TOMORROW BEGINS

2017
REGISTRATION
DOCUMENT

ERAMET
ALLOYS, ORES AND PEOPLE.

This is a non binding translation into English. The French language version of this document was filed with the French Financial Markets Authority (Autorité des marchés financiers) on 28 March 2018.

This Registration Document was filed with the Autorité des marchés financiers (AMF) on 28 March 2018 in accordance with article 212-13 of its general regulations. It may be used in support of a financial transaction if it is supplemented by a briefing note approved by the AMF. This document was prepared by the issuer and is the responsibility of its signatories.

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1

PRESENTATION OF THE GROUP

1.1 MESSAGE FROM THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER

"2017 was a key milestone for ERAMET, with current operating income up sharply to more than €600m in a particularly favourable manganese market.

In 2017 we started a new strategic impetus and a significant managerial transformation for the Group, aiming to make it more agile and competitive in a rapidly changing market, thereby repositioning towards value-accretive, long-term growth.

Our strategic transformation is based on three key levers: sustainable improvement in the profitability of our least performing assets by fixing and/or strategically repositioning them; growth in businesses where we have a real competitive advantage; developing our position in new high value-accretive markets, particularly through strengthening our position in metals for energy transition.

Our managerial transformation is focused on leaner and more responsive organisations, open to a changing environment. It is supported by dynamic management of our talents, making our managers accountable, and a stronger focus on performance, results and innovation.

Our actions are based on the digital revolution, which impacts all our businesses, driving us to revisit our business model for greater performance. These initiatives are also entirely in line with the Group's societal and environmental commitments to provide our clients and partners with the sustainable solutions that best meet their needs.

We approach 2018 with confidence and determination whilst remaining highly vigilant regarding short-term trends in our markets and particularly regarding demand for metals in China.

Together with the Board of directors, I would like to thank all ERAMET teams who contributed to these good results. All Group employees are fully committed to strengthening operational excellence at all levels of our organisation and to implementing ERAMET's new strategy."

1.2 A DIVERSIFIED MINING AND METALLURGICAL GROUP, LEADER IN ITS FIELDS OF ACTIVITY

The ERAMET Group is a French mining and metallurgical group with leading global positions in each of its business areas. The Group, which employed almost 13,000 people in 2017 in some 20 countries, generated sales of €3.6 billion during the year.

The ERAMET Group holds leading global positions in each of its businesses:

- ERAMET is the world's second largest producer of high-grade manganese ore at its mine in Moanda (Gabon), the world's second largest producer of manganese alloys and the largest producer of ultra-high value-added alloys or «refined» alloys.
- ERAMET operates nickel mines in New Caledonia and processes most of the ore itself. The Group is the world's largest producer of high-grade ferronickel, and a worldwide producer of high-purity nickel.
- ERAMET is the world's second largest producer of high power die-forged parts for aeronautics and energy generation. ERAMET Alloys designs and develops a range of parts and products: high-performance steels, superalloys (nickel-based), aluminium and titanium, a metal showing rapid development. ERAMET Alloys is also a world leader in gas-atomised powder metallurgy.
- The Group also has a business in titanium dioxide and zircon, TiZir, a 50/50 joint venture with the Australian group Mineral Deposits Limited. The division's primary site is the TiZir mine in Senegal (mineral sands), where operations began in the first half of 2014. The transformation (enrichment of titanium ore) is then performed by pyrometallurgy at the TiZir plant in Norway.

SPECIFIC POSITIONING OF THE ERAMET GROUP

- World-class deposits:

COMILOG The manganese source	**Manganese**	**Gabon – COMILOG** Manganese - Resources for over 40 years In operation for more than 50 years
LE NICKEL-SLN GROUPE ERAMET	**Nickel**	**New Caledonia – SLN** Nickel - Resources estimated at ~ 50 years In operation since the end of the 19th century
weda bay nickel	**Nickel**	**Indonesia – Weda Bay** Nickel - Over 50 years of resources Project
TiZir	**Ilmenite - Zircon**	**Senegal – TiZir** Zircon and Ilmenite - Estimated resources > 25 years In operation since 2014
ERAMINE SUDAMERICA S.A.	**Lithium**	**Argentina** Over 50 years of resources Project

- Leading positions in each area of our business, from mining to metallurgy;

  Manganese:
  - World's second largest producer of high-grade manganese ore.
  - World's largest producer of refined manganese alloys.

  Nickel:
  - World's largest producer of ferronickel.
  - Worldwide producer of high-purity nickel.

  Alloys:
  - World's second largest producer of die-forged parts.
  - A world leader in gas-atomised powder metallurgy.
- Specific know-how, often produced by our own R&D, with solid social and environmental criteria.

1.3 2017 RESULTS UP SHARPLY

The consolidated performance indicators used for the financial reporting of the Group's results and economic performance and presented in this document are restated data taken from the Group's reporting and monitored by the Executive Committee. In accordance with the accounting principles adopted for the Group's reporting, the operating performance of the joint ventures, the TiZir subgroup (Manganese Division) and the UKAD company (Alloys Division) are accounted for under proportionate consolidation. A reconciliation with the published data is presented in Note 3 of Chapter 3.2 (page 80).

ERAMET Group recorded strong results for FY 2017, driven in particular by sales growth of 22% versus 2016 at €3,652m (+30% at constant scope and exchange rates).

Scope and currency effects had a negative impact on sales of -€240m. On the one hand, they notably reflect the sale of the Manganese division's chemicals and recycling business (-€205m) and the sale of Eurotungstene (-€24m), and on the other, the negative currency impact (-€28m, largely owing to the Euro versus US dollar exchange rate).

Group current operating income was up sharply at €608m, mainly driven by very favourable price development in manganese, but also by productivity gains of €99m (i.e. a total of €405m over the 2014-2017 period, in line with the raised target).

Net income Group share was positive at €203m whereas a loss of €179m was reported for 2016.

Industrial capex ended at €230m, up by c. 6% versus the low level recorded in 2016.

Net debt stood at €376m at 31 December 2017, versus €836m at end-2016. Free Cash-Flow, which has been positive over the past three semesters, amounted to €476m in 2017.

It includes a non-recurring effect of €25m linked to disposal of the Group's headquarters situated in the Tour Montparnasse. Relocation of the Group's headquarters in Paris is scheduled for June 2018.

The net debt-to-equity ratio stood at 19% at end-2017.

Average debt maturity, of which 81% is based on fixed rates (excluding RCF), was extended through several operations. In September 2017, ERAMET thus successfully closed its bond issue of €500m maturing in February 2024. This bond issue was largely subscribed by a diversified base of institutional investors, mainly international.

In July 2017, TiZir, which is 50% owned by ERAMET, issued a new partly amortisable bond of USD 300m with end-maturity on July 2022. This bond has mainly been dedicated to the refinancing of the previous bond, which matured in September 2017.

ERAMET Group repaid the entire draw down of its revolving credit facility ("RCF"), of which €730m in 2017 and €250m in January 2018. The RCF had been drawn down early 2016. Moreover, in February 2018, this RCF was extended for €981m and a five-year maturity with a new term in 2023. Thus, ERAMET Group's financial liquidity has significantly increased to €2.8bn.

Given the change in the Group's market capitalisation and free float, ERAMET stock was relisted on the SBF 120 index at end-2017.

The terms "revenue at constant scope and exchange rates", "productivity gains" and "SLN's cash cost" used in this document refer to the definitions below:

- **Revenue at constant scope and exchange rates** refers to revenue adjusted for the effect of changes in scope and exchange rate variations from one year to the next.

  The scope effect is calculated as follows: for companies acquired during the financial year, by eliminating the revenue for the current period and by integrating, over the previous year, the full-year revenue of the companies acquired during the previous period; for companies sold, eliminating the revenue over the period under review and over the previous comparable period.

  The exchange rate effect is calculated by applying the exchange rates of the previous year to the revenue for the year under review.

- **Productivity gains** are defined as the reduction in costs generated by performance improvement measures measured at the EBITDA level. In practice, these gains are measured as the reduction of production costs after the neutralisation of certain effects, notably volume effects, material and energy prices, exchange rates and inflation. This calculation is made at constant scope.

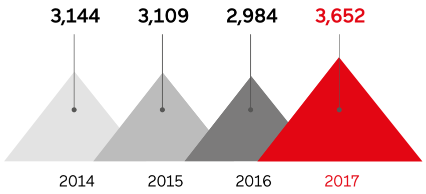
  For the mining divisions, productivity gains also include the absorption of fixed costs because the increase in volumes produced is a key objective for the performance of these entities.

- **SLN's cash cost** is defined as all production and structural costs (R&D including exploration geology, administrative costs, logistical and commercial costs), net of by-product credits and local services, which cover all the stages of industrial development of the finished product through until delivery to the end customer, and which impact the EBITDA in the company's financial statements.

  In addition, SLN's cash cost, as presented in this document, is recalculated at "constant economic conditions (beginning of 2016)" in order to neutralise the impact of external conditions (notably the EUR/USD exchange rate and fuel oil prices).

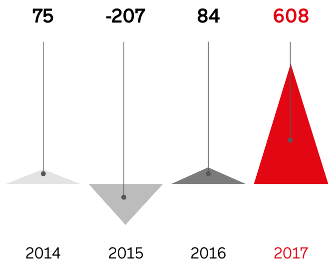
1.3.1 KEY BUSINESS FIGURES*

SALES
(€ MILLION)



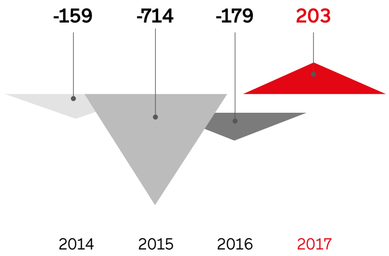
Strong increase in sales, up 22% compared to 2016, to €3,652 million.

CURRENT OPERATING INCOME
(€ MILLION)



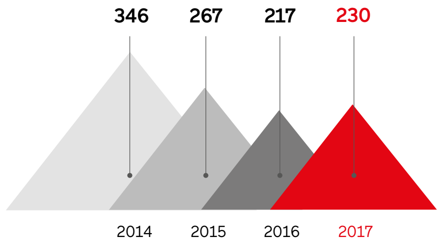
The current operating income of the Group rose sharply to €608 million.

NET INCOME, GROUP SHARE
(€ MILLION)



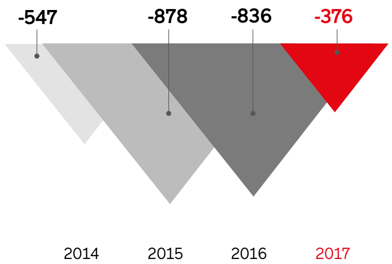
Net income, Group share positive at €203 million.

INDUSTRIAL INVESTMENTS
(€ MILLION)



Industrial investments of €230 million, mainly dedicated to the safety and maintenance of production tools.

NET FINANCIAL DEBT
(€ MILLION)



Net debt down sharply to €376 million at 31 December 2017, compared to €836 million at the end of 2016.

€405 million

in cumulative productivity gains since 2014 (annual impact)

BREAKDOWN OF CURRENT OPERATING INCOME BY BUSINESS SEGMENT
(€ MILLION)

	2017	2016
Nickel	(125)	(119)
Alloys	32	27
Manganese	738	219
Holding	(37)	(43)
TOTAL	608	84

BREAKDOWN OF INDUSTRIAL INVESTMENTS BY BUSINESS SEGMENT
(€ MILLION)

	2017	2016
Nickel	80	56
Alloys	59	55
Manganese	89	104
Holding	2	2
TOTAL	230	217

€2.7 billion

At 31 December 2017, the financial liquidity of ERAMET was substantial, at approximately €2.7 billion

* Adjusted data from Group Reporting, in which joint ventures are accounted for using proportionate consolidation. The reconciliation with the published financial statements is presented in Chapter 3.1.

1.3.2 SUMMARY OF CONSOLIDATED FINANCIAL STATEMENTS

KEY BUSINESS FIGURES FOR THE ERAMET GROUP (IN € MILLIONS)*	2017	2016	CHANGE
Sales	3,652	2,984	+22%
EBITDA(1)	871	375	+132%
Current operating income	608	84	+624%
Impairment of assets and deferred tax assets	(42)	(167)	-75%
Net income, Group share	203	(179)	N/A
Free cash-flow (2)	476	(66)	N/A
Net debt	(376)	(836)	-55%
Shareholders' equity	1,980	1,776	+11%
Ratio of net debt to equity	19%	47%	
ROCE(3)	21.4%	2.7%	

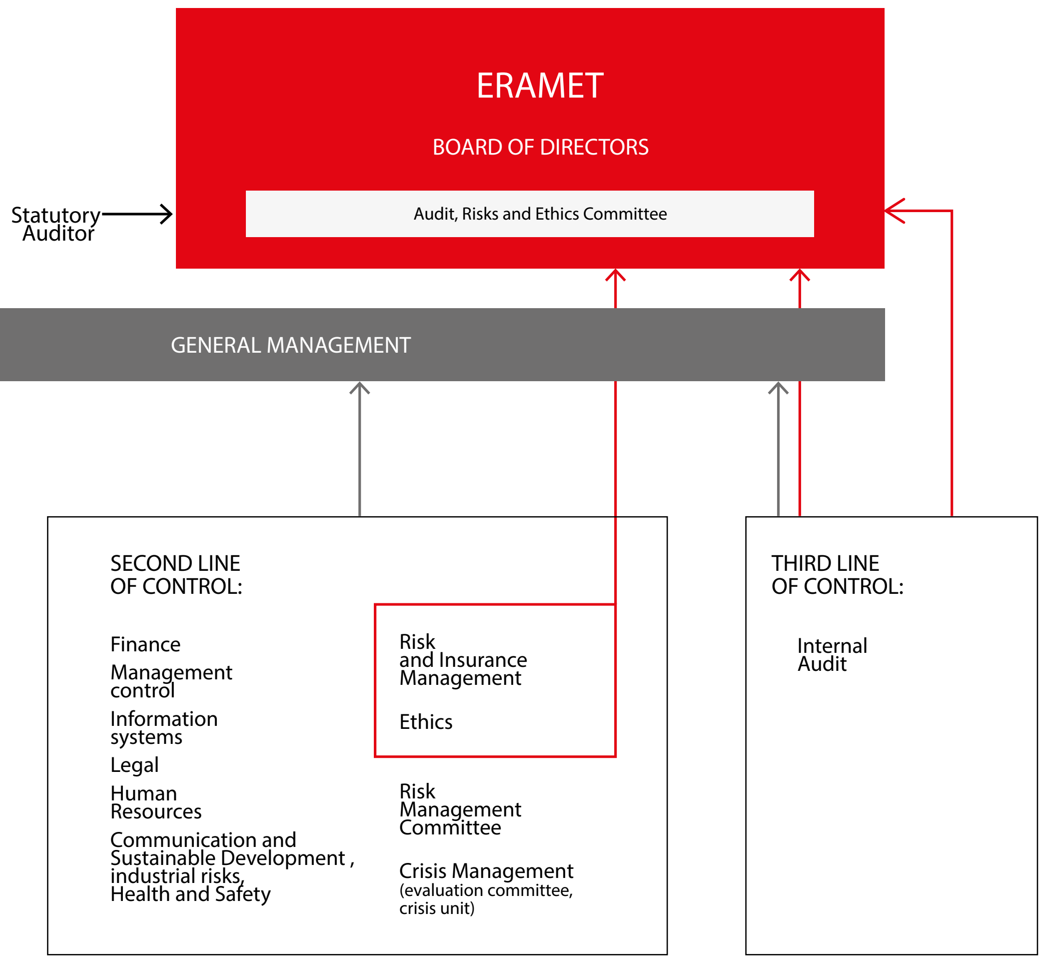
** Adjusted data from Group Reporting, in which joint ventures are accounted for using proportionate consolidation. The reconciliation with the published financial statements is presented in Chapter 3.1.*
(1) EBITDA is defined on page 140 of this document.
(2) Free Cash Flow is defined on page 72 of this document.
(3) ROCE is Current operating income divided by Capital employed at 31 December of year N-1 (equity, net financial debt, provisions for restoration of sites, provisions for restructuring and other social risks, less non-current financial assets, excluding capital employed at Weda Bay).

The net debt/EBITDA ratio is less than 1 as at 31 December 2017.

1.4 RISK GOVERNANCE BASED ON A CROSS-FUNCTIONAL SYSTEM

The Group operates in a constantly changing economic and regulatory environment with increasingly volatile cycles. It is therefore exposed to risks whose occurrence could negatively impact its activities, results, financial position, image and outlook. The purpose of the ERAMET Group's risk management system is to identify these risks, qualify them and reduce their probability of occurrence and potential impact in order to allow risk-taking to improve the Group's performance and provide better opportunities.

RISK GOVERNANCE SYSTEM



The implementation of the Risk Management process led in 2017 to the mapping of the major risks to which the Group is exposed due to its business model and the business activities carried out.

RISKS	MAJOR	OTHER
Strategic	• Risk of loss of competitiveness of certain assets • Risks related to insufficient value of the portfolio and a business model that is not adapted to new market cycles and the competitive environment • Geopolitical risks • Risks of social and environmental acceptability	
Operational	• Health and safety risks of human resources • Risks related to attracting and retaining talent, and industrial relations • Risk of failure of information systems, protection of information and cyber attacks • Risks related to security • Risks related to industrial and environmental safety • Risks inherent in production reliability and the development of new metallurgical products	• Transport risks
Legal	• Risk of non-compliance with regulations • Risk of the strengthening of legislative and regulatory requirements	• Significant disputes
Financial		• Liquidity risk • Market risk • Counterparty risk

1.5 A STRATEGIC COMMITMENT TO CSR

Due to the nature of its mining and industrial activities, and aware of its strong interaction with the local areas in which it operates, ERAMET is resolutely focused on all matters related to sustainable development and corporate social responsibility (CSR). The Group has long been committed to an approach of continuous progress and improvement in order to place CSR at the heart of its activities. ERAMET's aim, by permanently conducting its operations in the areas where it is located, is to support the development and constantly reinforce the smooth integration of its operations into new territories and in new sectors.

In this regard, our stakeholders increasingly articulate their expectations, which are moving towards the requirement for a "due diligence" approach based on the identification and control of risks. In this context, in 2017 ERAMET strengthened and formalised the mapping of its CSR risks, whether generated by the Group's own activities or those of the players in its supply chain. These risk maps make it possible to refine the knowledge of the CSR issues that the Group must manage.

Faced with these issues, ERAMET relies on its Ethics Charter and Sustainable Development policy, which set the standard of its social responsibility engagement. The Group's Ethics Charter sets out the Group's commitments and the rules and principles of action and behaviour of employees in many areas, supplemented by the Sustainable Development policy, which aims to clarify and put into action these commitments.

These two reference texts led the Group to structure its CSR approach around four pillars:

- Our **employees** (including health, safety, people development and social dialogue),
- The **environment** (risk management, reducing our footprint) and energy,
- Our **products** (responsible management and development opportunities),
- **Ethical compliance** and **relations with our stakeholders**.

These CSR pillars are broken down and implemented by the Divisions and sites by means of policies, roadmaps, or specific standards that result in the definition of specific multi-year objectives for each of the Group's businesses and activities, as well as action plans that ensure their effective implementation. The latest version of these objectives and action plans was validated by the Executive Committee and the Group Strategy and CSR Committee. ERAMET's ethics compliance programme, which also includes multi-year objectives and is managed by the Group's Ethics Officer, supplements this system.

The Communication and Sustainable Development Director and the Human Resources, Health, Safety and Security Director, both members of the Group's Executive Committee propose, support and monitor the multi-year objectives and associated action plans. They report regularly to the Executive Committee.

The effective inclusion of CSR requirements in the Group's activities is also closely monitored by ERAMET's Board of Directors, in particular through two of its Committees, the Strategy and CSR Committee, and the Audit, Risks and Ethics Committee.

Find out more: *2017 Registration Document, Chapter 6 and Appendix: Vigilance Plan*

1.6 A NEW PROFITABLE GROWTH STRATEGY

1.6.1 SUMMARY OF ERAMET'S STRATEGIC DIRECTION AT THE END OF 2017

In a particularly difficult market environment in 2015 and 2016, with nickel and manganese prices dropping to historic lows over the previous fifteen years, the Group focused its energy on protecting its balance sheet and generating cashflow. The acceleration of operational performance programmes improved the cost base by nearly €400 million over the 2014-2017 period, thus exceeding the objectives initially set.

2017 marked a two-fold milestone for the Group:

- The rebound in manganese prices, and more modestly those of nickel, combined with the productivity efforts of the year, led to a **significant improvement in our financial results**. Financial liquidity was strengthened and reached approximately €2.7 billion at 31 December 2017, mainly thanks to the success of a €500 million bond issue in 2017.
- 2017 also saw the **launch of the Group's managerial and strategic transformation** with a view to repositioning it competitively in its rapidly changing environment and to enable it to create value in the long term, in particular through the return to growth.

The strategy transformation is currently being rolled out and is structured around **three main thematic areas**:

- **The first area is the fixing/repositioning of the least performing assets.** This is key to the sustainability of our portfolio in the long term. It is reflected in SLN's new cost price objective of $4/lb for nickel by the end of 2020, and the re-evaluation of our Erasteel and Aubert & Duval businesses. Solutions go through significant intrinsic progress steps, but they may also lead us to consider consolidation movements. If the performance targets set cannot be met, some assets may be subject to a review of their different strategic options.
- **The second area is organic or external growth** in our attractive businesses where we have, or may have, a competitive advantage. Targeted areas include:
  - manganese ore through the expansion of our mining activities in Gabon and the search for value-accretive acquisitions
  - the exploitation of our Weda Bay nickel deposit
  - opportunistic developments in other metals offering complementarities with our existing positions
- **The third area is to strengthen our portfolio** by developing it in attractive markets where we have existing industrial or commercial leadership, or strong strategic assets. We are working on our positioning in **metals used in the energy transition**: lithium, cobalt, nickel salts, ... ERAMET indeed has serious scientific, industrial and commercial advantages in relation to these metals, whose demand is expected to grow in the coming years thanks to the demand for rechargeable batteries and, more generally, with the growth and development of the energy transition. This redeployment should allow the Group to diversify its asset base, both geographically and financially, via:
  - lithium, especially via the development of our deposit in Argentina
  - increasing our exposure in nickel salts, and cobalt via the study of potential targets or avenues for development
  - development in recycling through the study of opportunities to develop the recycling of batteries (lithium, nickel, cobalt)

This strategy is supported by a cross-functional transformation project that underpins all of our businesses – the **digital revolution**. Today, thanks to the exponential increase in computing power, digital technologies are making it possible to rethink the ways we operate – in the mines and plants, and even to transform business models. Digital transformation will be one of the major areas of value creation for ERAMET, both in improving the performance of existing assets and in the evolution of our positioning.

Our strategy is fully in line with our societal and environmental commitments, whose new goals have been included in our policy. The roll-out of the strategy is the foundation for long-term value-creating growth, which will allow the re-establishment of a policy of regular dividend payments to our shareholders.

This strategic transformation is based on a profound managerial transformation, which is instrumental in the effective execution of the strategy.

It aims to deploy managerial and operational excellence at all levels of our organisation: upward revision of the level of ambition; light, flexible and responsive organisations; strengthening of leadership skills, empowerment and performance management; rigour in execution; focus on results, etc. This transformation must improve performance and facilitate the achievement of our strategic ambitions.

1.6.2 INVESTMENTS

The ultimate aim is to improve competitiveness and boost the business of the three Divisions (Nickel, Manganese and Alloys). The investment policy is based on product differentiation with a focus on markets with structural medium to long-term growth. In 2017 again, investment approvals have essentially been limited to safety and maintenance related projects. The improving health of the group should allow us to reinforce our growth investments in the future.

Industrial investments recognised at Group level totalled €346 million in 2014, €267 million in 2015, €217 million in 2016 and €230 million in 2017. The amount of investments should be above €250 million in 2018.

Each major project may be financed in a different way (own resources, bank borrowings and finance leases). Current investments are generally financed from own funds.

1.7 RECENT DEVELOPMENTS AND OUTLOOK FOR THE GROUP IN 2018

1.7.1 MAJOR EVENTS AFTER THE REPORTING DATE

None.

1.7.2 FORESEEABLE OUTLOOK

In a still highly volatile market, in which we remain cautious regarding demand for metals, particularly in China, while overall Group's markets remain favourable in early 2018.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2

ACTIVITIES

2.1 GROUP STRUCTURE

ERAMET
DES ALLIAGES, DES MINERAIS ET DES HOMMES.

ERAMET Engineering (100%)

ERAMET International (100%)

ERAMET Research (100%)

ERAMET ALLOYS

- High-performance special steels and superalloys, high-speed steels
- Closed-die and forged parts

- **A & D** (France – 100%)
  - **UKAD** (France – 50%)
- **Erasteel** (France – 100%)
  - **Erasteel EIML** (China – 100%)

ERAMET MANGANESE

- Manganese: High-grade ore, alloys
- Catalyst recycling
- Titanium dioxide and high-purity pig iron
- Zircon and ilmenite

- **Comilog** (Gabon) (63.71%)
  - **Setrag** (Gabon) (99.96%)
  - **Maboumine** (Gabon) (76.14%)
  - **Comilog Dunkerque** (France) (99.99%)
  - (20%) Comilog Asia Ltd (China)
- (80%) **Comilog Asia Ltd** (China)
- **ERAMET** Norway (100%)
- **ERAMET Marietta** (USA) (100%)
- **TIZIR** (Norway, Senegal) (50%)

ERAMET NICKEL

- Ferronickel, high-purity nickel
- Nickel and cobalt chlorides
- Nickel carbonate

- **Société Le Nickel-SLN** (56%)
- **Sandouville-Le Havre plant** (100%)
- **Strand Minerals Pte. Ltd.** (100%)
  - **PT Weda Bay Nickel** (90%)

2.2 MANGANESE

2.2.1 THE MANGANESE MARKET

2.2.1.1 DEMAND FOR MANGANESE

MAIN APPLICATIONS

Steel

Over 90% of the world's manganese is used in the production of steel. All steel producers use manganese in their production processes—an average of 6-7 kg per tonne of steel. Manganese is used in steel in the form of manganese metal or as an alloy (ferromanganese or silicomanganese) with an average content of 70% manganese: 1.8 tonnes of ore with roughly 40% manganese content are required to produce one tonne of alloy.

Manganese is used mostly in manganese alloys and accounts for a very small portion of the cost of steel production. It is mainly used as an alloying element to improve hardness, abrasion resistance, elasticity and surface condition for rolling. It is also used for deoxidation and desulphurisation during production.

Other applications

- batteries: mainly alkaline batteries. A less significant application is in salt water batteries, which have an inferior performance. Manganese derivatives are also used in rechargeable lithium batteries;
- ferrites: used in electronic circuits;
- agriculture: fertiliser and animal feed;
- various chemicals: pigments, fine chemicals;
- other metallurgical uses: mainly as a hardening agent for aluminium (beverage cans).

CARBON STEEL, MAIN MARKET

Demand for manganese largely depends on changes in the global production of carbon steel. China has experienced rapid urbanisation with growing demands on its infrastructure, which have contributed significantly to the strong period of growth in steel production and demand for manganese over the last decade.

World crude carbon steel production, the main outlet for manganese, is up 5.3% from 2016, standing at 1,691 million tonnes, a record high. China continues to account for about 49% of global production.

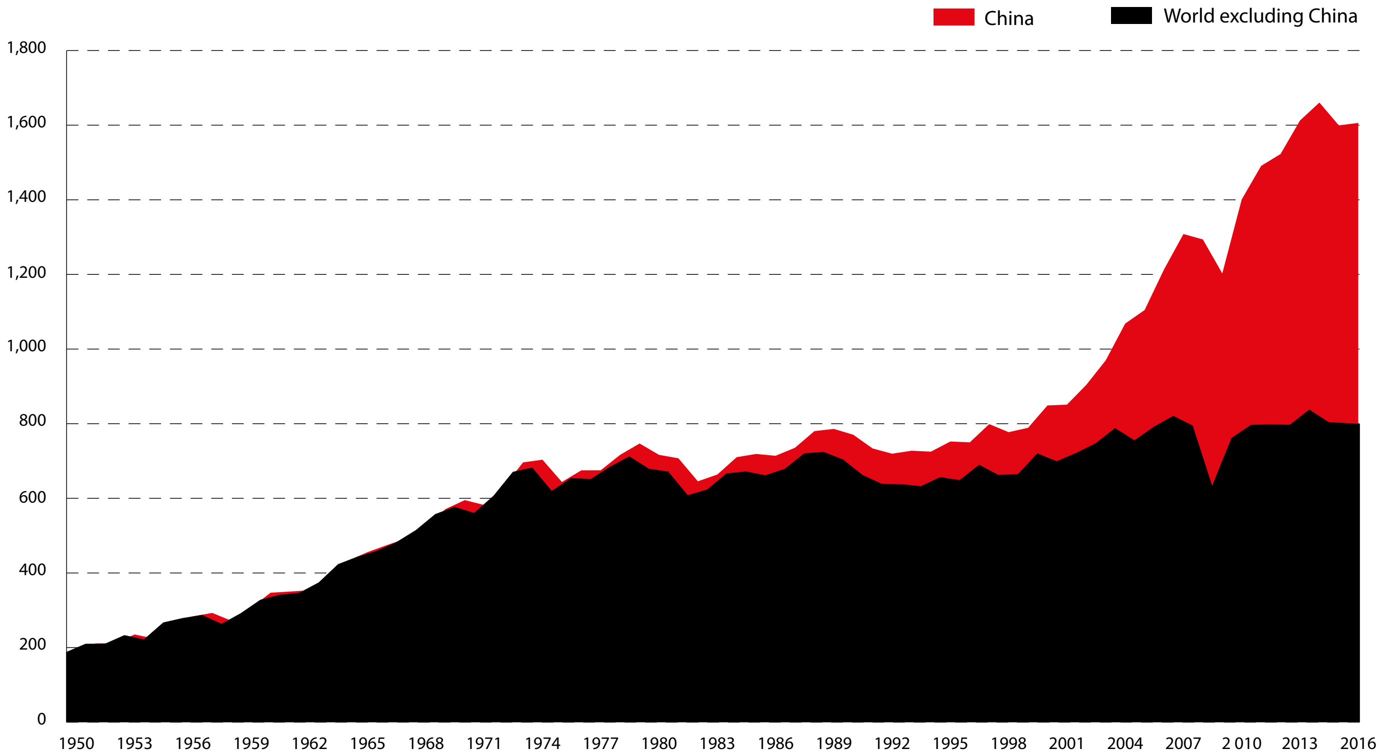
The medium to long-term outlook remains positive. Demand for steel will continue to be driven by developing countries, particularly India.

BREAKDOWN OF GLOBAL CRUDE STEEL PRODUCTION

	VOLUMES (IN MILLIONS OF TONNES)					% ANNUAL GROWTH				
GLOBAL PRODUCTION OF RAW STEEL	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
European Union	166.3	169.3	166.0	162.0	168.7	-1.4 %	1.8 %	-1.9 %	-2.4%	4.1%
Other Europe (incl. Turkey)	38.0	37.4	35.5	35.9	40.6	-4.9 %	- 1.6 %	-5.1 %	1.2%	13.0%
CIS	108.3	105.8	101.6	101.9	102.0	-2.4 %	- 2.3 %	-4.0 %	0.3%	0.0%
North America	119.0	121.4	110.9	110.6	116.0	-2.1 %	2.0 %	-8.6 %	-0.2%	4.8%
South America	45.8	45.1	43.9	40.2	43.7	-1.2 %	- 1.6 %	-2.7 %	-8.4%	8.7%
Africa	15.9	16.5	13.2	11.7	13.5	3.7 %	3.8 %	-20.0 %	-11.6%	15.9%
Middle East	26.5	28.6	27.4	29.0	32.4	7.4 %	7.9 %	-4.2 %	5.9%	11.8%
China	815.4	822.7	795.1	786.9	831.7	11.5 %	0.9 %	-3.4 %	-1.0%	5.7%
India	81.3	87.3	89.0	95.5	101.4	5.2 %	7.4 %	2.0 %	7.3%	6.2%
Other Asia & Oceania	204.5	211.0	201.9	213.5	223.9	-8.5 %	3.2 %	-4.3 %	5.7%	4.9%
65 countries	1 621.0	1 645.1	1 584.5	1 587.2	1 674.7	4.0 %	1.5 %	-3.7 %	0.2%	5.5%

Source: World Steel Association.

TRENDS IN GLOBAL CRUDE STEEL PRODUCTION (IN MILLIONS OF TONNES)



Source: World Steel Association, ERAMET.

2.2.1.2 MANGANESE SUPPLY

MANGANESE ORE

The supply of manganese ore is made up of several types of ore of varying quality. A distinction is generally made between the supply of medium to high-grade ore (30-48% manganese content), which is profitable to transport and export, and low-grade ore, which is consumed locally. Even though these two types of ore are used in combination by alloy producers, the use value of high-grade ore is far greater than that of lower-grade ore.

Global ore production in 2017 is estimated at 16.5 million tonnes of manganese content.

MANGANESE ORE PRODUCTION (IN MILLIONS OF TONNES CONTENT)

	2013	2014	2015	2016	2017
South Africa	4.4	5.4	4.7	4.5	5.4
Australia	3.2	3.2	3.0	2.3	2.6
China	3.6	4.2	2.3	2.7	1.8
Gabon	1.5	1.4	1.6	1.4	2.0
Brazil	1.0	1.0	1.0	1.0	1.0
India	0.9	0.8	0.7	0.7	0.7
Kazakhstan	1.0	0.9	0.6	0.5	0.5
Ghana	0.5	0.4	0.4	0.5	0.7
Ukraine	0.4	0.4	0.3	0.5	0.4
Malaysia	0.3	0.3	0.2	0.3	0.3
Other	0.9	1.2	0.7	0.7	0.9
World	17.7	18.9	15.5	15.1	16.5

Source: Producer reports, ERAMET estimates.

MANGANESE ALLOYS

Manganese alloys are produced by reducing manganese ore at a temperature of roughly 1,600°C. This process is carried out by adding coke to furnaces, which are mostly electric. Some producers, mainly based in China, use blast furnaces but this process is gradually being replaced, given the price of coke. Outside of China, blast furnaces are only located in Japan and Eastern Europe.

There are four families of manganese alloys:

- high carbon ferromanganese (HCFeMn) contains 65-79% manganese and 6-8% carbon. It can be produced using an electric furnace or a blast furnace;
- silicomanganese (SiMn) contains 60-77% manganese. It can only be produced by an electric furnace using ore, possibly supplemented by an addition of FeMn slag;
- refined ferromanganese (MCFeMn and LCFeMn) is a higher value-added product containing less carbon. It is mainly produced by transferring molten HCFeMn alloy to an oxygen converter which reduces the carbon content to the desired level, or by a high temperature reaction between silicomanganese, which is intrinsically low in carbon, and calcined ore. A distinction is made between medium carbon ferromanganese (1.5% carbon: MCFeMn) and low carbon ferromanganese (0.5% carbon: LCFeMn), mainly used in the production of flat steels and special steels;
- refined silicomanganese (low carbon, LCSiMn) is primarily used to produce stainless steel, one of the ERAMET group's main markets.

ERAMET MANGANESE IS THE WORLD'S LEADING PRODUCER OF REFINED ALLOYS.

MANGANESE ALLOY PRODUCTION (IN MILLIONS OF TONNES CONTENT)

	2013	2014	2015	2016	2017E
China	10.3	11.2	8.7	9.9	9.6
India	2.4	2.3	2.2	2.1	2.4
Ukraine	0.6	1.0	0.8	0.9	0.9
Norway	0.6	0.6	0.6	0.6	0.7
Japan	0.5	0.5	0.5	0.7	0.7
South Korea	0.7	0.8	0.7	0.6	0.6
Russia	0.3	0.4	0.3	0.4	0.5
South Africa	0.8	0.9	0.6	0.4	0.4
Brazil	0.2	0.2	0.2	0.3	0.3
Australia	0.3	0.3	0.3	0.2	0.2
Spain	0.3	0.3	0.3	0.2	0.2
Mexico	0.2	0.2	0.2	0.2	0.2
Georgia	0.2	0.2	0.2	0.2	0.2
France	0.2	0.2	0.2	0.2	0.2
United States	0.2	0.2	0.2	0.2	0.2
Kazakhstan	0.2	0.2	0.2	0.1	0.1
Other	0.4	0.5	0.3	0.3	0.8
World	18.4	19.8	16.6	17.7	18.2

BREAKDOWN OF WORLDWIDE MANGANESE ALLOY PRODUCTIONE

	2013	2014	2015	2016	2017
Silicomanganese	65%	65%	63%	65%	63%
High-carbon ferromanganese	25%	25%	26%	25%	26%
Refined ferromanganese	10%	10%	11%	10%	11%

Source: International Manganese Institute, produce reports and ERAMET estimates.

Silicomanganese has experienced the strongest growth of all the standard alloys. The availability in China (as well as in India and Ukraine) of local low-grade ore, which can easily be used to produce silicomanganese, has favoured its development. Low-grade ores are nonetheless always mixed with rich imported ores in an ongoing attempt to achieve a price/performance balance.

The Chinese market is characterised by a large number of alloy producers that are very dependent on high-grade imported ores, accounting for more than 60% of global ore imports. As a result of the introduction of export taxes in 2008, China is not a significant player in the international alloy market, unlike India, which is a major exporter of commodities (SiMn and HCFeMn). However, the Chinese export tax was lifted in 2012 for Electrolytic Manganese Metal, a competitive product to refined alloys.

MANGANESE METAL

Manganese metal is produced using a hydrometallurgical process during electrolysis (Electrolytic Manganese Metal or EMM). It is an extremely pure manganese product (over 99% Mn content), generally produced in the form of flakes. Since the hydrometallurgical process is adapted to the treatment of low-grade ores, EMM production is concentrated in China, the main exporter of metal with a traditionally very fragmented industry, but which has been highly concentrated in the last five years with the emergence of one producer that alone accounts for more than 50% of global production capacity. Apart from China, the only other country producing manganese metal is Gabon, where ERAMET COMILOG Manganese is currently ramping up the Complexe Métallurgique de Moanda (CMM).

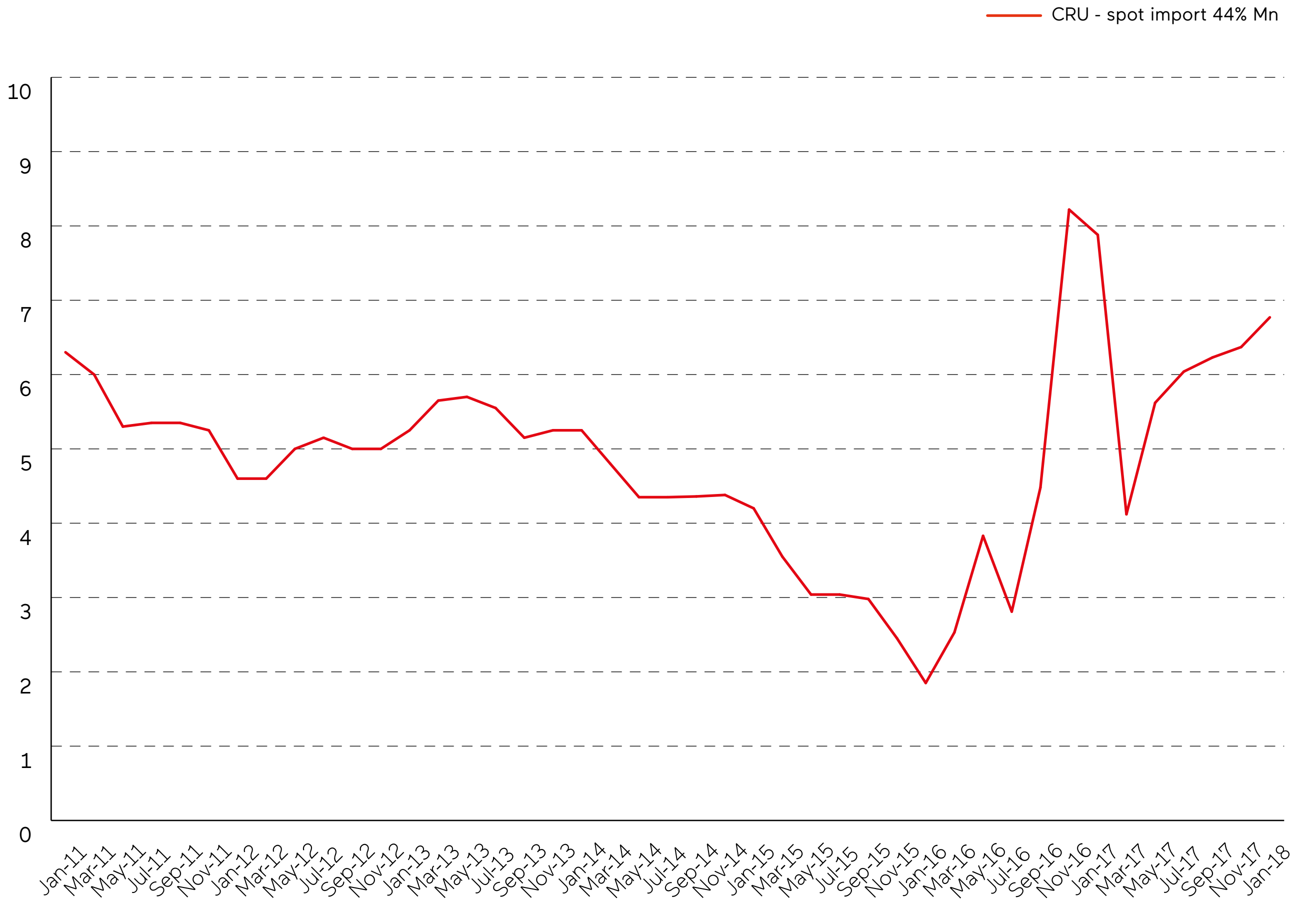
The main markets for manganese metal are carbon steel, stainless steel and aluminium production. Global manganese metal production varies between 1.1 and 1.5 million tonnes annually, depending on the year.

2.2.1.3 RECENT MARKET AND PRICE TRENDS

FORMATION AND MONITORING OF MANGANESE ORE PRICES

The sale price of manganese ore is the result of direct negotiations between buyers and sellers. It is conventionally expressed in USD/dmtu (dry metric tonne unit). One dmtu corresponds to 10 kg of manganese content. The dmtu price is higher for high-grade ores, and also depends on particle size and the possible presence of impurities.

MONTHLY PRICE OF MANGANESE ORE 44% CIF CHINA (IN USD/DMTU)



Source: CRU.

FORMATION AND MONITORING OF MANGANESE ALLOY PRICES

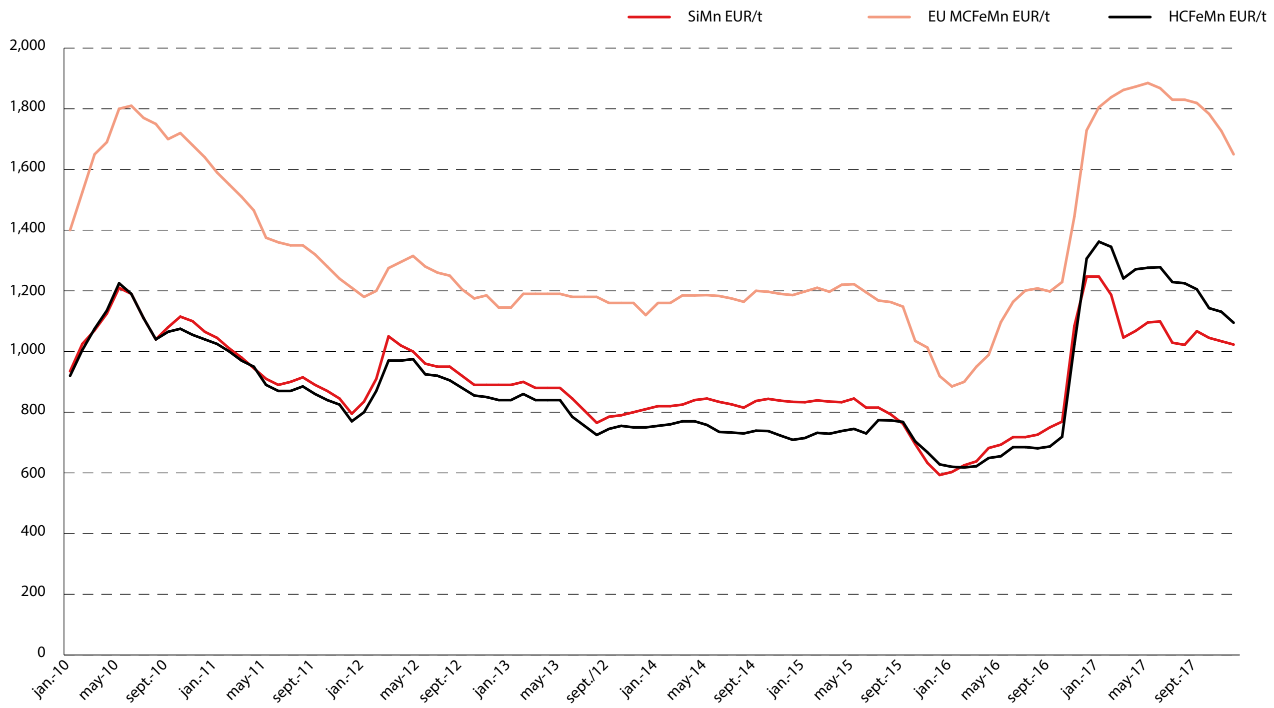
There is no market as such for manganese alloys. Prices are negotiated directly between producers and customers. As far as scheduled sales are concerned, alloy prices are often negotiated on a quarterly basis. Non-scheduled sales are often negotiated on the basis of spot prices.

The manganese alloys market is above all a highly competitive global market. However, the movement of alloys between large areas is relatively limited due to shipment costs. Prices may vary between major geographic areas (Europe, North America and Asia) due to changes in exchange rates or lags in economic cycles.

There are also discrepancies between the different alloy families due to differences in use value. Refined alloys in particular have a much higher sale price than standard alloys.

There are several publications specialising in metals that track trends in manganese alloy prices using monthly spot price surveys. The graph below is based on data published by CRU (London).

PRICE OF MANGANESE ALLOYS IN EUROPE (€/T)



Generally speaking, fluctuations in the price of manganese alloys reflect those of ore. However, producers' ability to preserve their margins largely depends on regional balances and supply and demand for each type of alloy.

RECENT MARKET AND PRICE TRENDS

In 2017, steel production benefited from growth of 5.3% compared to the previous year. In contrast to 2016, more than half of this increase came from production outside China; all areas benefited from the improvement in the global economy and the decline in Chinese steel exports (-31% compared to 2016).

In 2017, manganese ore production increased significantly, by 9.1%. The acquisition by Ningxia Tianyuan Manganese Industry Co Ltd (TMI) of Consolidated Mineral Ltd (CML) and its investments began to bear fruit with the ramp-up of Nsuta in Ghana and the reopening of Woodie-Woodie (Australia) at the end of 2017. For its part, OMH reopened Bootu Creek (Australia) in early 2017 and was producing at full capacity in the second half of the year. In South Africa, the difficulties experienced by UMK resulted in moderate production, in contrast to Tshipi, which pushed up its volumes. Finally, CITIC Dameng and Noga were instrumental, along with COMILOG, in the ramp-up of Gabonese production.

One of the highlights of 2017 was the growth of South African exports which are estimated at more than 15 million tonnes, an increase of 24% compared to 2016. The continued high price for ore pushed miners to export their stock of products outside the usual commercial specifications and to increase their production.

Prices of manganese ore 44% CIF China (source: CRU) started by rebalancing in the first quarter, losing 55% from January to March 2017, before growing steadily throughout the year, benefiting first from the strong performance of global steel production, and then, towards the end of the year, from production cuts related to environmental requirements in China. Inventories at Chinese ports followed an opposite trend, decreasing throughout the second half of the year and finally falling below 2 million tonnes in December 2017.

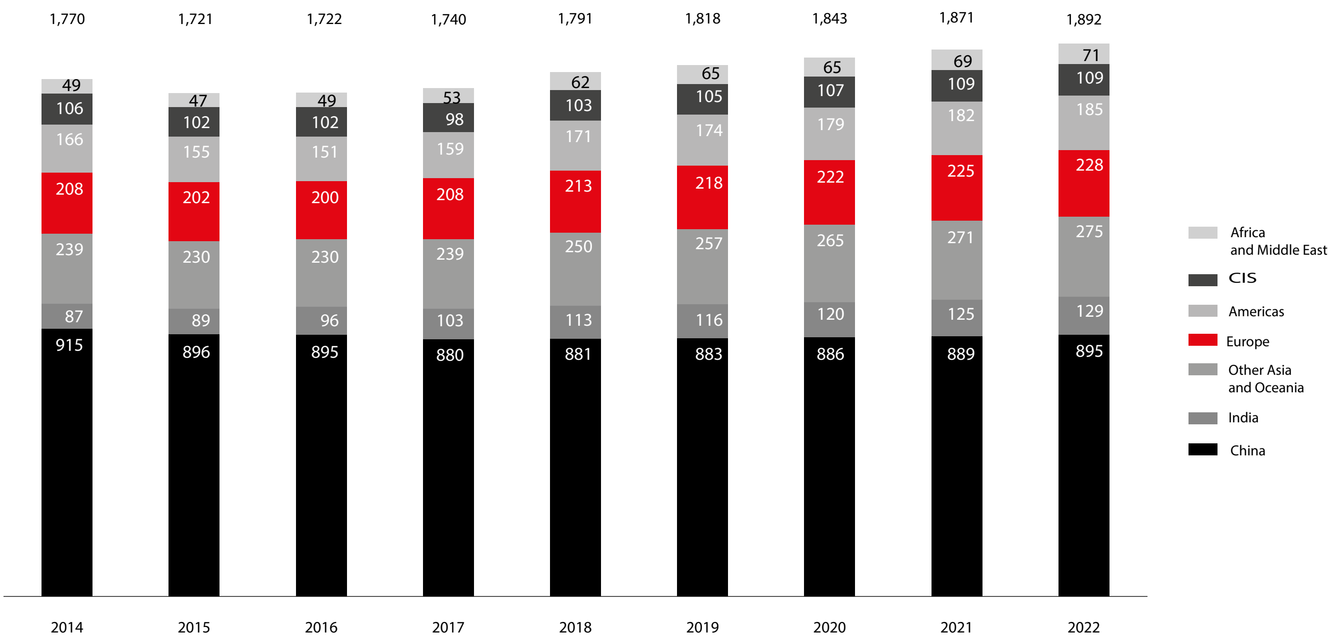
The price of manganese metal lost 43% between January and August 2017, then stabilising at around USD 1,850/t for the remainder of the year.

Alloy prices remained high in 2017, supported by those of the ore, with a slowdown at the end of the year.

2.2.1.4 MARKET OUTLOOK

The market for manganese, used primarily in carbon steel (90% of demand), is a mature market, with limited but relatively robust growth prospects. Currently at a high level (around 1,600 million tonnes per year), demand for carbon steel is expected to grow at an average of around 1% per annum over the next decade.

OUTLOOK FOR GLOBAL STEEL DEMAND



Source: CRU.

2.2.2 OVERVIEW OF ERAMET MANGANESE

2.2.2.1 KEY FACTS

MANGANESE ORE AND ALLOYS (94% OF ERAMET MANGANESE'S SALES IN 2017): A GLOBAL LEADER IN MANGANESE ORE ACROSS THE ENTIRE VALUE CHAIN

The main business activity is the Manganese division, which includes the extraction of ore in Gabon by COMILOG, its transport by rail (including other transport activities related to the Trans-Gabon railway concession) and its loading at the port, as well as ore recovery activities, either in the form of manganese alloys for the steel industry or in the form of chemical derivatives targeting various customers in the chemical industry. ERAMET Manganese is a leading global player in the manganese industry, both in mining and ore processing: through its majority stake in COMILOG along with the Republic of Gabon and through several plants located close to consumption zones, it is:

- the world's second largest producer of high-grade manganese ore;
- the world's second largest producer of manganese alloys;
- the world's largest producer of refined alloys.

TITANIUM DIOXIDE/ZIRCON: 5% OF SALES IN 2017 (ACCRUING TO ERAMET'S 50% HOLDING IN TIZIR)

With the acquisition of the Norwegian group Tinfos in 2008, the Group owns pyrometallurgical industrial facilities in Norway which can process titanium ore (ilmenite) in order to supply a product enriched in titanium dioxide (slag) to customers that produce white pigments.

In 2011, ERAMET formed a 50/50 partnership, bringing together this leading downstream metallurgical asset and an upstream source of ore on the verge of being developed: the Grande Côte mining project in Senegal, previously developed by the Australian group Mineral Deposits Limited. Grande Côte began production in 2014. This combination also resulted in the creation of TiZir.

With the launch of the Grande Côte project in Senegal in the first half of 2014, TiZir has become one of the world's leading players in zircon and titaniferous raw materials.

MABOUMINE PROJECT: NIOBIUM/PHOSPHATES/RARE EARTH METALS PROJECT IN GABON

Through Maboumine, a subsidiary of COMILOG (76%), ERAMET has for a number of years explored options for ore recovery at the Mabounié site in the province of Moyen-Ogooué, Gabon.

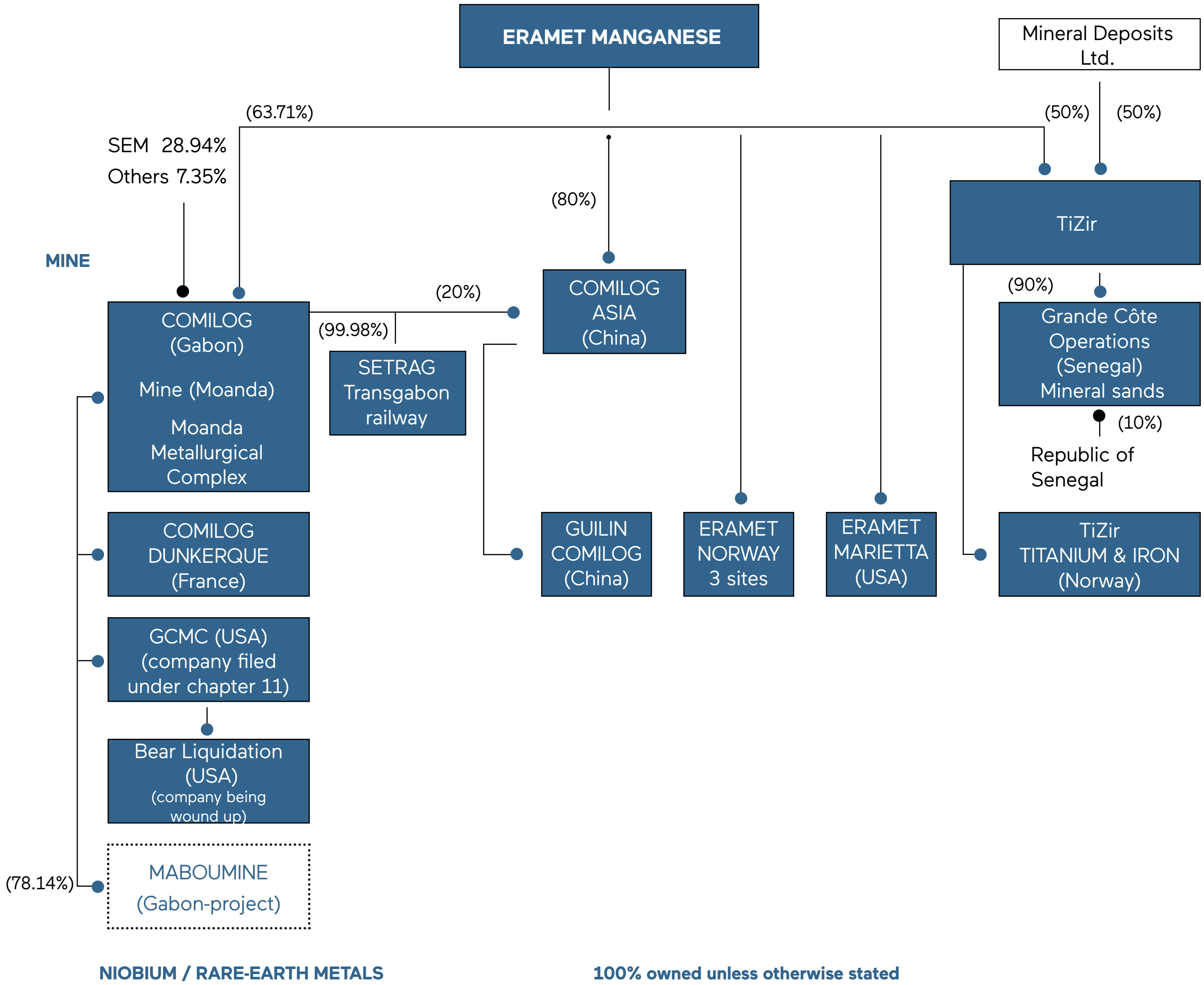
After a strategic review, it was decided that the initial project, based on the recovery of rare earth and niobium through hydrometallurgical processing, was not economically viable, particularly due to the sharp fall in prices in the rare earth market.

The development option currently being studied is based on the recovery of niobium and phosphates through a mineralurgical and pyrometallurgical process. Within this context, ERAMET is open to forging a new partnership.

2.2.2.2 STRUCTURE

ORGANISATION AT 31 DECEMBER 2017

ERAMET Manganese is currently organised according to the diagram pictured below:



- COMILOG is a company operating under Gabonese law and ERAMET owns 63.71% of its shares. Its activities include:
  - operation of the manganese mine and sinter plant in Moanda (Gabon);
  - operation of SETRAG (concession holder of the Trans-Gabon railway);
  - production of manganese alloys in Moanda (Gabon) and Dunkerque (France);
  - the Maboumine niobium/phosphates project in Gabon.
- ERAMET Norway has three Norwegian alloy plants in Porsgrunn, Sauda and Kvinesdal (Norway).
- ERAMET Marietta (United States) produces manganese alloys.
- TiZir is a 50/50 joint venture with the Australian group, Mineral Deposits Limited, which extracts mineral sands (titaniferous ore and zircon) in Senegal and processes ilmenite into titanium dioxide and high-purity pig iron in Tyssedal, Norway.

2.2.2.3 ERAMET MANGANESE'S ACTIVITIES

MINING OPERATIONS AND PROCESSING OF MANGANESE (MANGANESE ALLOYS)

The mine, sinter plant and metallurgical complex in Moanda (C2M)

The Moanda mine is one of the richest manganese deposits in the world. The ore's manganese content averages at around 46%. Mining reserves are discussed in Section 2.8.

Mining operations are carried out in open pits. The layer of overburden covering the ore is a few metres thick. The run-of-mine ore is extracted using excavators and loaded onto 100-tonne trucks. The ore is processed at the Moanda beneficiation plant. The resulting enriched ore is shipped by conveyor to the Moanda train station.

The Moanda industrial complex processes the fine by-products of beneficiation, as well as manganiferous sediments extracted from the bed of the Moulili river. The fine products are enriched by dense medium or by high-intensity magnetic separation so as to increase their manganese content from 35% to a little over 50%. Part of the concentrates produced by this process are sold directly, while the rest are mixed with coke and sintered at a temperature of 1,300 degrees Celsius to achieve a product with approximately 56% manganese content. This product is then shipped by conveyor and loaded onto goods wagons at the Moanda train station. The sinter plant has a production capacity of 600,000 tonnes per year.

The Moanda Metallurgy Complex (C2M) began production in late 2014. Its target production is 60,000 tonnes of silicomanganese and 20,000 tonnes of manganese metal.

The Trans-Gabon railway transports COMILOG's manganese ore, as well as wood, various cargo and passengers, between Franceville and Libreville, a distance of more than six hundred kilometres. COMILOG owns and operates its own locomotives and goods wagons.

As of November 2005, COMILOG obtained the concession for the Trans-Gabon railway for a duration of thirty years. This allows it to secure its connections and ensure the shipment of sharply growing quantities of ore.

Through its subsidiary, Port Minéralier d'Owendo, COMILOG is a concession holder for its ore carrier port, the port of Owendo, with a storage capacity equal to roughly one month of production. The port can accommodate 55,000-tonne ships and load them in three days.

Manganese alloy production

The Group is the world's second largest producer of manganese alloys and the world's largest producer of refined alloys, products with high added value.

The Group produces a wide range of alloys: high-carbon ferromanganese, silicomanganese, low and medium-carbon ferromanganese and low-carbon silicomanganese. ERAMET Manganese has been gradually increasing the proportion of refined alloys it produces. In 2014, the Moanda Metallurgy Complex in Gabon (CMM) added manganese metal to its range of products.

ERAMET MANGANESE'S PRODUCTION OF MANGANESE ALLOYS

(IN THOUSANDS OF TONNES)	2017	2016	2015	2014	2013	2012
High-carbon ferromanganese	60	76	62	68	118	144
Standard silicomanganese	265	268	278	237	267	236
Refined alloys	391	359	370	389	366	350
Total	716	703	710	694	750	730

MANGANESE ALLOY PRODUCTION SITES

SITES	COUNTRY	PRODUCTION CAPACITY	TYPE OF FURNACE	PRODUCTS
Dunkerque	France	70 kt	Electric furnace	SiMn
Sauda	Norway	210 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Porsgrunn	Norway	165 kt	Electric furnace	HC, MC, LC FeMn, SiMn, LC SiMn
Kvinesdal	Norway	165 kt	Electric furnace	SiMn, LCSiMn
Marietta	United States	120 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Moanda	Gabon	65 kt	Electric furnace	SiMn
Moanda	Gabon	20 kt	Hydrometallurgy	Metal manganese

In Europe, three alloy plants are located in Norway. The fourth plant is located in France (Dunkerque).

In the United States, ERAMET Marietta is the primary of two local manganese alloy producers.

ERAMET MANGANESE MARKETING POLICY

Thanks to its industrial presence, ERAMET Manganese can offer a complete range of products and a flexible response to the various manganese-related needs of its customers.

The Group maintains partnerships with its customers, providing significant technical and sales support in order to help them derive maximum benefit from its products in their own production processes. The marketing policy is managed by ERAMET COMILOG Manganese, which uses the ERAMET group's international sales network, ERAMET International, which is responsible for marketing ERAMET Manganese's products. The Group is represented by agents in the countries where ERAMET International does not have a presence.

2.2.3 ERAMET MANGANESE IN 2017*

(€ MILLION)	2017	2016
Sales	1,919	1,439
EBITDA	861	358
Current operating income	738	219
Net cash generated by operating activities	722	243
Capital employed	1,125	1,339
Industrial investments	89	104

* *Adjusted data from Group Reporting, in which joint ventures are accounted for using proportionate consolidation. The reconciliation with the published financial statements is presented in Chapter 3.1.*

2.2.3.1 OPERATIONAL INDICATORS

(IN THOUSANDS OF TONNES)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Manganese ore and sinter production	4,163	3,413
Volume of ore and sinter transported	4,068	3,346
Manganese alloy production	716	702
Manganese alloy sales	699	725
Production of heavy mineral concentrates(1)	725	614

(1) In Senegal.

The Manganese division's sales, which accounted for 53% of consolidated sales, were up sharply (+33%) in 2017 at €1,919 million. Current operating income ended at €738 million (and more than three times 2016) in a particularly favourable market environment.

2.2.3.2 MANGANESE BUSINESS

Gross global production for carbon steel, the main end-product for manganese, was up by 5.3% versus 2016 and reached 1,691 Mt, an historic record. China continued to account for c. 49% of global production.

After the price fluctuations of the first quarter, manganese ore prices remained at a historically high level in 2017. The average for CIF China 44% manganese ore prices (source CRU) was USD 5.97/dmtu in 2017 (USD 5.69/dmtu in first-half 2017 and USD 6.25/dmtu in second-half 2017) versus USD 4.30/dmtu in 2016. This sharp increase (+39%) was driven by strong demand in China in a context of continuing low ore stocks in Chinese ports.

Despite a decline at year-end, manganese alloys prices were at high levels in FY 2017, following strong growth recorded at end-2016.

Efforts to make the railway line more reliable in Gabon (SETRAG, a 100% owned subsidiary of COMILOG), combined with better mining performances, enabled COMILOG to achieve a record level of 4.1 Mt of manganese ore produced and transported in 2017, versus a target of 4.0 Mt. The Company confirmed its excellence position in the global high-grade manganese ore market.

2.2.3.3 MINERAL SANDS BUSINESS

In 2017, TiZir recorded sales of €199 million (USD 225 million) and a current operating income of €27 million (USD 30 million), up €40 million versus 2016. These results highlight TiZir's good performance in a favourable environment.

2017 was marked by a favourable change in demand both in pigments (the main end-product on the market for titanium dioxide slag) and ceramic tiles (the main end-product for zircon). Global inventories for pigments and mineral sands, especially zircon, reached low levels.

In Senegal, TiZir continued optimising its operational efficiency with production of nearly 725 kt of concentrated mineral sands produced in 2017, up 18% versus 2016 production. In 2018, timing of ilmenite exports could be impacted due to railway track reconstruction works planned on the outskirts of Dakar, which will disrupt train traffic and the transportation of product to the port. TiZir currently works with the relevant stakeholders as well as on optimising logistics to minimise the impact during the construction period.

In Norway, titanium dioxide slag production amounted to 181 kt in 2017, increasing by 73% versus 2016, the latter being impacted by a furnace standstill.

2.2.3.4 RETURN ON CAPITAL EMPLOYED FOR ERAMET MANGANESE

ROCE: Current operating income/Capital employed at 31 December of year N-1 (equity, net financial debt, provisions for restoration of sites, provisions for restructuring and other social risks, less non-current financial assets, excluding investment in the Moanda Metallurgy Complex at 31 December 2010 to 2013 for the 2011 to 2014 ROCE).

MANGANESE ROCE (BEFORE TAXES)

YEAR	2012	2013	2014	2015	2016	2017
%	20.6	15.6	9.7	3.5	13.8	55.1

2.2.4 DETAIL OF INVESTMENTS

(€ MILLION)	2012	2013	2014	2015	2016	2017
Industrial investments	399	346	199	164	104	89

Against a backdrop of an improving market, in 2017 ERAMET Manganese maintained its investments, focusing in particular on strategic items, safety and the environment, and on maintaining industrial equipment.

RENOVATION OF THE SETRAG RAILWAY LINE

The investment package required to increase the reliability of the Trans-Gabon rail network was continued in 2017 with the implementation of a multi-year plan for the refurbishment of the railway line. In particular, the manufacture of new sleepers and the renewal of the track superstructure are progressing at full capacity. The aim of the proposed reform of SETRAG is to restore the railway's original capacity. Spread out over eight years, the cost of this operation is €316 million, of which €93 million will be financed by the Gabonese Government. The remainder shall be borne by COMILOG, which benefits from international financing obtained via SFI (World Bank) and Proparco (subsidiary of the French Development Agency).

As provided in the amendment to the Concession Agreement signed in October 2015, the Gabonese State and SETRAG have funded the remedial investment plan, as follows:

- the Gabonese government, with the signing of a Financing Agreement with the French Development Agency (AFD) in December 2016;
- SETRAG, with the signing in June 2016 of the first tranche of a credit of €85 million over a period of 15 years with the International Finance Corporation (IFC—World Bank) and Proparco (*Promotion et Participation pour la Coopération Économique*—a subsidiary of the French Development Agency, AFD) with guarantee and commitment of support from COMILOG.

In addition to this project, funds were provided to improve safety, reduce the environmental impact and boost the productivity of production facilities.

A number of significant investments were made in connection with the environmental footprint of the manganese ferroalloy production plants (fume capture and filtration systems, ultimate waste storage systems).

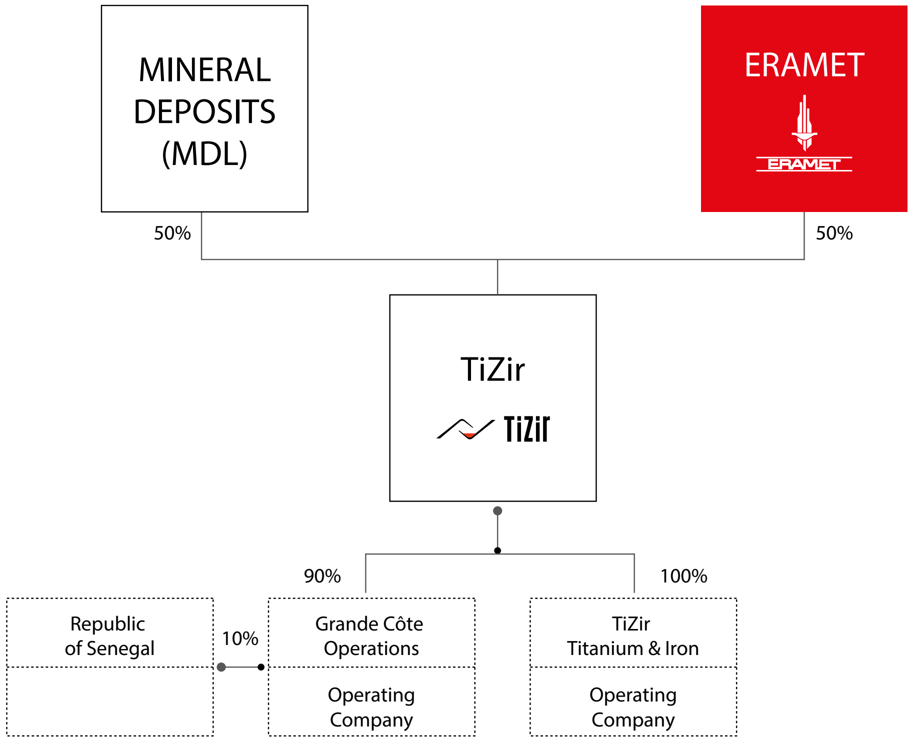
Within the framework of regulatory changes concerning emissions by pyrometallurgical industries based in the United States, ERAMET Marietta successfully completed work to bring one of its two furnaces into compliance, and is continuing to review the other equipment.

2.2.5 MINERAL SANDS

2.2.5.1 TIZIR 50% ERAMET: AN IMPORTANT PLAYER IN THE TITANIUM DIOXIDE AND ZIRCON MARKETS

TiZir was formed in 2011 by ERAMET and the Australian company Mineral Deposits Limited. ERAMET owns 50% of the company, which has two sites:

- Grande Côte, a mineral sands operation (GCO) in Senegal;
- TiZir Titanium and Iron plant (TTI) in Tyssedal, Norway, which beneficiates ilmenite (titaniferous ore) to produce titanium dioxide slag for the pigments industry and high-purity pig iron.



Together, these two assets represent a vertically integrated entity and a major player in the mineral sand industry: TTI benefits from the security of its supply of high-quality ilmenite by GCO, which in turn guarantees the long-term sale of a significant portion of its production.

SITES	COUNTRIES	PRODUCTS
GCO	Senegal	Mineral sands: titaniferous ore (ilmenite, rutile, leucoxene) and zircon
TTI	Norway	Titanium dioxide slag (pigment industry) High-purity pig iron (foundry)

GRANDE CÔTE OPÉRATIONS (GCO)

The Grande Côte mineral sands mine is located along the Senegalese coast. The concession begins about 50 km north of Dakar and stretches north for more than 100 km.

Construction of the project began in the second quarter of 2011. Industrial production began in April 2014 and ramped up for two and a half years. Since the end of 2016, mining production has continued to grow gradually.

Its facilities include:

- a dredge and a floating concentration unit that produces a concentrate containing the heavy minerals;
- a heavy mineral separation plant producing ilmenite, rutile, leucoxene and various grades of zircon;
- a power plant;
- a railway line of which GCO is the end-to-end concession holder;
- storage and port infrastructure in Dakar.

TIZIR TITANIUM & IRON PLANT (TTI)

The TTI plant in Tyssedal, Norway, produces titanium dioxide slag which is used as a feedstock in the production of titanium dioxide pigments using a chloride process. The plant has an annual capacity of 230 kt of titanium slag. TTI also produces high-purity pig iron with an annual capacity of 100 kt. This co-product is sold to foundries for diverse applications, including the production of wind turbine parts.

The site benefits from privileged access to hydroelectric power as it is located close to large areas of water exploited for this purpose.

The operation also benefits from access to unique technology (there are only six such smelter facilities in the world) and over thirty years of operating history. The flexible nature of TTI's production process (the plant can produce slag for the production of chloride or sulphate pigments) and its unique access to a competitive source of energy make TTI a major asset in the titanium industry.

The furnace was completely overhauled in 2015, with a 3-month production shutdown to install equipment to transform production at the plant to produce a titanium slag used for the production of chloride-process TiO_2 pigment. Following the incident that took place in August 2016 during the ramp-up, the refractory lining had to be changed and operations resumed on 7 January 2017. The furnace ramped up as expected and is currently producing close to annual capacity targets.

TIZIR'S PRODUCTION

		2017	2016	2015	2014
GCO—Mine					
Sand extracted	(kt)	45,063	39,203	34,760	14,102
Heavy mineral concentrate	(kt)	724.8	613.7	632.9	184.0
GCO—Finished products					
Ilmenite	(kt)	492.4	416.2	427.7	100.6
Zircon	(kt)	61.6	52.6	45.2	9.0
Zircon concentrate	(kt)	20.2	0.0	0.0	0.0
Rutile and leucoxene	(kt)	10.0	9.7	5.3	0.7
TTI					
Titanium dioxide slag	(kt)	181.1	103.6	106.8	183.7
High-purity pig iron	(kt)	73.8	42.6	59.2	103.0

MINERAL SANDS, SOURCE OF ZIRCON AND TITANIUM DIOXIDE

Mineral sands are mineral raw materials that contain heavy minerals concentrated over time in an alluvial (rivers, coasts and lakes) or windy (dunes) environment. Deposits of mineral sands are thus former beaches, dunes or river beds. These sands contain titaniferous ore deposits, mainly found in the form of ilmenite ($FeTiO_3$) and also rutile (TiO_2), and to a lesser extent leucoxene (ilmenite partially changed into rutile), and zircon ($ZrSiO_4$).

The levels of these ores in the sands are often in the order of a few percent. One of the most economical method of extraction entails using a floating dredge in a basin, however, this is only possible if the sands contain very few clay particles, which is the case at GCO. Otherwise, more conventional mining methods (hydraulic excavators and dumpers) are used—for rocky titaniferous ore, for example.

At GCO, sands are mined in a basin (advancing by an average of around 20 metres a day) using a dredge to extract them, concentrating the ores using gravity separation on a floating unit and then depositing the non-mineralised sands back. A final unit, on land, uses gravimetric, magnetic and electrostatic separation methods to separate the various ore contents in the heavy mineral concentrate in order to group them into their various commercial forms.

The largest mineral sand deposits currently being mined are mostly located in Australia, South Africa and China, which together account for more than 50% of the titanium ore supply and three quarters of the zircon supply.

2.2.5.2 THE TITANIUM DIOXIDE MARKET: STRONG POTENTIAL FOR GROWTH DRIVEN BY DEVELOPING COUNTRIES

While titanium metal is well known for its applications in the aerospace industry, as is the case at ERAMET Alloys, 91% of TiO_2 units are consumed in the white pigment industry.

White pigment producers require raw materials rich in TiO_2. TiO_2-based pigment has two exceptional properties; opacity and pure whiteness. It is used in paint, plastics, textiles and paper.

Use of TiO_2-based white pigment:

- Paint 55%
- Plastics 24%
- Paper 8%
- Ink 8%
- Other 5%

This pigment market is experiencing global growth of around 3.5% a year.

The main producers of TiO_2-based raw materials are Base Resources, Cristal*, Iluka Resources, Kenmare Resources, Kronos*, Lomon Billions*, Rio Tinto, TiZir and Tronox* (* company that also produces pigments), as well as other Chinese, Indian and Ukrainian producers.

MARKET AND PRICE TRENDS

After a long phase of stability, the titanium dioxide market saw an initial increase in demand in 2008 followed by a surge in its prices across the value chain in 2011, with spot prices tripling during a peak in 2012.

The product's strong profitability, combined with strong growth forecasts in China, generated investments leading to significant overcapacity and an increase in inventories. As a result, prices fell sharply from mid-2012 until the first few months of 2016, a scenario common to most raw materials.

With low prices across the entire value chain causing a decline in supply, the market once again found its balance, starting with TiO_2 pigments and ilmenite. These two commodities saw a sharp increase in their selling price during 2017. Other commodities posted smaller increases (highest-grade ilmenite, slag, rutile and synthetic rutile) due to greater overcapacity and the practice of short to medium term fixed-price sales contracts.

THE ZIRCON MARKET

One of zircon's main applications is as an opacifying agent in ceramics, giving them a glossy appearance and smooth surface. Ceramic tiles and bathroom sinks contain zircon: zircon sand is finely ground and then added directly to the ceramic preparation and the enamel.

Zircon also has important refractory properties and is used in certain industrial segments as a mould component in high-precision foundries. The chemical derivatives of zircon are used in a number of applications such as abrasives, wear-resistant materials and certain catalysts. Finally, zirconium metal is used in the nuclear sector for the protective sheath of fuel rods (highly heat-resistant and permeable to neutrons).

Uses for Zircon:

- Ceramics 52%
- Chemical derivatives 20%
- Refractories 15%
- Foundries 12%
- Other 1%

The main producers of Zircon are Cristal, Iluka, Kenmare Resources, Rio Tinto, TiZir and Tronox.

As with titanium dioxide, the zircon market experienced a period of very high prices and tension on the physical market at the beginning of the decade. This was accentuated by stockpiling throughout the industrial chain.

In 2013, the trend reversed. A phase of destocking and a significant drop in prices characterised the market for most of the year, while production capacity continued to increase and certain consumers adapted their consumption patterns to technically optimise their use of zircon (partial substitution). The price of zircon remained relatively stable in 2014 and 2015 before dropping again at the beginning of 2016 following a new decrease in demand for the production of ceramic tiles in China.

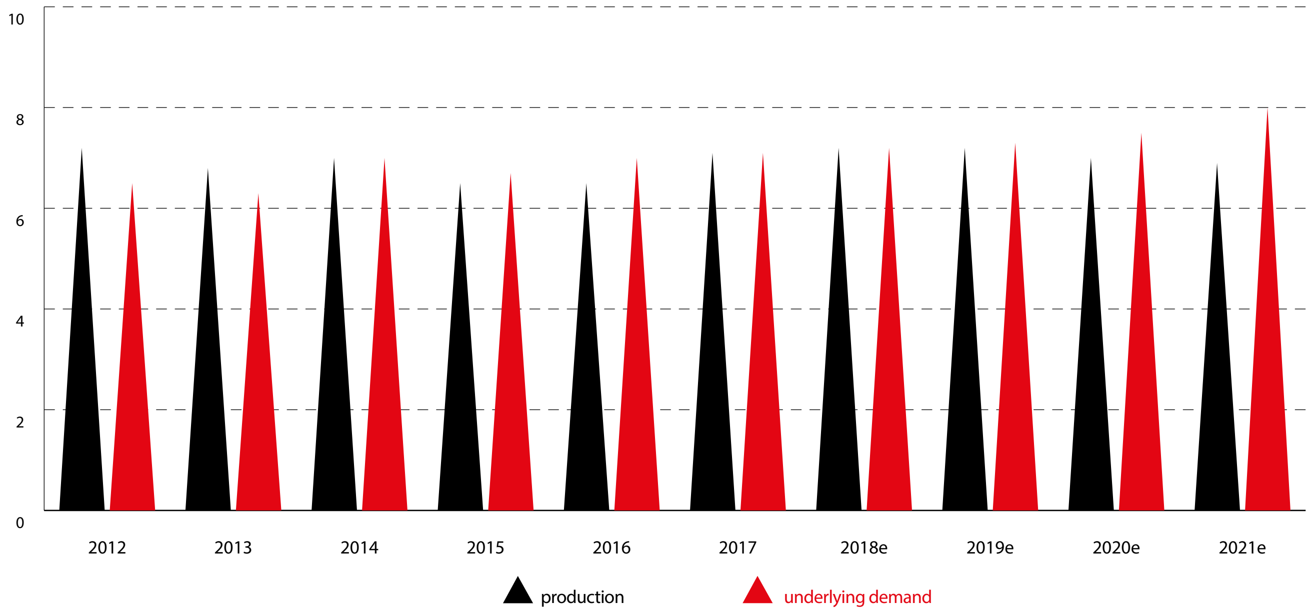
Prices increased slightly in late 2016 and early 2017, but in the second quarter, producer inventories (now at very low levels), robust demand and stable supply led to a sustained increase in prices, achieving at the end of 2017 an increase of around 35% over average 2016 levels.

MARKET OUTLOOK

The outlook for the beginning of 2018 is positive for all of TiZir's product markets:

- real demand seems robust, with average multi-year growth rates between 2% and 3%;
- inventories are low;
- supply is not increasing due to the lack of new projects and the environmental policy in China that limits volumes for some producers.

SUPPLY/DEMAND BALANCE IN MILLIONS TIO_2 UNITS



2.2.5.3 DETAIL OF INVESTMENTS

TiZir did not make any major investments in 2017. Investments to maintain capacity—such as deep drilling and rails for GCO, and copper elements of the furnace for TTI—were made.

2.3 NICKEL

2.3.1 THE NICKEL MARKET

2.3.1.1 USES FOR NICKEL

Nickel is primarily used to make many special steels in the broadest sense (stainless steels, steel alloys and superalloys), which together account for roughly 85% of nickel uses. Its rich and varied properties also lend it to smaller-volume uses, such as electroplating, the process of forming a thin coherent metal coating using electrochemistry on valves or automobile parts. Another booming application for nickel is its use in rechargeable batteries. Finally, nickel also has catalytic properties. The symbol for nickel on the periodic table of elements is "Ni". In 2017, global primary nickel consumption, estimated at around 2.2 million tonnes, was divided up as follows:

- Stainless steel: 70%
- Nickel-based alloys: 10%
- Electroplating: 7%
- Casting and alloy steels: 6%
- Other uses (including catalysis and batteries): 7%

Source: ERAMET estimates.

STAINLESS STEEL

The stainless steel industry is by far the largest consumer of nickel. Combining nickel with chromium makes it corrosion-resistant, more ductile and much more malleable. The primary uses for stainless steel are as follows:

- Food safety and hygiene: household equipment (sinks, cutlery, pots, etc.), electrical appliances (washing machines, microwave ovens, etc.) and also the food industry, with tanks and pipes for milk and wine production, pharmaceutical preparations and surgical equipment;
- Core industries for corrosion resistance: chemicals, petrochemicals, paper, energy production, etc.;
- Building and construction industry (aesthetics, durability and low maintenance costs): lifts, ramps, street furniture, building accessories;
- Transport (limitation of corrosion, low maintenance costs): trains, ships, tanker trucks, aeronautics and automotive catalytic converters.

NICKEL-BASED ALLOYS

Superalloys used in aeronautics are able to retain their mechanical properties at increasingly high reactor operating temperatures. To achieve this level of mechanical performance, superalloys contain more than 45% nickel along with other metals, such as cobalt and chromium.

Nickel-iron alloys are used in the production and transport of industrial gases as well as liquefied natural gas. The very low temperatures used in these processes make the use of certain nickel-iron alloys essential.

Other nickel-based alloys are primarily used for their resistance to corrosion in chemical industries and environmental protection facilities, such as smoke and gas processing and wastewater treatment.

NICKEL RECYCLING

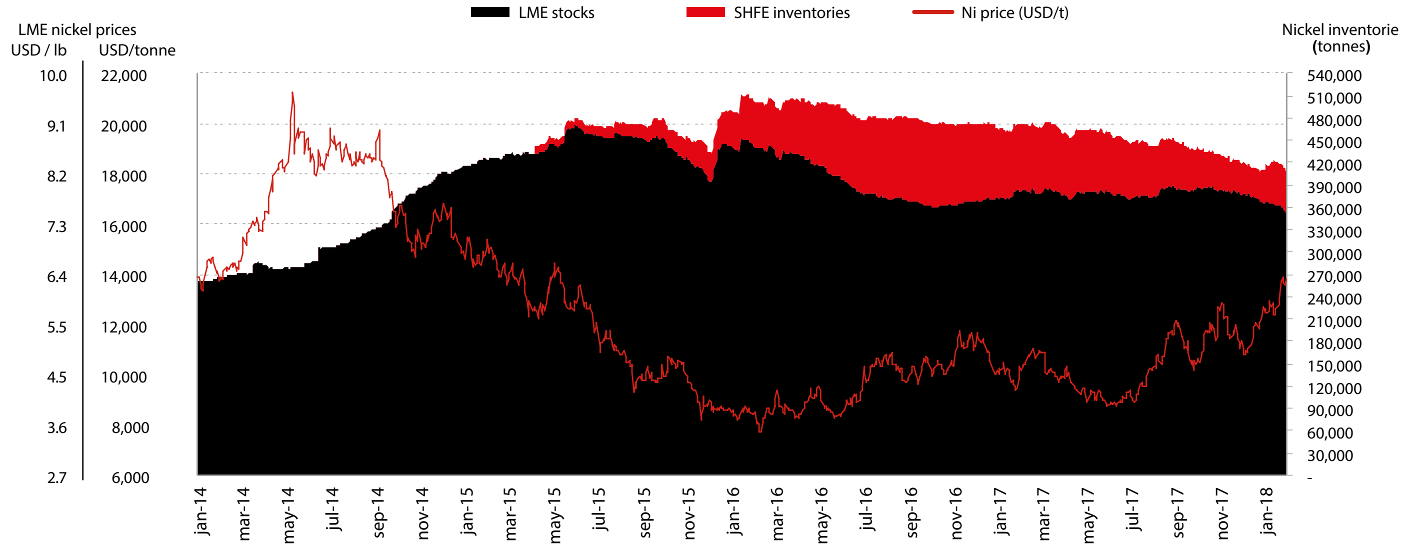
Nickel is infinitely recyclable and its high economic value makes it profitable to collect and recycle. The structure of the nickel recycling industry has been established for many years. Nickel is most commonly recycled in the production of stainless steel.

2.3.1.2 RECENT TRENDS IN NICKEL PRICES

Nickel is listed on the London Metal Exchange (LME). This market is characterised by the option but not the obligation to deliver or take delivery of physical metal associated with futures contracts. As of the end of March 2015, nickel is also listed on the Chinese SHFE stock exchange (Shanghai Futures Exchange).

Premiums or discounts are applied to this base price according to the quality of the products, their degree of processing, their location, and according to the equilibrium of the physical market at the time. Nickel prices are presented according to the type of "cash seller and settlement" contract.

Following a two-year slump, nickel prices fell again in the first half of 2017, reaching a low point at the beginning of June of USD 8,715 per tonne (USD 3.95 per lb) as a result of still very high inventory levels on the LME and SHFE (a total of 477 kt in mid-March), the easing of the Indonesian ban with the resumption of ore exports, and continued significant nickel ore exports from the Philippines, as well as the uncertainty associated with stainless steel production in China (decrease in supply in the second quarter of 2017 following the build-up of large stainless steel inventories). The second half of the year turned out to be much better with a price peak at the beginning of November, at USD 12,830 per tonne (USD 5.82 per lb). This rebound in nickel prices was driven by a recovery in stainless steel production in China (record production of 6.8 million tonnes in the third quarter), and by a sustained outlook for nickel, in particular thanks to the development of batteries for electric vehicles, as well as a significant drop in nickel inventories (-55 kt in 2017 to finish at 411 kt at the end of the year). The average for 2017 (USD 10,411 per tonne, or USD 4.72 per lb) is higher than that of 2016 (USD 9,609 per tonne, or USD 4.36 per lb).



2.3.1.3 TOP NICKEL PRODUCING COUNTRIES

PRODUCTION OF ORE (IN THOUSANDS OF TONNES OF NICKEL CONTENT)

	2011 (YEAR)	2012 (YEAR)	2013 (YEAR)	2014 (YEAR)	2015 (YEAR)	2016 (YEAR)	2016 (1-11)	2017 (1-11)
Indonesia	564.4	648.4	834.2	177.1	129.6	198.9	175.8	325.2
Philippines	319.4	322.4	315.6	443.9	470.0	352.0	330.7	323.5
New Caledonia	131.1	131.7	163.9	178.1	186.1	211.2	196.1	201.7
Russia	270.0	270.0	264.0	264.0	261.0	223.0	204.4	194.3
Canada	219.6	204.5	223.3	235.0	234.9	235.7	215.4	194.2
Australia	215.0	243.6	234.2	244.7	224.2	203.1	185.9	173.5
China	94.5	103.7	107.2	100.0	93.0	90.0	82.5	86.9
Brazil	91.0	109.0	108.0	102.0	94.8	86.4	79.2	79.2
Others	73.1	64.5	57.5	69.6	73.9	62.3	57.0	62.3
Guatemala	0.0	2.4	10.2	46.8	56.4	45.9	41.8	52.6
Cuba	72.5	68.0	55.6	51.6	53.8	51.6	47.3	48.4
South Africa	39.8	45.9	51.2	55.0	56.7	49.0	45.2	44.2
Colombia	57.1	77.9	74.4	62.2	55.5	50.1	46.1	43.4
Finland	19.3	20.2	19.4	18.7	9.7	23.5	20.7	36.0
Madagascar	0.0	8.4	29.2	40.3	49.0	45.7	40.6	35.2
Papua New Guinea	0.0	5.3	11.4	21.0	25.6	22.3	19.6	30.7
United States	0.0	0.0	0.0	4.1	27.2	24.1	22.4	21.0
Myanmar	0.0	0.0	6.1	21.0	26.4	22.8	20.9	20.9
Botswana	32.4	32.4	30.0	29.1	23.8	12.0	12.0	0.0
World	2,199.1	2,358.2	2,595.5	2,164.0	2,151.6	2,009.6	1,843.5	1,973.2

Source: INSG (International Nickel Study Group).

PRODUCTION OF FINISHED PRODUCTS (NICKEL ALLOYS, FERRONICKEL, NICKEL PIG IRON, PURE NICKEL METAL, NICKEL SALTS, INTERMEDIATE CHEMICALS) (IN THOUSANDS OF TONNES OF NICKEL)

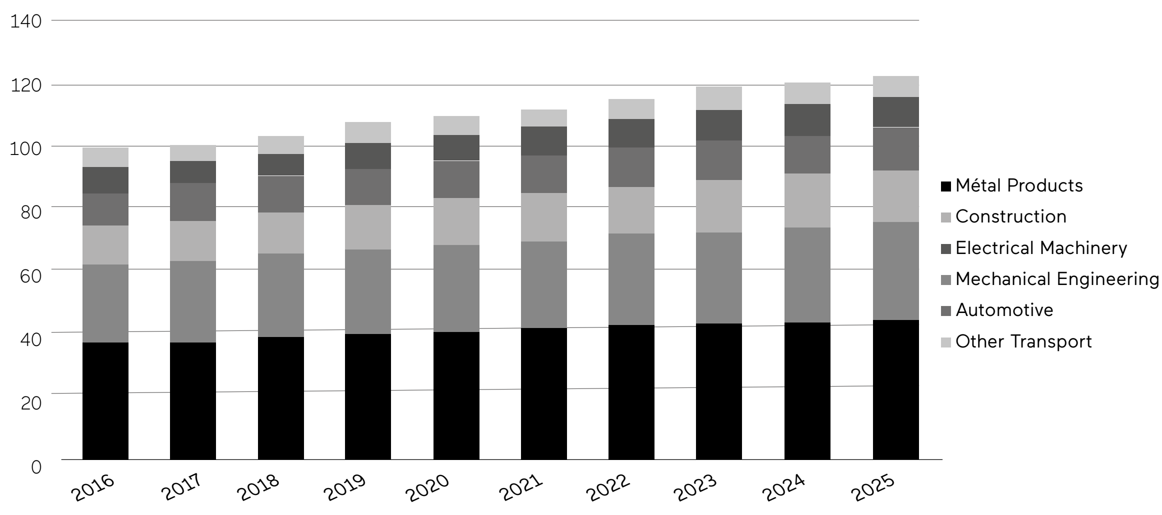
	2011 (YEAR)	2012 (YEAR)	2013 (YEAR)	2014 (YEAR)	2015 (YEAR)	2016 (YEAR)	2016 (1-11)	2017 (1-11)
China	435.2	519.2	693.5	690.5	600.0	573.4	522.0	569.7
Indonesia	19.7	18.4	21.0	21.8	38.3	116.3	100.8	189.2
Japan	157.3	169.5	178.0	177.6	193.8	191.8	175.8	173.6
Canada	142.4	152.0	153.1	150.0	159.3	158.3	144.6	144.0
Russia	263.0	254.0	242.0	239.4	231.9	192.0	177.3	142.7
Australia	110.2	128.8	141.5	138.7	132.5	115.8	105.5	102.0
New Caledonia	40.0	45.4	48.4	62.0	77.5	96.0	86.9	94.4
Norway	92.4	91.7	91.0	90.5	91.2	92.7	84.9	79.4
Brazil	30.8	53.5	57.5	79.6	77.7	77.1	71.6	63.3
Finland	48.5	45.5	44.3	42.6	43.5	53.7	48.1	53.9
Korea	19.0	20.9	25.4	22.8	39.0	45.6	41.8	43.0
South Africa	34.0	32.9	31.3	33.3	41.9	42.1	38.6	37.3
Colombia	37.8	51.6	49.3	41.2	36.7	37.0	34.0	36.5
Others	40.5	33.8	22.0	25.4	29.6	20.8	18.4	33.3
United Kingdom	37.4	39.4	42.4	39.1	39.1	43.1	39.8	33.3
Madagascar	0.0	5.7	25.1	37.1	47.3	42.1	37.8	32.4
Myanmar	0.0	0.0	3.1	19.0	23.0	19.6	18.0	18.7
Greece	18.5	18.6	16.8	18.5	17.1	17.1	15.8	15.3
Ukraine	14.6	20.6	21.2	18.6	18.0	18.1	16.5	13.6
Cuba	29.2	25.7	16.6	13.3	14.6	14.4	13.2	13.2
Macedonia	17.3	19.2	20.0	18.1	17.7	10.6	9.7	9.4
France	13.7	13.2	12.1	8.4	6.5	4.6	4.4	2.2
World	1,601.8	1,759.7	1,955.1	1,987.9	1,976.2	1,982.2	1,805.7	1,900.5

Source: INSG (International Nickel Study Group).

2.3.1.4 MARKET OUTLOOK

Stainless steel will remain the largest consumer of nickel, but sustained growth prospects for nickel demand are driven by batteries for the automotive industry.

The consumption of primary nickel in stainless steel is expected to continue to grow at a rate of 2-3% per year, driven by end-use applications (see graph below).



Source: Roskill, OEF, MBR's Stainless Steels Market Tracker & MBR's Steel Forecaster.

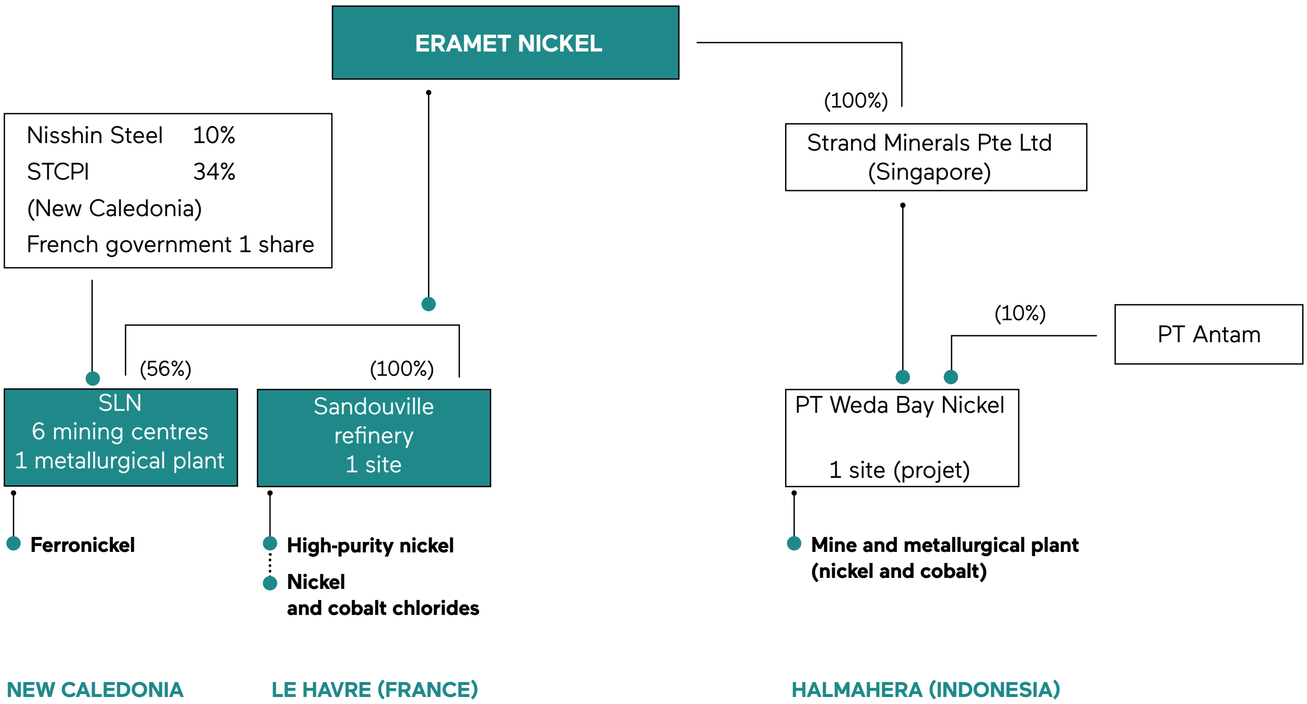
Nickel demand is also now supported by the very good prospects offered by the development of the lithium-ion battery sector, primarily for electric and hybrid vehicles. ERAMET estimates that demand for non-stainless steel nickel is expected to grow by around 5% per year over the next few years, of which around 15% per year will be in the battery sector.

2.3.2 STRUCTURE OF ERAMET NICKEL

ERAMET Nickel pursues a strategy of developing ores locally and positioning itself in products with high added value, with reliance on the ERAMET group's internal R&D. ERAMET Nickel comprises three main entities:

- Société Le Nickel-SLN in New Caledonia, a 56% owned subsidiary and the main mining and metallurgical centre, produces high-grade ferronickel at the Doniambo plant;
- Le Havre Sandouville nickel refinery, specialising in high value-added products (nickel salts, high-purity electrolytic nickel, cobalt salts), has been supplied with nickel matte by a new European source since mid-2017;
- the Weda Bay project in Indonesia, based on world-class deposits, developed in partnership with the Chinese company Tsingshan, the leading producer of stainless steel. It is planned to produce a low-grade nickel pig iron from Weda Bay ore ("NPI").

2.3.3 STRUCTURE AT 31 DECEMBER 2017



2.3.3.1 SOCIÉTÉ LE NICKEL

ERAMET has a longstanding presence (since 1880) in New Caledonia through Société Le Nickel (SLN), its 56%-owned subsidiary. The other shareholders as at 31 December 2017 were:

- STCPI with 34%, a structure representing the interests of New Caledonia's three provinces;
- Nisshin Steel with 10%, an important client producer of stainless steel in Japan;
- the French government, which holds one share in SLN.

ERAMET Nickel operates high-quality mines due to their nickel content and their reserves. As is the case for the entire mining industry, their operating conditions have evolved over the last few years, primarily due to the recovery of larger volumes of waste rock, which impacts production costs. However, the Group's research centre (ERAMET Research in Trappes) has enabled the Group to adapt its metallurgical process to these changes while continuing to enhance the operating efficiency of its mines and to invest in scaled-up mining equipment.

All of ERAMET's metallurgical products are made using ore from its own mines. The Doniambo plant in New Caledonia mainly produces ferronickel. From 2017, SLN has focused its production on ferronickel, having produced its last batch of matte in August 2016.

ERAMET markets all Société Le Nickel (SLN) products, including low-grade nickel ores. ERAMET also provides technical support to Société Le Nickel (SLN) in a number of areas, particularly in procurement management, research, engineering, and legal and financial requirements.

Société Le Nickel (SLN) sells all of its Doniambo metallurgical production to ERAMET. The sale price of the ferronickel sold by SLN to ERAMET depends on the average price at which ERAMET sells to its customers, minus marketing costs and a sales margin for ERAMET.

SLN's governance system closely involves the stakeholders of New Caledonia.

NICKEL MINES

ERAMET Nickel's mines in New Caledonia benefit from:

- sizeable tonnages of saprolite resources for pyrometallurgy;
- high nickel contents of roughly 2.452.50% with cut-off grades of 1.7-2.0% Ni;
- sizeable reserves with decades of potential use (see the section on Resources and Reserves).

Société Le Nickel-SLN's garnierite and saprolite oxide deposits are mined in open pits. They are generally located at altitudes of 500 to 1,000 metres. SLN has extensive experience in mining deposits in New Caledonia. These deposits are defined by geological, geochemical and geophysical surveys and their geological structures are modelled. Deposits are extracted using hydraulic excavators based on mine planning geology. The ore is then transported by trucks with payloads of 50 to 100 tonnes, depending on the model.

ERAMET's internationally recognised mining techniques are designed to preserve the environment: storage of tailings in stabilised heaps, control of water run-off and revegetation, etc.

NÉPOUI AND TIÉBAGHI BENEFICIATION PLANTS

In Népoui, ore is hydraulically sent to the beneficiation plant using a seven-kilometre pipeline. That plant was opened in 1994 and uses an (at the time) innovative technology based on sorting by particle size and density to increase ore content. This allows a larger proportion of the deposit to be exploited (including lower-grade ores), thus extending the lifespan of the reserves. A similar process has been adapted to process ore from the Tiébaghi mine. The Tiébaghi beneficiation plant was opened in November 2008.

TRANSPORT OF ORE

The mine's output is mostly sent to the Doniambo plant. The first stage of ore transport is from the mine to the coastal storage areas either by truck, or at Kouaoua by an 11-kilometre conveyor, or at Népoui and Tiébaghi in the form of slurry to feed the beneficiation plants. At the port, the ore is stored and standardised before being loaded onto ships for transfer to the Doniambo plant.

DONIAMBO METALLURGY PLANT

The Doniambo plant produces directly marketable ferronickel. The ore mined is standardised and then dried before being calcined in five rotary furnaces. The ore is then melted in three Demag electric furnaces. The resulting product is transformed into marketable ferronickel (SLN 25) by ladle refining followed by shot blasting.

The Doniambo plant is one of the two largest ferronickel production sites in the world. Its location close to the port of Nouméa allows direct access to ore carriers and cargo ships.

The production equipment at Doniambo has undergone a major modernisation programme. Four of the five rotary furnaces and two of the three electric furnaces have been replaced in recent years. The ore drying facilities have also been modernised. Significant investments have also been made to protect the environment.

2.3.3.2 SANDOUVILLE REFINERY

The Le Havre-Sandouville refinery uses a hydrometallurgical process specially developed by ERAMET research teams. Nickel matte is supplied under a long-term contract with a European metallurgist. 2017 was a year of transition, since previously, the raw material had been supplied entirely by the Société Le Nickel-SLN metallurgical plant in Doniambo, New Caledonia.

The nickel matte is crushed and then dissolved by an iron chloride solution. Several successive extraction stages in mixer-settlers separate out iron in the form of ferric chloride (commercial product), and cobalt in the form of cobalt chloride (commercial product). The various remaining impurities are then removed. The resulting pure nickel chloride solution can be marketed as-is (liquid nickel chloride), in the form of nickel salts (nickel carbonate, nickel chloride hexahydrate or anhydrous) or fed into a series of electrolytic tanks. The result is a very pure nickel cathode (over 99.97% nickel content).

2.3.3.3 ERAMET NICKEL SALES NETWORK

The Group maintains long-term partnerships with its customers. It has its own global sales network, ERAMET International. The Group provides significant technical and sales support to its customers in order to help them derive maximum benefit from its products in their own production processes.

- The Group's entire ferronickel production ("SLN 25") is sold to stainless steel producers, for which the Group supplies both nickel (20 to 25% of the gross weight) and iron of excellent quality. The Group generally operates under medium or long-term contracts, providing for commitments of volume in accordance with periodically negotiated prices. These contracts ensure relatively regular shipments for ERAMET.
- Nickel metal or nickel HP is produced in the form of high-purity nickel cathodes that meet the most stringent requirements and are mainly sold to nickel alloy manufacturers (superalloys for aerospace and nuclear power) and nickel electroplating workshops (nickel plating).
- Nickel chloride, or SELNIC, is used in nickel plating and in the chemical industry (catalysts). A portion of the nickel chloride is converted into anhydrous nickel for the electronics industries.
- Nickel carbonate ("Nickel ONE™") is primarily used in the refining industry to manufacture catalysts and in the ceramics industry as a pigment.
- Cobalt chloride is used in the tyre industry, in the chemical industry as catalysts and also in powder metallurgy.

2.3.3.4 WEDA BAY NICKEL (PROJECT IN INDONESIA)

The Weda Bay deposit is one of the largest nickel deposits in the world. Its measured, indicated and inferred resources are estimated at more than 9.3 million tonnes of nickel content, an increase of more than 5 million tonnes compared to estimations made at the time of ERAMET's acquisition of Weda Bay in May 2006.

ERAMET has signed a framework agreement with the Chinese steel group Tsingshan with a view to determining the conditions for partnership to increase the value of the asset. Tsingshan is the world's largest producer of stainless steel. This partnership entails using a pyrometallurgical process to produce nickel ferroalloy, with a volume of about 30,000 tonnes of nickel content, from the ore mined from the Weda Bay deposit in Indonesia. This would thus entail the Tsingshan Group joining Strand Minerals Pte Ltd. ERAMET would hold a 43% stake and the Tsingshan Group 57%.

2.3.4 MAJOR EVENTS

Through SLN in New Caledonia, ERAMET Nickel is the world's eighth largest producer of nickel, with output that has stabilised over the last few years at around 55,000 tonnes.

In 2017, ERAMET Nickel produced 56,771 tonnes, consolidating its position as the world's leading producer of ferronickel for the stainless steel market.

METALLURGICAL PRODUCTION (FERRONICKEL + MATTE) FROM THE DONIAMBO PLANT	(IN TONNES OF NICKEL CONTENT)
2012	56,447
2013	53,015
2014	55,012
2015	53,369
2016	55,227
2017	56,771

In 2017, the Sandouville plant completed the conversion of its facilities to use a new Nickel matte (sulphide origin) and started up these facilities in August 2017. Nickel production (including all nickel products) amounted to 2,412 tonnes in 2017.

2.3.5 SPECIFIC ACTIVITIES

ELECTRICITY SUPPLY TO SOCIÉTÉ LE NICKEL-SLN

Electricity at Doniambo is currently supplied by an old oil-fired power plant which will be replaced in the coming years in order to reduce the energy costs for the plant. The scheme adopted in the second half of 2016 is to install a new natural gas-fired electricity generation plant on the island. The project will be managed by a newly created public structure in New Caledonia. The investment will be guaranteed by the State under the provisions adopted by the French Parliament in December 2016 up to an amount of €320 million and should not affect ERAMET's balance sheet.

A sustainability plan for the plant has been initiated. The plan, totalling €21 million, includes investments to replace the critical units of the current plant over five years. In 2017, work focused mainly on parts 1 and 2, with the replacement of superheater elements.

2.3.6 ERAMET NICKEL IN 2017*

(€ MILLION)	2017	2016
Sales	644	595
EBITDA	(44)	(24)
Current operating income	(125)	(119)
Net cash generated by operating activities	(69)	(137)
Capital employed	710	700
Industrial investments	80	56

* *Adjusted data from Group Reporting, in which joint ventures are accounted for using proportionate consolidation. The reconciliation with the published financial statements is presented in Chapter 3.1.*

2.3.6.1 OPERATIONAL INDICATORS

(IN MILLIONS OF TONNES)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Nickel production(1)	59,183	55,227
Nickel sales(2)	58,488	56,121

(1) Ferronickel and matte until the end of 2016 and ferronickel and high purity nickel from 2017.
(2) Finished products.

The Nickel division's FY 2017 sales totalled €644 million, up 8% versus 2016. Current operating income was negative at -€125 million in 2017, penalised by the ramp-up of Sandouville, with a loss of c. €40 million, which offset the €32 million improvement from SLN during the period.

Following an upturn in growth observed in 2016, global stainless steel production continued to increase, up 5.7% in 2017 versus 2016.

Global nickel supply also remained strong with a recovery in exports and the roll-out of new capacities in Indonesia, as well as continued ore exports from the Philippines.

Metal stocks at the LME and SHFE remained at high levels, at 411 kt at end-2017, nonetheless down by 55 kt on the year.

As a result, LME nickel prices remained low in 2017 at USD 4.73/lb on average, however slightly higher than the 2016 level (USD 4.36/lb on average).

Nickel metallurgical production at SLN increased by 2.9% in 2017 versus 2016 and reached 56.8 kt.

In this context, the implementation of the SLN productivity plan was a success. Average 2017 SLN cash-cost was USD 4.76/lb(1), corresponding to a 21% decrease compared to 2015. Benefiting from favourable weather conditions, SLN achieved a cash-cost of USD 4.44/lb(1) in the second-half of 2017, entirely in line with the objective of USD 4.5/lb(1) set out in the Plan SLN 2018. SLN teams are now focusing on the continuation of this trajectory with the target of USD 4.0/lb(1) in 2020.

(1) Figures at constant economic conditions (early 2016).

Since June 2017, the Sandouville nickel refinery is supplied by a new source of European nickel matte as part of a long-term agreement. The new process started operations in 2017. The ramp-up of the plant is complex and difficult and is continuing to affect throughput rate. In the long-term, the plant in Sandouville will produce 15 kt of high-purity nickel intended for high-tech industries, especially for the electronics and batteries markets.

In Indonesia, ERAMET is discussing with local authorities to implement its partnership agreement concluded with the Chinese stainless steel producer, Tsingshan, announced in June 2017.

2.3.6.2 RETURN ON CAPITAL EMPLOYED FOR ERAMET NICKEL

ROCE: Current operating income/capital employed at 31 December of year N-1 (equity, net financial debt, provisions for restoration of sites, provisions for restructuring and other social risks, less non-current financial assets, excluding capital employed at Weda Bay).

YEAR	2012	2013	2014	2015	2016	2017
%	(5.1)	(28.5)	(6.3)	(27.0)	(18.3)	(17.9)

2.3.7 DETAIL OF INVESTMENTS

(€ MILLION)	2013	2014	2015	2016	2017
Industrial investments	172	97	56	56	80

IMPROVING PRODUCTION EQUIPMENT

In 2017, ERAMET Nickel's investment budget was higher than in 2015 and 2016, due to the major replacement or renovation projects. Strict criteria were used to appraise projects to be undertaken in order to ensure they met the priority needs of safety and environmental protection, improved productivity, or were used to replace obsolete equipment. As part of this systematic search for performance, in a context of a limitation on the sums available to invest, the largest investment projects were given priority.

- For Société Le Nickel-SLN, investments concerned mines, specifically the maintenance of mining equipment, and the Doniambo plant, in particular the ore unloading gantries, and the replacement of critical elements for power plant B.
- At the Sandouville refinery, investments were dedicated to modifying the nickel matte treatment process in order to adapt it to the new matte now supplied to the plant.

2.4 ALLOYS

KEY FACTS

Key information concerning the Alloys division of the ERAMET group is as follows:

- global leadership position: Aubert & Duval is the world's second largest producer of high power closed die-forged parts for the aerospace industry and a major player in aerospace titanium. Erasteel is one of the world leaders in premium high-speed steels and the alloys division is one of the world leaders in gas-atomised alloyed metal powders;
- a strategy of positioning in high-tech markets requiring technical expertise and innovation;
- recent strategic investments to support its development: a new superalloy powder atomising tower in Les Ancizes; new facilities for recycling batteries and catalysts at the Commentry site; launch of a new rolling mill in Les Ancizes;
- the structuring of a European aerospace titanium supply chain with the inauguration in 2016 of MKAD, dedicated to the machining of aviation-grade titanium parts, and the inauguration in 2017 of EcoTitanium—the first European site to produce aviation-grade titanium ingots using recycled materials.

2.4.1 BUSINESSES OF THE ALLOYS DIVISION OF THE ERAMET GROUP: A HIGH-END METALLURGIST SUPPLYING STRATEGIC INDUSTRIES, SPECIFICALLY IN THE AEROSPACE SECTOR

The Alloys Division of the ERAMET group operates through two main subsidiaries: Aubert & Duval and Erasteel, both of which are positioned at the high end of the alloys industry, with strong metallurgical skills.

- Aubert & Duval is one of the world's leading suppliers of high performance steels and alloys to strategic industries such as aerospace, energy, defence and tooling.
- With its world-class industrial tools, Aubert & Duval is vertically integrated in the processes of hot forging, die-forging* and rolling of special steels, superalloys, titanium and aluminium alloys, and it also produces alloy powders.
  - It is one of the three major producers of die-forged parts for critical applications in the aerospace and energy industries.
  - A producer of high performance steels and nickel alloys, Aubert & Duval has positioned itself at the top of the "steel pyramid". It has also reinforced its position in the area of titanium at multiple stages of the value chain by participating in the strong growth of this material in the aerospace industry, specifically because of its compatibility with composites. It also produces tool steels for **specific niche** markets.
  - With its metallurgical expertise and solid experience in atomising powders, Aubert & Duval is a recognised supplier of fine metallic powders for additive manufacturing for demanding markets such as the aerospace, energy, medical, defence and automotive industries.
- Erasteel is one of the major players in high-speed steels** and remains the leader in the high-end segment of these steels, particularly with its powder metallurgy high-speed steels (PM-HSS), used for cutting and cold working tools and high performance mechanical components.

Erasteel is a world leader in powder metallurgy (PM), a process for obtaining high-alloy steels while preserving very high metallurgical properties. Erasteel's PM-HSS steels are gas-atomised and marketed under the ASP® brand. The ASP® range is suitable for a wide range of tooling and mechanical component applications. Pearl® has a wide range of powdered steels and alloys for Hot Isostatic Compaction and thermal spray coatings.

* Die-forging is a process for creating parts with complex shapes by hammering or applying pressure in a tool consisting of dies, which mould the shape of the workpiece. Die-forging consists of shaping workpieces by plastic deformation after heating the blanks made of aluminium, titanium or nickel alloys, etc. Before it is forged, the blank is prepared by open-die forging, an important step which gives the blank the mechanical properties required for the final part. Die-forging refines the structure and allows grain orientation; this gives the forged parts improved general properties with, in particular, high fatigue resistance.

** High-speed steels (HSS) are particularly used for machining (drills, taps, etc.). These high-alloy steels have high hardness properties and wear resistance due to the significant presence of hard carbide producing elements, such as tungsten and vanadium.

2.4.2 PRODUCT FAMILIES OF THE ALLOYS DIVISION OF THE ERAMET GROUP

2.4.2.1 LONG PRODUCTS

These are products with high mechanical properties sold in the form of round, flat or square bars, in sheet metal or wire, and are intended to be processed or machined. Aubert & Duval's products are used in critical applications: aerospace, medical, hot tools, defence. Erasteel's products are intended for cutting tools, cold work tools and mechanical components for the following end markets: aerospace, tooling, automotive, medical, etc.

2.4.2.2 FORGED BLOCKS FOR TOOLING

These are large forged blocks, possibly pre-machined, and long products, generally with large cross-sections. The target markets are the traditional tool steel markets: hot working, cold working and injection moulds.

The market is fragmented (large number of customers) and regional. As a result, distribution plays an important role. Aubert & Duval and Erasteel are specifically positioned at the high end of the market, providing strong technical consulting content.

2.4.2.3 METALLIC POWDERS

Aubert & Duval has developed powders for Additive Manufacturing and compacted powders in the form of semi-finished products for the die-forging of aerospace turbine discs.

Erasteel markets powder for the hot compaction market.

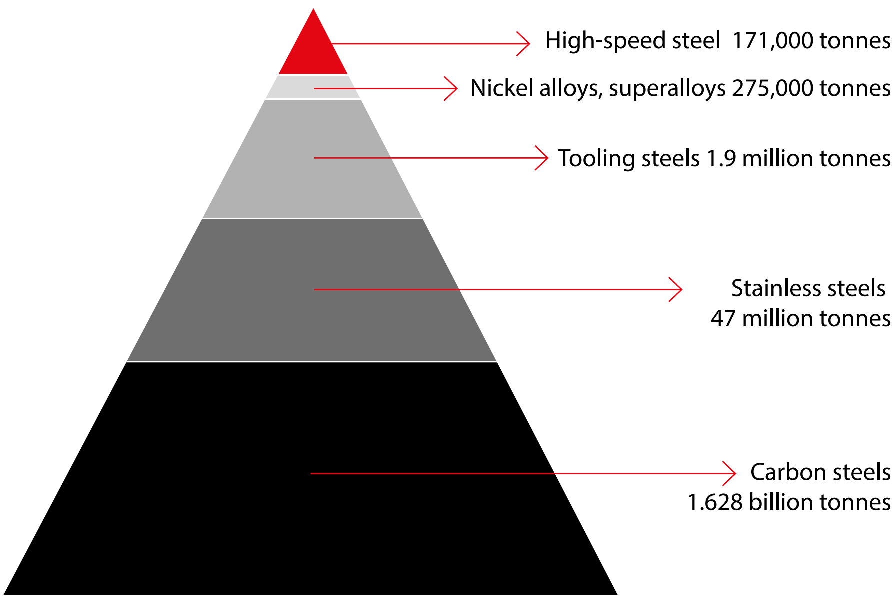
2.4.2.4 PARTS

Aubert & Duval manufactures die-forged parts, open-die forged parts and parts by Hot Isostatic Compaction (HIC) for the most demanding applications (aerospace, energy, etc.)

2.4.3 HIGH END POSITIONING OF THE ALLOYS DIVISION OF THE ERAMET GROUP

The materials and products marketed by ERAMET Alloys are positioned in niche markets at the top of the steel pyramid.

WORLD PRODUCTION OF THE MAIN STEEL AND ALLOY FAMILIES IN 2017



ERAMET estimates.

HIGH-GRADE ALLOYS AND NICKEL-BASED ALLOYS (APPROXIMATELY 275,000 TONNES)

There are several types of nickel-based alloys, which can be grouped by type of properties required:

- alloys with high mechanical resistance at high temperatures (superalloys).

  Superalloys contain 40% to 75% nickel. This is alloyed with chromium (15-30%) and, depending on the required grade, cobalt, molybdenum, titanium, aluminium and niobium. Their main markets are the aerospace industry (engines) and the gas turbine sector.

  Demand for superalloys is primarily driven by the aerospace industry. This industry, however, is strongly cyclical in nature. The new engine business is complemented by activities related to the maintenance of existing engines;
- alloys for electronics industries and electrical resistors;
- alloys for transporting liquefied natural gas;
- corrosion-resistant alloys (chemicals industry, food industry, offshore platforms, nuclear power and environment);
- high-speed steels (approximately 200,000 tonnes)

High-speed steels have a high carbon content and also contain tungsten, molybdenum, vanadium, chromium and sometimes cobalt. They do not contain nickel. After heat treatment, these steels are extremely heat resistant. Long products account for the largest share of the total market and are used to manufacture drills, taps, burrs, reamers, etc. Flat products are used to manufacture saw blades, cutting discs and industrial cutters.

These markets require distribution channels to meet the specific demands of each customer.

2.4.4 SPECIAL PRODUCTION PROCESSES FOR THE PRODUCTION OF HIGH-PERFORMANCE STEELS AND SUPERALLOYS

The Alloys Division of the ERAMET group has substantial expertise in the production of metal alloys and meets the highest requirements of the industries it serves.

2.4.4.1 PRODUCTION OF METALS

The production of high-performance steels and superalloys entails melting scrap or recycled alloys and alloy elements in an electric furnace to create an alloy with a perfectly controlled composition.

Several types of processes are used depending on the characteristics required:

- **air processing**, which takes place in an arc furnace, followed by a metallurgical processing phase to add alloying metals in order to attain the desired purity and chemical analysis;
- **vacuum processing**, used to produce alloys that withstand higher stresses (containing alloy elements that react with oxygen and nitrogen). This process is carried out in Vacuum Induction Melting (VIM) furnaces;
- **remelting**, required for critical parts for the aerospace, power generation and tooling sectors.

  The remelting process is carried out using Electro Slag Remelting (ESR) or Vacuum Arc Remelting (VAR) furnaces. Both processes are employed successively for certain types of alloys for the aerospace industry and onshore turbines.
- **the processing of titanium alloys by PAM-CHR (plasma arc melting—cold hearth refining)**;
- **powder metallurgy:**

  After melting the metal in the furnace, this process consists of atomising a stream of molten metal in the form of fine droplets which, upon cooling, form a powder.

  These metal powders produced by gas atomisation can then be compacted into a perfectly dense material by hot isostatic compaction. This process is particularly suitable for highly alloyed, high-grade products, such as high-speed steels. The products manufactured by the Alloys Division using this technology are sold as long products or near-net-shape parts, depending on the application.

  The Alloys Division has also developed strong skills in the atomisation of free powders mainly used in additive manufacturing (3D printing).

2.4.4.2 PROCESSING OF METALS

After production, various techniques are used to mechanically form the material, generally by applying heat and optimising the material's mechanical properties.

- **Die-forging:**

  Aubert & Duval is a world-leading die-forging manufacturer. The company specialises in large parts for critical applications whose quality of design, development and manufacturing require metallurgical expertise, know-how and specialised equipment. Aubert & Duval's processes meet the specifications of the most demanding industries in terms of rigour, reproducibility and quality.

  It is one of the only producers that uses die-forging processes for all four types of materials: steels, superalloys, aluminium and titanium. Steels and some superalloys are produced internally. Die-forging is carried out at the Issoire, Interforge and Pamiers sites.

  The die-forging facilities have the following tools:
  - 4.5 kt to 65 kt die-forging presses;
  - 1-16 tonne rams;
  - various finishing facilities (grinding), heat treatment, non-destructive testing, and machining (lathes, milling machines).

  The Interforge press

  Since the mid-1970s, Interforge's activities, based in Issoire, have centred around a 65,000 tonne die-forging press, the most powerful in the western world. The company subcontracts die-forging exclusively for its shareholders in proportion to their shareholding (94% for Aubert & Duval and 6% for Safran Aircraft Engines).
  This press is a strategic asset of the first order. Its capacity enables it to produce parts that are difficult to make with its competitors' presses, which are limited to 40,000-45,000 tonnes.

  The Pamiers presses

  The Pamiers plant has two presses: 22,000 tonnes and 40,000 tonnes. The 40,000 tonne press is fully integrated and has a tool designed specifically for the die-forging of parts for aircraft engines, particularly large formats.
- **Open-die forging** involves the shaping of metal into simple bars or blanks. This process is carried out using a hot press, a forging machine or a ram, with a series of pressing runs without using dies.
- **Rolling** consists of running the material between rollers to shape it into sheets, bars (typically 20-200 mm in diameter) or wire (5-20 mm in diameter).

ERAMET Alloys has established several strategic partnerships over the last five years, with holdings ranging from 25 to 50%:

- UKAD in titanium forging, based on the upstream activity of UKTMP (Kazakhstan);
- SQuAD in India in the field of die-forging for the aerospace industry;
- The creation of MKAD, a partnership between Aubert & Duval and Mecachrome for the supply of titanium machined parts;
- EcoTitanium with ADEME and Crédit Agricole Centre-France, dedicated to the production of aviation-grade titanium bars made from recycled scrap.

The Alloys Division of the ERAMET group has made several recent investments in wholly-owned subsidiaries, including the construction of an atomising tower and the modernisation of the rolling mill at the Aubert & Duval site in Les Ancizes (France), and the installation of a recycling plant for catalysts, batteries and metal oxides at the Erasteel site in Commentry, Allier (France).

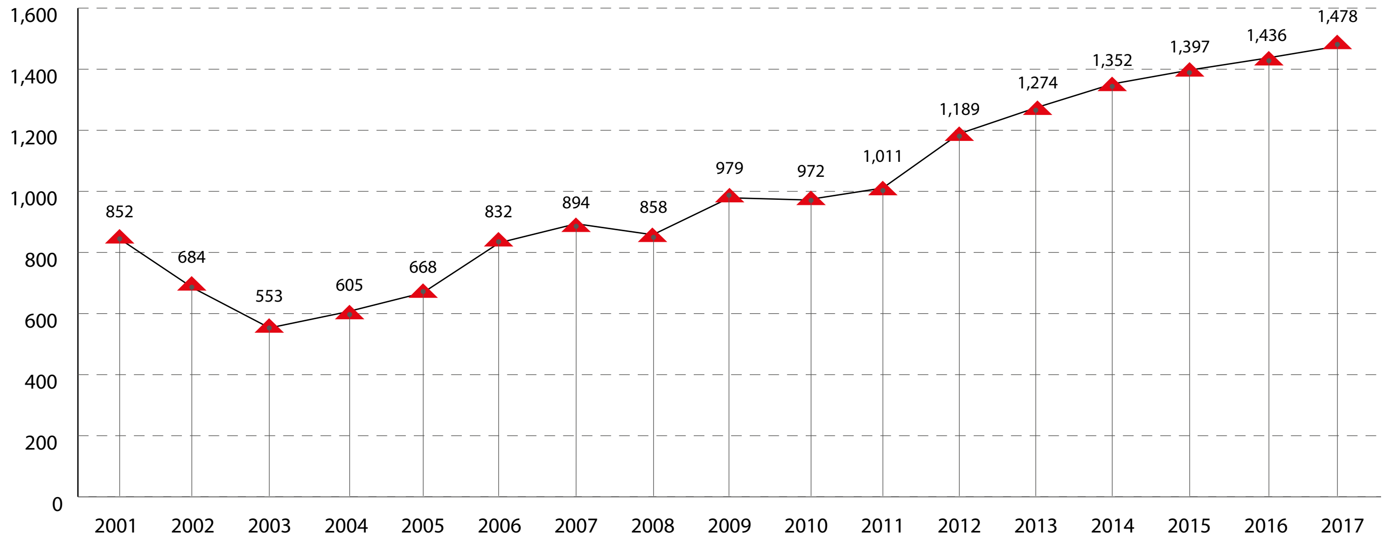
By successively inaugurating MKAD and EcoTitanium, ERAMET Alloys has consolidated its integrated titanium channel for processing titanium alloys through forging, die-forging, machining and end-of-flow operations.

In addition, Brown Europe, a wholly-owned subsidiary of ERAMET Alloys operating in the wire-drawing industry for high-performance steels and aviation-grade titanium, completed the implementation of a new production line, based in Brive-la-Gaillarde (France), which will provide support for the development of its customers' businesses in this growing market.

2.4.5 MARKET OUTLOOK

Aerospace, the main industry sector for Aubert & Duval, has enjoyed growth over the last decade.

TRENDS IN THE NUMBER OF AIRCRAFT DELIVERED BY AIRBUS AND BOEING



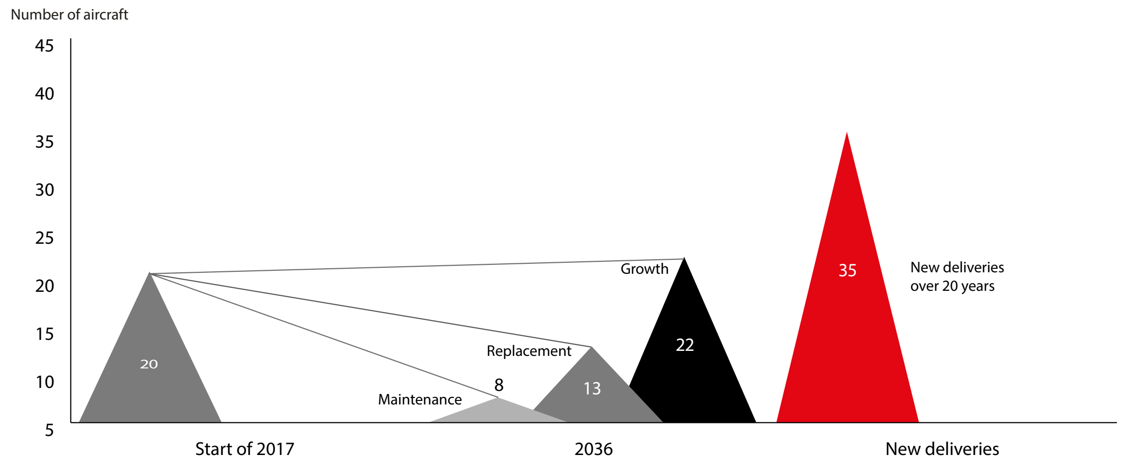
Source: Airbus/Boeing.

Aubert & Duval supplies parts for new aircraft models (A350, A320NEO, 777X, 787) and new aircraft engine programmes (TXWB, GE9X, LEAP, T7000).

The aerospace industry, the primary market for the Alloys Division's products, remains solid and stable compared to 2016.

The demand for aircraft is driven by the increase in global traffic, orders from emerging countries and the renewal of the current aviation fleet, as shown in the diagram below

EVOLUTION OF THE FLEET OF AIRCRAFT IN SERVICE



Source: Airbus GMF 2017, commercial planes (≥100 seats), cargo (≥10 tons). Numbers rounded at the closest ten figures.

The onshore turbine market is experiencing a slowdown, impacted by wind power. Aubert & Duval is maintaining a good position on the market for large turbines.

For Erasteel, the main market is high-speed steel tools.

Consumption of high-speed steels in the West has been affected by competition from tungsten carbide tools. At the same time, China has captured a large share of the market for low to medium-end tools and the production of high-speed steels of similar quality. Competitors producing high volumes of low-cost high-speed steels of inferior quality than those produced by Western producers have expanded in China to meet this demand.

As a result, the Western market for high-speed steel is increasingly focused on more powerful tools based on powder metallurgy, or on specific products (bimetal, which allows for the targeted use of high-speed steel on blades, etc.).

In China, however, there is strong growth in demand for tools containing high-speed steels of higher quality due to economic and industrial development in China, which now is the world leader in the number of car registrations.

Overall, the world market for high-speed steels is growing slightly (around 2% per year).

2.4.6 COMPLEX COMPETITIVE ENVIRONMENT

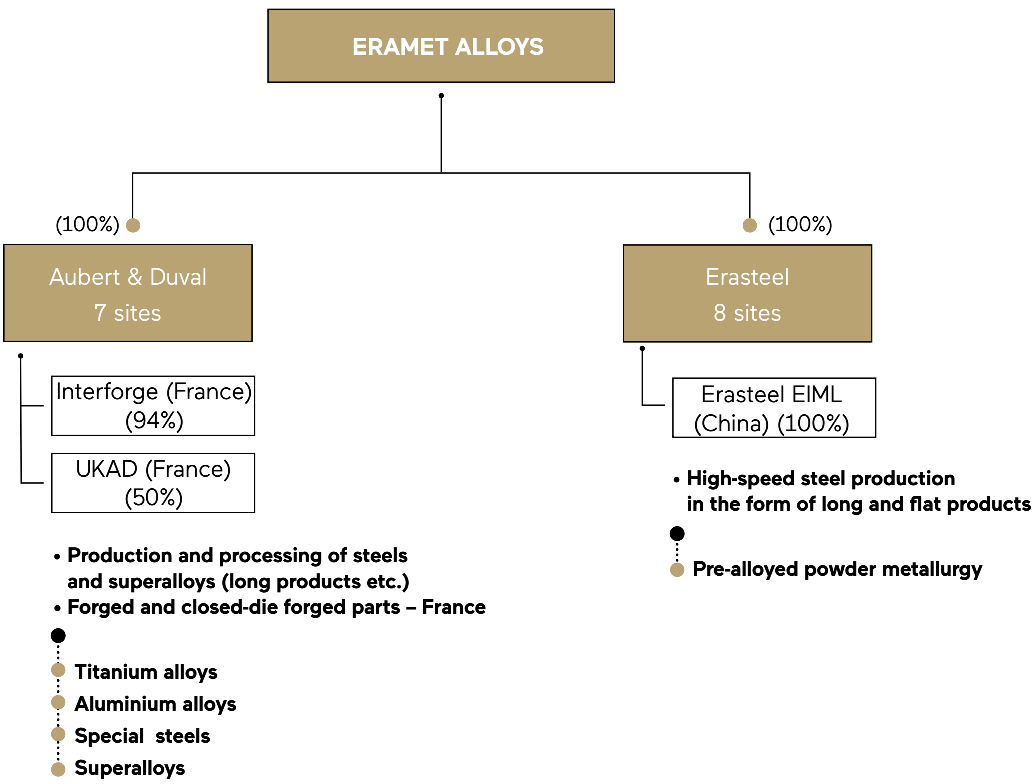
The Alloys Division of the ERAMET group has various competitors, depending on the market, the type of product and alloys sold.

The following macro trends are worth noting:

- "three-dimensional" consolidation, which is:
  - vertical (from alloy processing to forging, machining and even recycling, and the installation of high-power presses),
  - horizontal (open-die forging, die-forging, casting, powder metallurgy, additive manufacturing, etc.),
  - multi-material (titanium, steels, aluminium, nickel-based alloys, composites, etc.);
- the emergence of new competitors: local, active in their domestic markets and supported by government programmes to reduce the dependence of their countries on imported products. This is the case of China, India, Russia, etc.;
- the growing importance of titanium in all new aircraft models, which is the subject of industrial investments and strategic moves;
- development of new technologies, such as additive manufacturing (3D printing), fused deposition modelling and hybrid technologies (3D printing and die-forging).

2.4.7 STRUCTURE OF ERAMET ALLOYS

ORGANISATIONAL STRUCTURE AT 31 DECEMBER 2017



2.4.8 ERAMET ALLOYS IN 2017*

(€ MILLION)	2017	2016
Sales	1,087	949
EBITDA	84	74
Current operating income	32	27
Net cash generated by operating activities	90	22
Capital employed	789	790
Industrial investments	59	55

* *Adjusted data from Group Reporting, in which joint ventures are accounted for using proportionate consolidation. The reconciliation with the published financial statements is presented in Chapter 3.1.*

The Alloys division recorded sales up 15% to €1,087 million in 2017. Current operating income stood at €32 million, up 19% versus 2016, with highly contrasting trends for each business.

Aubert & Duval, of which aerospace accounts for more than two-thirds of its sales, posted current operating income of €38 million in 2017, down 21% versus 2016. This was linked to operational difficulties and a level of production that was down sharply on the improvement targets set.

Aubert & Duval announced an industrial reorganisation project for its steel melting shops, in particular its plant in Firminy (France). The Firminy steel melting shop was closed in the last quarter of 2017 and is in the process of being moved to the plant at Les Ancizes.

The aerospace sector remains strong and should progressively stabilise, after the ramp-up of new programmes.

Erasteel posted 2017 current operating income of -€6 million, equivalent to a €15 million improvement on 2016. This is due to the success of the project for industrial reorganisation, for productivity and for marketing products portfolio dynamics (+9% in volume), and to the favourable impact of raw materials' prices. Conversely, the challenges in the ramp-up of the recycling of spent catalysts and batteries business[1] impacted results.

A change of management is underway for the Alloys division and its strategic and operational outlook will be revised in 2018.

RETURN ON CAPITAL EMPLOYED FOR ERAMET ALLOYS

ROCE: Current operating income/capital employed at 31 December of year N-1 (equity, net financial debt, provisions for restoration of sites, provisions for restructuring and other social risks, less non-current financial assets).

ALLOYS ROCE (BEFORE TAXES)

YEAR	2012	2013	2014	2015	2016	2017
%	(0.7)	0.5	3.0	3.4	3.4	3.9

2.4.9 DETAIL OF INVESTMENTS

(€ MILLION)	2014	2015	2016	2017
Industrial investments	48	44	55	59

ERAMET Alloys slightly increased its investments in 2017.

ERAMET Alloys continued to structure its activities in titanium for the aerospace industry with the launch of EcoTitanium in September 2017.

In 2017, ERAMET Alloys launched the construction of a new superalloy powder atomising tower in Les Ancizes (Auvergne), intended for the aircraft engine parts market, as well as powders for additive manufacturing.

(1) Business integrated in early 2017 at the Commentry site in France.

2.5 LITHIUM PROJECT

2.5.1 MAJOR EVENTS

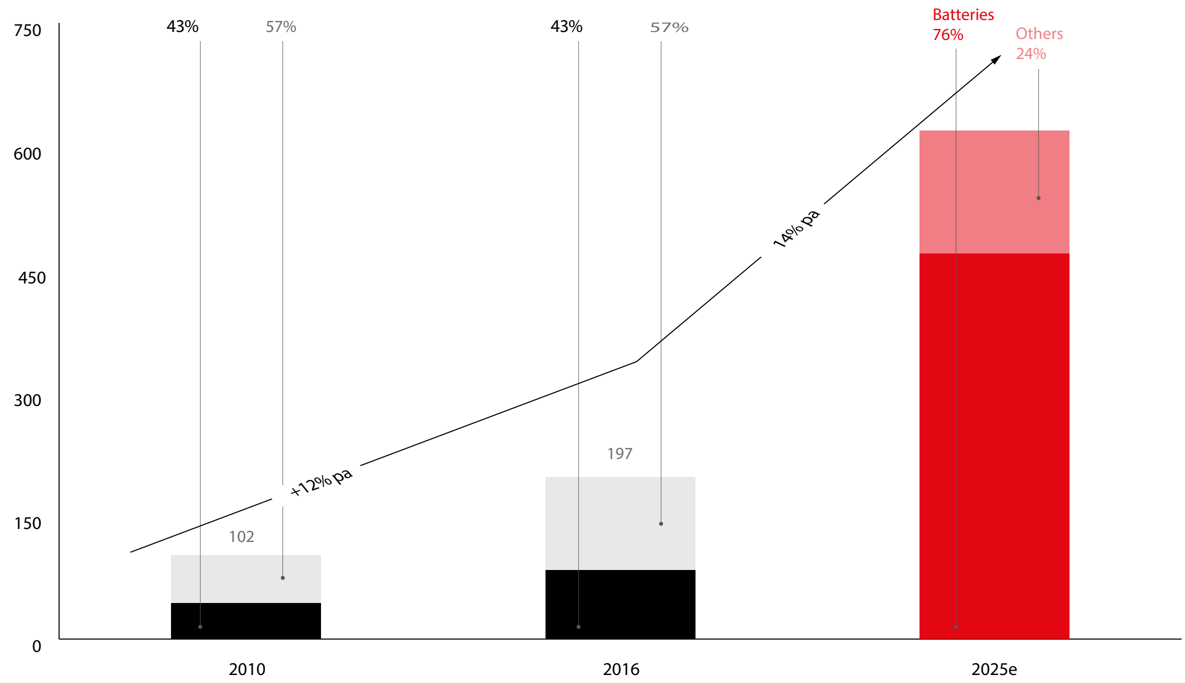
Throughout 2017, the focus of work was the ongoing development of the process of direct extraction of lithium from brine from the salt flats in Argentina. The work was mainly devoted to monitoring the industrialisation and synthesis of active material allowing for the selective recovery of lithium as opposed to the other elements contained in the lithium brine. The properties of this material, as well as the entire lithium production process, have been optimised through testing using real brines from Argentina.

The Lithium project has entered its final phase of development: 2018 will be dedicated to testing ERAMET's innovative process on a semi-industrial scale over the long term, as well as carrying out engineering studies and economic evaluations. An investment decision could be made in the first half of 2019 subject to the positive outcome of final technical and economic studies. Should a decision be made to build a new plant (investment in the order of USD 400 million), production could begin in late 2021.

2.5.2 OUTLOOK

The positive news from the battery market stems from the dynamism of the lithium market, whose development prospects are very strong. The market growth rate is estimated at a minimum of 12% for the next few years (see graph below). Excluding electric vehicles, whose market penetration assumptions are open to challenge, market growth is at least 8% per year (mobile phones, etc.).

EVOLUTION OF LITHIUM DEMAND



Source: ERAMET.

2.6 HOLDING

The company ERAMET S.A., the consolidating parent company, has two main functions operationally:

- a pure holding function called ERAMET Holding, bringing together the various support services including the Administrative and Financial Department, the Human Resources Department, the Health, Safety and Security Department, the Communication and Sustainable Development Department, the Legal Department, the Information Systems Department and the Strategy and Investor Relations Department;
- the operational activity of the Nickel Division (excluding personnel costs).

The costs of these different services are billed to the three divisions through intermediary management fee contracts. Other operating costs relating to Nickel are directly allocated to the Nickel Division.

ERAMET also has directly held subsidiaries, acting on behalf of the various entities or for the parent company. These include:

- ERAMET Nickel: a company which brings together the personnel of the support functions of the mining divisions (General Management, Sales and Industrial Management);
- ERAMET Services: a company which includes accounting functions, payroll and IT support for the Group's French companies;
- ERAMET Research: ERAMET's Research Centre, which includes research and development activities;
- ERAMET Engineering: a project and technology engineering company;
- ERAMET International: a company that brings together ERAMET's sales network for certain activities of the three divisions. ERAMET International has subsidiaries and branches throughout the world. The activity of ERAMET International is generally remunerated by agency commission contracts;
- Metal Securities: the Group's cash management company, which centralises cash surpluses and short-term requirements for the Group as a whole;
- Metal Currencies: the Group's foreign exchange management company, which carries out all foreign exchange hedging operations for the Group as a whole;
- ERAS: reinsurance company;
- Eramine: company in charge of developments in lithium;
- Sialeo: company responsible for developments in the recovery of metals from the seabed.

At the consolidation level, the Holding Division includes the holding function for ERAMET and the consolidated subsidiaries (Metal Securities, Metal Currencies, ERAS, ERAMET Research, ERAMET Engineering, ERAMET Services and Eramine).

2.7 PLANTS AND EQUIPMENT

The Group mostly owns its sites and their various equipment. Some large items of equipment are financed under finance leases (IV30 and the 40,000 tonne press at ERAMET Alloys, the Tiébaghi beneficiation plant and the mining equipment at ERAMET Nickel) and are restated in the consolidated financial statements.

The breakdown of property, plant and equipment by Division and by unit is shown below. Almost 80% of the value of these non-current assets belongs to around ten industrial sites:

(€ MILLION)	GROSS VALUE	%	NET VALUE	%
Société Le Nickel—SLN (New Caledonia)	1,827	31.2%	540	23.9%
Other	152		59	
ERAMET Nickel	**1,979**	**33.8%**	**599**	**26.5%**
Comilog SA (Gabon)	1,038	17.7%	504	22.3%
TiZir (Norway, Senegal)*	379	6.5%	313	13.9%
ERAMET Norway A/S (Norway)	365	6.2%	118	5.2%
Setrag (Gabon)	309	5.3%	196	8.7%
ERAMET Marietta Inc. (United States)	170	2.9%	7	0.3%
Guilin Comilog Ferro Alloys Ltd (China)	99	1.7%	0	0.0%
Other	65		10	
ERAMET Manganese	**2,425**	**41.4%**	**1,148**	**50.9%**
Aubert & Duval (France)	920	15.7%	375	16.6%
Erasteel SAS (France)	146	2.5%	33	1.5%
Erasteel Kloster AB (Sweden)	130	2.2%	9	0.4%
Other	221		85	3.8%
ERAMET Alloys	**1,417**	**24.2%**	**502**	**22.2%**
ERAMET Holding (France)	**37**		**8**	
Total	5,858		2,257	

* *ERAMET share à 50 %.*

2.8 RESEARCH AND DEVELOPMENT/ RESERVES AND RESOURCES

2.8.1 RESEARCH AND DEVELOPMENT: R&D OPERATING ACROSS THE ENTIRE METALS VALUE CHAIN, FROM MINING TO PRODUCTS

2.8.1.1 R&D ACTIVITIES

The ERAMET group relies on R&D across the entire metals value chain, from mining to products, including recycling loops. This value chain covers exploration, mining, extractive metallurgy, metallurgical processing (initial processing, remelting processes, powder metallurgy), open-die forging and closed-die forging. Metal recycling is sought to be included in every stage of this value chain. This integrated positioning of R&D represents a strategic opportunity for the ERAMET group to improve each stage of the creation of value from products and processes.

Specifically, ERAMET is active in R&D for the recovery and processing of a significant number of metals in the periodic table and their mineral derivatives. Listed in order by atomic number, they are: aluminium, titanium, manganese, iron, cobalt, nickel, copper, zirconium and molybdenum. The Group's projects and those of ERAMET Research's clients outside the Group also lead the Group to conduct research on a wide range of additional metals, including the following (listed by atomic number): lithium, zinc, germanium, lead, niobium, indium, the lanthanide series, including rare-earth metals such as lanthanum, cerium, praseodymium, neodymium, samarium, europium and dysprosium.

ERAMET also conducts a number of R&D projects in the fields of superalloys, high-performance steels, aluminium alloys and titanium alloys, as well as powder metallurgy.

This expertise in multiple metals and alloys along the entire value chain contributes to the unique positioning of ERAMET R&D.

2.8.1.2 AREAS OF EXPERTISE

The ERAMET group's first area of expertise is focused upstream around the main disciplines of extractive metallurgy, such as mineralogy, mineral processing, hydrometallurgy and pyrometallurgy.

- Mineralogy is the identification of the nature and morphology of minerals in ores. This first step is essential as it allows the definition of the phase or phases for processing the metal and it makes it possible to define, a priori, a draft plan for the exploitation of the ore through geometallurgical processes.
- Mineralurgy consists of separating recoverable fractions from ores by using the physical properties of the minerals in the ore, i.e. density, size, magnetism, electrostatic susceptibility or hydrophobicity, etc.
- When it is no longer possible to extract the mineral through mineralurgical processes, more complex chemical or thermal processes, including hydrometallurgy and pyrometallurgy, are used.

The ERAMET group's second area of expertise is metallurgical processing, covering innovation in new alloy grades and all processes associated with metallurgical processing. Powder metallurgy occupies an increasingly important role in this field, with new developments occurring in the area of aerospace, particularly in the expanding field of additive manufacturing.

The ERAMET group's third area of expertise is the thermomechanical transformation of alloys by forging and die-forging, producing near-net-shape parts, particularly for the aerospace, energy, nuclear and defence markets.

Numerical modelling, applied to areas such as thermodynamics, fluid mechanics, dynamic reactor simulation, chemical engineering and physical metallurgy, provides an essential complement to the developments and optimisation of processes and products.

Recent developments in digital transformation are a cross-functional area of improvement for all of the Group's R&D departments, as well as for our operations and all our activities, and constitute a strategic focus in the development of all ERAMET activities.

Microscopic characterisation and the chemical analysis of treated materials and products are also part of the areas of expertise where innovation and proficiency are an additional asset in the development of projects for the ERAMET group.

2.8.1.3 ORGANISATION OF THE GROUP'S R&D

The Group's R&D organisation is managed operationally for each of the areas of expertise.

With regard to extractive metallurgy, R&D relies on a common R&D centre and technical centres that directly support the operational sites:

- ERAMET Research, the joint research centre based in Trappes (Yvelines), employs roughly 100 people, including 80 researchers, engineers and technicians. This laboratory has high-performance observational tools, including the first microscope in France with QEMSCAN mineralogy software, advanced laboratory tools and pilot facilities, sometimes on a semi-industrial scale (rotary furnaces, high and low impedance electric furnaces of approximately 1 MW), on which continuous testing campaigns lasting several weeks are regularly conducted.

- Société Le Nickel-SLN's Technical Studies and Investigations Department (DETI), in New Caledonia, employs around sixty people, about half of whom are dedicated to R&D. This department is in charge of the R&D of SLN's mining sites and pyrometallurgical plant.
- The Studies, Investment and Project Department (DEIP), based at ERAMET Sandouville, is working on the launch and ramp-up of the new Sandouville workshops built to process a new matte.
- The small ERAMET Norway Trondheim (ENT) team assists the Norwegian factories of the Manganese Division, drawing on the extensive resources of the Norwegian Technological University (NTU) and a research institute in metallurgy, SINTEF.

For metallurgical processing (i.e. air forging, the secondary metallurgy, vacuum forging and re-melting), a dedicated R&D team is based in Les Ancizes in Puy-de-Dôme. In powder metallurgy, a competence centre for the production of steel powder by gas atomisation is located in Sweden and comprises about a dozen people. Its name is PEARL (Powder Expertise Analysis and Research Laboratory). Other areas of expertise are also represented at the Alloy Divisions sites at Irun, Imphy and Les Ancizes for the production of superalloy powders for additive manufacturing.

For metallurgical processing, an R&D team focusing on die-forging is based in Pamiers, in Ariège.

The ERAMET group employs a total of roughly 200 people who are completely dedicated to R&D, not counting the industrialisation and process monitoring teams present at all of the industrial sites. Within the Divisions, these teams coordinate testing and essential phases of industrialisation for the Group's research projects. A total of approximately 1% of Division sales is dedicated to R&D, or around €30 million in 2017. In order to increase the efficiency and effectiveness of its R&D activities, ERAMET has combined Research, Innovation and Engineering under a single management authority. This group reports to the Director of Strategy, who has been part of ERAMET's Executive Committee since 2017.

2.8.1.4 MAIN ACHIEVEMENTS IN 2017

ERAMET targets its research and development to meet the demands of its industrial clients, improve its competitiveness, offer new services and create new development opportunities. The environment is a constant focus during the development of new processes, with the aim of reducing the environmental footprint.

Research efficiency is a decisive asset in the Group's activities, from mining to products. In order to meet and even exceed customer expectations, research and development programmes allow the Group to strengthen its positions, even in the most competitive markets.

These programmes are conducted within the Divisions or at the ERAMET Research centre. To ensure the results are wholly relevant, the ERAMET Research teams work in close collaboration with ERAMET Engineering and the teams in charge of development in the various units, who are in direct contact with the operational staff. This generates considerable efficiency gains, from defining programmes to implementing innovations, whether involving products or the processes themselves, including improving productivity.

The main research topics for 2017 are described in the following paragraphs.

ERAMET NICKEL R&D

ERAMET Nickel's R&D activities for 2017 were focused on three areas.

- The first area entailed the optimisation of technical and economic performance of the New Caledonian subsidiary by helping it to adapt its pyrometallurgical process to the chemical developments in nickel ores, both current and future. New tools were developed to improve process control. Industrial tests were carried out on ore calcination in order to improve the stability of operations in electric furnaces and its energy efficiency.
- The second area of research focused on improving environmental performance by developing a new ferronickel refining process for producing inert slag, and studying methods for recovering by-products from the Doniambo plant in New Caledonia, both internally and externally.
- The third area focused on diversifying the supply of nickel matte from the high-purity nickel production plant at Sandouville. This work led to the design of workshops to process the new European matte.

All of this was made possible thanks to close cooperation between the teams from ERAMET Research, DETI, DEIP and ERAMET Nickel's Industrial Department.

ERAMET MANGANESE R&D

ERAMET Research's primary mission was to support a production increase at C2M (Moanda Metallurgy Complex) in Gabon. The aim is to provide technical support to the process and production teams for manganese metal and silicomanganese, particularly by participating in the technical analysis and resolution of typical problems when beginning production at this type of facility. At the same time, the mission's scope of action includes optimising and finalising workshop documentation, training teams and proposing improvements. This assistance to operational teams will continue into 2018, until the plant has reached normal operating conditions.

From an environmental point of view, new mine sludge treatment processes have been pilot-tested to reduce the environmental footprint of the mine in Moanda.

With regard to manganese alloys, ERAMET Research's work has focused on improving plant performance, particularly increasing refining capacity, lowering production costs, improving furnace stability, decreasing costs for energy and developing new alloy grades. Work on manganese metallurgy is carried out in close cooperation with the ERAMET Norway R&D team, based in Trondheim.

ERAMET ALLOYS R&D

R&D activities are carried out in close cooperation with Division business units in order to develop new products with our customers and to improve the performance and competitiveness of existing products. These activities cover the development of new steel grades and superalloys, and work on alloy processing and thermomechanical transformation processes (forging, die-forging, etc.) and heat treatments. Powder metallurgy represents an important part of these activities, both for the development of higher performance alloys and to meet the demands and specific requirements of the additive manufacturing market.

Aubert & Duval uses CAD software combined with simulation software to optimise the characteristics and costs of parts in direct coordination with the customer. This significantly reduces the research, development and production cycles.

In recent years, Aubert & Duval has solidified its strategic position in the die-forging segment with:

- an innovative product R&D policy: new steel and superalloy grades, expertise with large parts due to the increasing size of equipment (large-capacity aircraft, high-power gas turbines, etc.);
- an innovative research and development policy for its processes: die-forging to near-final specifications in order to optimise material use, high-speed machining;
- optimisation of industrial performance in terms of production costs, product quality and service reliability (specialisation of production units, implementation of lean manufacturing).

Erasteel, for its part, continues to innovate by offering new grades of high-speed steels with increased use value and proposing services.

ERAMET Research's resources, primarily in the area of process modelling and precise characterisation of metallurgical structures, were integrated into these various projects.

LITHIUM PROJECT R&D

The focus of work for the Group's project was the ongoing development of the process of direct extraction of lithium from brine from the salt flats in Argentina. In 2017, the work continued to focus on monitoring the industrialisation and synthesis of active material allowing for the selective recovery of lithium as opposed to the other elements contained in the lithium brine.

2.8.1.5 COLLABORATIONS AND PARTNERSHIPS IN R&D

ERAMET group's R&D is enriched by its ongoing collaboration with the academic world and its partnerships with research institutes and other large industrial companies.

In France, and in the field of extractive metallurgy, ERAMET has ongoing partnerships with Chimie ParisTech, Mines ParisTech, *École centrale Paris*, *École nationale supérieure de géologie de Nancy*, *École nationale supérieure des mines de Nancy* and *Université Paul-Sabatier* in Toulouse. For many years, the BRGM *(Bureau de Recherches Géologiques et Minières)* has conducted several studies for ERAMET in a variety of areas (geology, resource audits, research projects).

ERAMET maintains a partnership with IFP Énergies Nouvelles aimed at developing innovative processes for lithium extraction.

The Group has entered into several partnerships in pyrometallurgy research, notably with the University of Trondheim in Norway, KTH (Royal Institute of Technology) in Sweden, and the Swedish semi-public research centre, MEFOS.

In the field of alloys in France, ERAMET maintains a close partnership with academic research centres providing specific expertise on metallic materials (characterisation of micro-structures and properties, production processes, thermomechanical treatments), and is associated with the following engineering schools: Mines ParisTech, *École nationale supérieure des mines de Nancy*, *École nationale supérieure des mines de Saint-Étienne*, *École des mines d'Albi*, SIGMA (Clermont-Ferrand), ENSMA (Poitiers). These partnerships mainly take the form of doctoral thesis work allowing for the development and exchange of expertise and innovative techniques in metallurgy, mechanics and process modelling. ERAMET is also involved in projects to develop new alloys and their resulting products, initiated in the competitiveness clusters (ViaMéca, Aerospace Valley, *Pôle nucléaire de Bourgogne*) and in partnership with M2P (Metz, Besançon, Troyes) and Saint-Exupéry (Toulouse) technological research institutes.

Of equal note are the projects undertaken with MetaFensch, a metallurgy research centre in Uckange, with two projects aimed at developing titanium production and recycling processes and titanium alloy powders for additive manufacturing processes.

Outside France, in the field of alloys, the Group continues to maintain its partnership with the University of Strathclyde in Scotland, with an active and permanent presence at the centre for research and development on forging parts for the aerospace industry (AFRC).

Since, for several years now, the European Union has placed a focus on innovation and raw materials, ERAMET is currently part of several consortia currently being established at European level as part of the EIPRM (European Innovation Partnership for Raw Materials) programme headed by DG Entreprises, now DG Growth. ERAMET is involved in these collaborative projects as part of European consortia, either as a coordinator or as a partner, in fields as varied as optimisation of mining surveys with online mineralogical analysis, the recycling of dust from manganese furnaces and the development of new processes in extractive metallurgy. ERAMET has teamed up with more than 100 industrial partners, academic partners and European research centres as a "core member" of "KIC" Raw Materials, an innovative scheme aimed at strengthening ties between the worlds of research and education within an industrial framework, to encourage innovation, skills and employment in the area of raw materials.

Collaborative projects also continued at the national level with projects like SOFIA, aimed at optimising the linkage between the quality of metallic powders and 3D printing technology.

ERAMET Engineering, a wholly owned subsidiary of ERAMET, is regularly involved in the industrial implementation phases of the processes developed by ERAMET Research, by conducting engineering scoping studies, preliminary feasibility studies (PFS), bankable feasibility studies (BFS), or by overseeing new investments.

2.8.1.6 CONCLUSION

ERAMET group's R&D is used across the value chain of its activities, from mining to products. R&D organisation and governance are focused on value creation for the Group. The Group's R&D is therefore an essential link in the long-term deployment of its strategy, and also in meeting short-term operational challenges. At the end of 2017, as part of a new strategic direction, new impetus was given to R&D, which will result in a reorganisation and an updated vision to further promote innovation in 2018.

2.8.2 RESERVES AND MINERAL RESOURCES

2.8.2.1 OVERVIEW

DEFINITIONS

Definitions of mineral resources

A Mineral Resource is a concentration or occurrence of commercially valuable material in or on the Earth's crust in such grade and quantity as to give reasonable likelihood that mining will be economically feasible. The location, quantity, quality, continuity of the deposit and the geological characteristics of its resources are known, estimated or interpreted on the basis of specific geological evidence and expertise. Mineral resources are ranked in order of increasing of geological confidence, as "inferred", "indicated", and "measured".

An Inferred Mineral Resource is the part of a Mineral Resource for which quantity and quality can be estimated on the basis of geological evidence, but with a low level of confidence. Geological and grade continuity are inferred but not verified. The estimate is based on information that is limited or of uncertain quality and reliability, gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Indicated Mineral Resource is the part of a Mineral Resource for which the quantity, grade or quality, densities, shape and physical characteristics can be estimated with a reasonable level of confidence. The estimate is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too far apart from one another or spaced in a way that makes them inadequate to confirm the geological and grade continuity and/or its quality, but spaced closely enough for geological and grade continuity to be reasonably assumed.

A Measured Mineral Resource is the part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a high level of confidence. The estimate is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough for geological and grade continuity and/or quality to be reasonably assumed.

Definition of drainable resources

A Drainable Resource is defined as the availability of a given envelope of confidence of brines with a certain lithium content in a medium with sufficient effective porosity to enable extraction. A cut-off grade can be assigned. In ERAMET's case, drainable resource estimates are made in envelopes with a concentration greater than 200 mg/l Li. The level of classification is based on survey patterns which assess the lateral and vertical continuity of the lithology, brine concentrations in lithium and the hydraulic parameters.

An Inferred Drainable Resource is the part of the drainable resource for which only geophysical measurements and potentially some boreholes are available. Hydraulic continuity is not verified. The estimated lithium content is based on information that is limited or whose quality and reliability are uncertain.

An Indicated Drainable Resource is the part of a drainable resource for which lateral continuity is proven at less than 6 km of the aquifer's hydraulic parameters and the brine's lithium content and vertical continuity between two measuring points in a single shaft.

A Measured Drainable Resource is the part of the drainable resource for which the sampling quality, hydraulic parameters and grades can be estimated with a high level of confidence and meet quality criteria (QA/QC). The number of lithium measurements above the cut-off grade in a particular lithological horizon must be more than 3.

The brine's lithium content and the hydrodynamic parameters of the aquifer are determined by pumping tests carried out in the volume being considered, including at least one long-duration test (t>30 days). The reliability and consistency of the results for content and hydrodynamic parameters are analysed using a conceptional model of brine distribution and a numerical model.

Definition of extractable resources

An Extractable Resource is defined as an available volume of brine with a certain lithium content that can be extracted through one or several pump wells over a given period to meet economic feasibility requirements. The reliability and consistency of the hydrodynamic parameters are analysed and simulated using a conceptional model of brine distribution and a numerical model.

An Inferred Extractable Resource is a modelled volume of brine with a lithium content higher than the cut-off grade extracted by a pumping system from areas where inferred drainable resources have been identified. An initial estimate using numerical modelling of volumes and contents of recovered brine and insufficient level of confidence in geological and hydrological data prevent these resources from being converted into reserves. These resources are excluded from feasibility studies.

An Indicated Extractable Resource is a modelled volume of brine with a lithium content higher than the cut-off grade that can be extracted through one or several pump wells from areas where indicated drainable resources have been identified. Variations in estimates of geological and hydrological parameters can affect the economic feasibility of the pumping field. The volumes and lithium contents of the extracted brines have an accuracy of +/-25%.

A Measured Extractable Resource is a modelled volume of brine with a lithium content higher than the cut-off grade that can be extracted through one or several pump wells from areas where measured drainable resources have been identified. The geological and hydrological parameters are estimated with a sufficient level of confidence such that any variations will not affect the economic feasibility of the pumping field. The volumes and lithium contents of the extracted brines have an accuracy of +/-15%.

Definitions of reserves

A Reserve is the economically exploitable part of the "measured" or "indicated" resources of a deposit. Reserves are estimated based on a preliminary or actual feasibility study (a mining project in the broader sense), which takes account of any technical (pit design, mining dilutions and losses depending on operating methods used, facility performance), economic, commercial, legal, environmental, social and governmental constraints, both existing and foreseeable at the time of estimation. The preliminary or actual feasibility study demonstrates at the time of reporting that extraction is viable. Mineral reserves are categorised in ascending order of confidence as "probable" and "proven" mineral reserves.

A Probable Reserve is the economically exploitable part of an "indicated" resource, and in certain circumstances a "measured" resource, while a Proven Reserve is the economically exploitable part of a "measured" resource.

Exploration results

Exploration Results are the same commercially valuable materials as are assessed for resources and reserves. Exploration indicates that a potential mineralised zone may be found but available recognition information is very tenuous.

LOCATION

Through its subsidiaries, Société Le Nickel-SLN in New Caledonia and COMILOG S.A. in Gabon, the Group operates nickel and manganese deposits respectively. With development of the Weda Bay Nickel project in Indonesia, ERAMET has opened up prospects for further development.

In New Caledonia, Société Le Nickel-SLN mines open-cast nickel oxide deposits formed by superficial weathering of ultrabasic rocks. Mining and processing now focus on the saprolitic portion of the weathering profile.

In Gabon, COMILOG S.A. operates a rich tabular open-cast manganese deposit, located under thin caprock and formed by superficial weathering of volcanic-sedimentary rocks.

In Gabon, La Minière de la Mabounié (Maboumine) carried out exploratory work in relation to a niobium, rare earth, tantalum and uranium processing project. In view of the current market outlook for raw materials, the search for ore enriching technology enabling average returns for the associated elements of value should guide the search for a partner in a joint initiative between the Republic of Gabon and ERAMET.

In Indonesia, ERAMET's Board of Directors approved the terms of the framework agreement signed with the Chinese steel group Tsingshan, the world's largest producer of stainless steel, with the goal of determining the conditions of a partnership for the valuation of this asset. This partnership would use a pyrometallurgical process to produce nickel ferroalloy, with a volume of about 30,000 tonnes of nickel content per year, from the ore mined from the Weda Bay deposit in Indonesia. This partnership would thus entail the Tsingshan Group joining Strand Minerals Pte Ltd. ERAMET would hold a 43% interest and the Tsingshan Group 57%.

In Senegal, the Grande Côte Opérations company (GCO), part of the joint venture TiZir mentioned above, operates a heavy-mineral sand deposit. The Grande Côte deposit, a few dozen kilometres north of Dakar, is a coastal-dune heavy-mineral placer containing large quantities of titanium-bearing minerals (ilmenite, rutile) and zircons. These deposits can be mined by dredging. Production started in 2014.

In Argentina, Eramine Sud America SA, a wholly-owned subsidiary of Eramine SAS (wholly owned in turn by ERAMET SA), carried out exploratory work on several salt flats before focusing on the Centenario-Ratonès flat north-west of Salta in the Andes cordillera. Exploratory work showed that resources were available in the lithium found in natural brines.

LEGAL CLAIMS

Mining-claim instruments assure the Group's long-term rights over the reserves and resources. These rights mainly consist of perpetual concessions foreshortened to the expiry date of 31 December 2048 (Article 7 of the New-Caledonian *"Loi du Pays"* Act of 16 April 2009) and of rights conceded for a period of 75 years renewable in successive 25-year periods in New Caledonia, a 75-year concession in Gabon expiring on 31 December 2032 renewable for successive 10-year terms, and a Contract of Work for a renewable 30-year period in Indonesia.

The mineral deposits at the Grande Côte project in Senegal are located in a mining concession assigned to GCO since July 2008, and originally granted to MDL by the Senegalese government in November 2007 for a renewable 25-year term.

Maboumine has a mining exploration permit, renewed on 14 November 2014 for a three-year period, in which mineral deposits are located.

Eramine SA had 55 consolidated mining claims on the Centenario-Ratonès salt flat at year-end 2015, issued on a perpetual basis, subject to the submission of mandatory impact surveys, the payment of annual mining fees and compliance with a development schedule.

The carrying amount of reserves is recognised at historical cost for purchased claims, with no measurement of granted concessions. The balance sheet amount does not necessarily reflect market value.

ESTIMATES

The resource and reserve estimates were drawn up for Le Nickel SLN, Weda Bay Nickel, TiZir and COMILOG S.A. by professionals who are full-time employees of the Group, using conventional or geostatistical methods.

In the case of Eramine SA, they were drawn up by "Qualified Persons" outside the Group.

Geological reconnaissance, resource and reserve estimation, exploitation planning and mining are supplemented by over 40 years' industrial experience. The methods used evolve constantly to take advantage of technical progress in these areas.

Basis of estimates

Estimates are based on sampling that can never be fully representative of the entire deposit. As deposits are explored and/or exploited, estimates may increase or decrease in line with improvements in knowledge of the mineralised mass.

Estimate methodology

In due consideration of the Group's presence in New Caledonia, estimates of the Group's reserves and mineral resources as presented here were drawn up pursuant to the 2012 edition of the JORC Code (Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves) for all aspects relating to estimation methods and classification levels.

The published figures are internally validated by a board of referees and by "Competent Persons" as defined by the JORC code.

Estimates of lithium project drainable and extractable resources are drawn up by an independent firm, Montgomery and Associated, acting as "Qualified Persons" in the area of lithium-bearing deposits extracted from brine. An audit of resources was also drawn up in February 2015 by M. King, an independent specialist consultant.

For Pt Weda Bay Nickel (laterites and saprolites), Société Le Nickel-SLN (saprolites for the Doniambo plant) and COMILOG S.A. (manganese ore), external audits conducted in 2009, 2013 and 2014 respectively have certified that the resources and reserves have hereto been evaluated in a satisfactory manner and in compliance with the JORC code recommendations.

Mineral resources

Resources are calculated with the same cut-off grades as reserves (except where expressly specified otherwise), but without any guarantee that these recoverable resources will be wholly converted into reserves following additional technical-economic and marketing studies.

A drilling and/or intercept is considered positive if:

- it contains at least two metres of ore at a grade equal to or higher than the cut-off grade;
- it is not isolated.

The mineralised mass defined by the drilling intercepts selected on this basis is included in mineral resources if its positioning and its geometric and chemical characteristics are such that it is reasonably likely to be economically feasible.

Drainable resources

Drainable resources are established within a 200 mg/l Li envelope representing the cut-off grade.

The deposit is surveyed by drilling in a pattern that will verify the vertical and lateral continuity of the aquifer's lithological, geochemical and hydraulic parameters with a lithium content in excess of the cut-off grade.

Recoverable mineral resources

Recoverable resources are mineral resources where mining recovery and ore dressing factors have been applied on the basis of experience acquired on those sites.

The nickel or manganese tonnages given correspond to the quantity of metal present in the ores at the outlet point to the mining units when shipped to a metallurgical or chemical processing plant. The mining allowances for mining dilution and losses, and those relating to ore dressing, are established on the basis of mining summaries which compare production to estimates of volumes already extracted.

Recoverable resources are included in mineral resources.

Exploration results

Exploration results follow the same estimation process as resources.

Reserves

Reserve estimates are based on medium/long-term economic conditions (prices of fuel oil, coal, coke, electricity, metal prices and exchange rates etc.), commercial constraints (quality, customers etc.), environmental constraints (permits, mining constraints etc.) and constraints on current and foreseeable technical mining and treatment processes.

Reserves are estimated on the basis of a complete mining project. No assurances can be given as to the total recovery of the reserves announced, as market fluctuations and technical developments may make the recovery of certain deposits or parts of deposits economically feasible or otherwise.

Reserves are included in mineral resources.

Presentation of estimates

Mineral resource estimates and those for recoverable resources and reserves are given for the mining deposit as a whole. Results may also be compared to production levels, thus providing an indication of the remaining mine life.

2.8.2.2 COMILOG S.A. RESERVES AND RESOURCES

An external audit was carried out in 2014 by Melabar GeoConsulting, which certified that the resources and reserves estimated by COMILOG S.A. were evaluated satisfactorily in accordance with the recommendations of the JORC code.

MINERAL RESOURCES

The table below shows the figures for COMILOG S.A.'s mineral resources, updated to 1 January 2018. The figures are expressed in thousands of tonnes of dry ore (kt), with the associated manganese content (% Mn) and the tonnage of metal content expressed in millions of dry metric tonne units (dmtu.10^6 where 1 dmtu = 10 kg of manganese, i.e. 1 dmtu.10^6 = 10,000 tonnes of manganese).

MINERAL RESOURCES IN MANGANESE ROCK ORE AND FINES AT 1 JANUARY 2018

	MEASURED			INDICATED			INFERRED			TOTAL		
CATEGORY	KT	% MN	DMTU.10^6	KT	% MN	DMTU.10^6	KT	% MN	DMTU.10^6	KT	% MN	DMTU.10^6
Rock ore > 5 mm												
Bangombé	20,487	44.8	918	38,680	45.6	1,764	2,290	40.9	94	61,457	45.2	2,778
Okouma-Bafoula				102,100	45.7	4,670	27,000	44.0	1,190	129,100	45.4	5,860
Massengo							12,000	40.0	480	12,000	40.0	480
Total rock	**20,487**	**44.8**	**918**	**140,780**	**45.7**	**6,434**	**41,290**	**42.7**	**1,764**	**202,557**	**45.0**	**9,118**
Fine 1-5 mm												
Bangombé	7,910	40.2	318	15,610	41.8	652	706	36.1	25	24,226	41.1	996
Okouma-Bafoula				32,500	42.4	1,380	9,100	40.8	370	41,600	42.0	1,750
Moulili	1,825	44.9	82	2,183	40.4	88	123	34	4	4,132	42.2	174
Total fine	**9,735**	**41.1**	**400**	**50,293**	**42.2**	**2,120**	**9,929**	**40.2**	**399**	**69,958**	**41.7**	**2,920**
Total rock + fine	30,222	43.6	1,318	191,073	44.8	8,554	51,219	42.2	2,163	272,515	44.2	12,038

Except for the Moulili deposit, the grain size cut applied to the survey samples is 5 mm, which ultimately corresponds to a beneficiated grain size of 8 mm.

Bangombé deposit

For the Bangombé deposit, currently operated, declared resources at 1 January 2018 correspond to the findings of the estimate made over the course of 2017 outside of the zones mined up until 31 December 2017. Complementary reconnaissance work has led to the extension of the mineralised perimeter of the Bangombé deposit, ultimately leading to an increase in mineral resources, which comfortably compensates for the subtraction of resources related to production carried out in 2017.

Resources are calculated in two granulometric fractions: "Rock" ore (+5 mm, 9% H_2O) and "Fine" (1-5 mm, 12% H_2O). The mineral resources consist of ores with a manganese content in the "Rock" fraction greater than or equal to 30%.

Okouma-Bafoula deposit

The Okouma and Bafoula deposits were the subject of a geological study conducted in 2016, combining historical surveys and surveys conducted in recent years. As a result, the two masses, which are part of the same geological unit, were grouped into a single deposit—Okouma-Bafoula. The mineral resources are estimated and expressed in the same way as those of Bangombé, distinguishing between "Rock" ore and "Fine" ore.

The Okouma-Bafoula mineral resource figures are unchanged from those published in 2017. The resources are classified as indicated mineral resources due to uncertainties regarding historical survey data. Work initiated in 2017 to resolve these uncertainties will continue in 2018.

Massengo deposit

For the unexploited deposit of Massengo, declared mineral resources at 1 January 2018 are identical to those published at 1 January 2017, according to the same criteria of granulometry (+5 mm, 1-5 mm fractions), humidity (9%, 12%) and selection (30% Mn) as for the Bangombé ores.

Moulili deposit

The Moulili river bed was filled with a manganese ore deposit of which only the fine 1-10 mm fraction has been evaluated to date. Working from upstream to downstream, the deposit was divided into four sections, of which two, MT1 and MT3, are being exploited.

The mineral resources as at 1 January 2018 correspond to the updated figures following the Lidar topographic survey of 12 April 2017 minus production between that date and 31 December 2017, i.e. a total of 27.10_6 dmtu. No cut-off grade is applied. Mineral resources are classified according to the extent of knowledge of the different sections, i.e. resources measured at MT1, indicated at MT2 and MT3 and inferred at MT4.

Yéyé deposit

Reconnaissance work carried out on Yéyé indicates the existence of potential ore deposits. However, the quantity and quality of available information is currently insufficient to estimate inferred mineral resources.

RECOVERABLE RESOURCES AND RESERVES

The table below shows the figures for COMILOG S.A.'s recoverable resources and reserves, updated at 1 January 2018. The figures are expressed in thousands of tonnes of dry ore (kt), with the associated manganese content (% Mn) and the tonnage of metal content expressed in millions of dry metric tonne units (dmtu.10^6 where 1 dmtu = 10 kg of manganese, i.e. 1 dmtu.10^6 = 10,000 tonnes of manganese).

MANGANESE ORE RECOVERABLE RESOURCES AND RESERVES AT 1 JANUARY 2018 (IN MILLIONS OF DMTU)

	MEASURED			INDICATED			TOTAL		
CATEGORY	KT	% MN	DMTU.10⁶	KT	% MN	DMTU.10⁶	KT	% MN	DMTU.10⁶
Rock ore > 8 mm									
Bangombé	14,315	45.5	651	24,705	45.9	1,134	39,021	45.7	1,785
Okouma-Bafoula				73,100	46.3	3,390	73,100	46.3	3,390
Total rock	**14,315**	**45.5**	**651**	**97,805**	**46.3**	**4,524**	**112,121**	**46.2**	**5,175**
Fine 1-8 mm									
Bangombé	6,125	41.3	253	10,829	42.2	457	16,954	41.9	710
Okouma-Bafoula				25,700	42.9	1100	25,700	42.9	1,100
Moulili	1,821	45.5	83	618	42.5	26	2,439	44.8	109
Total fine	**7,946**	**42.3**	**336**	**37,147**	**42.6**	**1,583**	**45,093**	**42.6**	**1,919**
Total rock + fine	22,261	44.3	987	134,952	45.3	6,107	157,214	45.1	7,094

RESERVES OF MANGANESE ROCK ORE AND FINES AT 1 JANUARY 2018

	PROVEN			PROBABLE			TOTAL		
CATEGORY	KT	% MN	DMTU.10⁶	KT	% MN	DMTU.10⁶	KT	% MN	DMTU.10⁶
Rock ore > 8 mm									
Bangombé	10,931	45.6	498	10,850	47.1	511	21,781	46.4	1,010
Okouma-Bafoula				73,100	46.3	3,390	73,100	46.3	3,390
Total rock	**10,931**	**45.6**	**498**	**83,950**	**46.5**	**3,901**	**94,881**	**46.4**	**4,400**
Fine 1-8 mm									
Bangombé	4,756	41.2	196	4,954	43.7	216	9,710	42.5	412
Okouma-Bafoula				25,700	42.9	1100	25,700	42.9	1,100
Moulili	1,821	45.5	83	618	42.5	26	2,439	44.8	109
Total fine	**6,577**	**42.4**	**279**	**31,272**	**42.9**	**1,342**	**37,849**	**42.8**	**1,621**
Total rock + fine	17,508	44.4	777	115,222	45.5	5,243	132,730	45.4	6,021

Bangombé deposit

On the basis of the mineral resources, the figures for recoverable resources are established taking the following into account:

- geological uncertainties, therefore excluding inferred mineral resources;
- the presence of durable infrastructures judged not to be moveable, of which mapping was completed in 2017;
- commercial specifications with a cut-off grade of 37% Mn on the rock-ore fraction;
- mining and technical factors arising from reconciliations, carried out/estimated.

The definition of recoverable resources factors in criteria established for the given geological domain that are subject to change in light of further information and studies. For the ore masses of the Plateau and the inner edges, these criteria relate to a minimum ore thickness of 2 metres and the mining methods associated with at least an outline diagram. For outer edges, recoverable resources correspond to the ore included in a mining plan with an excavation diagram.

Recoverable resources for which the mining project is complete are converted into reserves. Reserves are included in recoverable resources. The long-term mining sequence of the Bangombé deposit is based on recoverable resources, which will ideally sustain the first few years of the plan.

The recommendations of the auditor (Melabar GeoConsulting 2014) had led to the exclusion of the inner edge deposits from the reserves and the declassification of part of the outer edge deposits as probable reserves. Surveys were conducted in 2017 to reduce the drilling pattern on two of the edge deposits and increase the degree of knowledge about them. This work was followed by the updating of the geological models and the mining studies (mining projects and assessments in particular), which allowed the transformation of measured resources into probable reserves and the reclassification of probable reserves as proven reserves. Similar work will be carried out over time on all edge deposits.

Okouma-Bafoula deposit

The ore at the Okouma-Bafoula deposit was estimated and classified as probable reserves using the same procedure applied to the Bangombé deposit, notably by including environmental and community constraints. The volume of reserves corresponds to the volume of recoverable resources declared at 1 January 2017, to which the updated technical factor of performance of the beneficiation yield was applied for rock ore.

A long-term mine planning study of the Okouma-Bafoula deposit was conducted in 2017 independently of the long-term mining sequence of Bangombé-Moulili. Work is under way to include these reserves in the mining sequence of COMILOG S.A.

Moulili deposit

The MT1 and MT3 sections have been operating since 2010 and 2013, respectively. The estimate of recoverable resources and reserves was updated by first integrating the updated Lidar topography as of 12 April 2017 and then subtracting the figures for production carried out between 12 April and 31 December 2017. Surveys of the MT2 and MT4 sections were unable to estimate any recoverable resources or reserves in these areas.

COMILOG S.A.'s long-term mining sequence includes the Moulili reserves.

2.8.2.3 SOCIÉTÉ LE NICKEL-SLN'S RESERVES AND RESOURCES

SAPROLITE RESERVES AND RESOURCES FOR PYROMETALLURGY

An external audit was carried out in 2013 by Sigma Blue Pty Ltd, which certified that the estimates for resources and reserves of nickel-bearing saprolitic ores intended to supply the Société Le Nickel pyrometallurgy plant at Doniambo were free of material error and were evaluated acceptably and in compliance with the recommendations of the JORC code.

Mineral resources

Mineral resources are grouped together according to their classification, using the criteria defined by the SLN geologists and in accordance with the JORC code definition.

In accordance with the system for describing drilling data, the tonnages and grades given correspond solely to the weathered, ore-bearing phase of saprolites at a defined cut-off grade and not to the saprolitic column as a whole.

DEVELOPMENTS IN MINERAL RESOURCES AT 1 JANUARY 2018

MINERAL Resources	1 JANUARY 2018			1 JANUARY 2017		
	MT	% NI	KTNI	MT	% NI	KTNI
Measured	39.4	2.41	949	39.5	2.43	957
Indicated	63.2	2.42	1,526	66.4	2.44	1,618
Inferred	81.3	2.45	1,992	73.1	2.43	1,776
Total	183.9	2.43	4,467	178.9	2.43	4,351

For the most part, mineral resources are estimated by modelling 3D blocks using linear geostatistical methods for the ore masses as a whole.

Ore tonnages are given in millions of dry tonnes and the humidity contents, whether observed in production in progress or estimated, range from 22 to 45% according to ore mass.

The figures were established with cut-off grades applied to the weathered fraction, the range of which depends on the type of processing (mineralurgical or conventional) and economic conditions.

Changes to the resource figures are due to the combined effects of variations in cut-off grade (decreasing at Tiébaghi), the updating of geological models at all of the sites and the mining production conducted in 2017. Work carried out on the peripheral deposits of Kouaoua and the areas outside the mining centre, particularly around Poum, Tia, Me Aiu and Poro, led ultimately to an increase in the mineral resources of more than 2%.

Exploration results

Exploration results also correspond to saprolitic ore. At 1 January 2018, they were assessed as 741 ktNi, up from the previous year (+15%). This development is mainly due to the results of surveys on the Mont Do, Tia and Tene Me Adeo domains. Work will continue in the years to come to advance these targets to inferred/indicated mineral resource status.

Recoverable resources and reserves

The table below sets out the figures for saprolite recoverable resources and reserves for the Doniambo pyrometallurgy plant surveyed in 2017 and published at 1 January 2018, with the figures published at 1 January 2017 in italics. These figures stem from the above mentioned mineral resources and factor in the following:

- traditional run-of-mine processing similar to that used at the sites of Société Le Nickel-SLN and/or subcontractors, which includes screening at approximately 80 mm with or without recovery of part of the coarser fractions, depending on the type of ore;
- mineralurgical processing at Népoui Kopéto and Tiébaghi;
- optimisation of mining projects in the case of reserves.

Ore tonnages are given in millions of dry tonnes, and metal tonnages in thousands of tonnes of nickel content in the ore.

Recoverable resources and reserves of ore intended for mineralurgical processing are estimated as "washery concentrate" arising from processing all the ore from Népoui-Kopéto, and 1.8-2.4% Ni range for Tiébaghi.

RECOVERABLE RESOURCES AND RESERVES AT 1 JANUARY 2018

RESOURCES	1 JANUARY 2018			1 JANUARY 2017		
Recoverable	MT	% NI	KTNI	MT	% NI	KTNI
Measured	24.9	2.57	642	25.7	2.58	662
Indicated	44.8	2.42	1,084	48.6	2.45	1,189
Inferred	58.0	2.48	1,437	51.2	2.48	1,267
Total	127.7	2.48	3,163	125.4	2.49	3,118

	1 JANUARY 2018			1 JANUARY 2017		
RESERVES	MT	% NI	KTNI	MT	% NI	KTNI
Proven	17.3	2.63	455	19.8	2.62	519
Probable	16.7	2.47	412	17.9	2.47	442
Total	34.0	2.55	867	37.6	2.55	960

Measured and indicated recoverable resources are estimated at 1,726 ktNi, with their proportion in inventoried total down 5% compared to the figures published on 1 January 2017. The increase in recoverable resources is a result of the effects on mineral resources mentioned above, as well as the effect of changes in mining factors measured at Népoui, and the increase of the separation grade between traditional ore and UTM ore at Tiébaghi.

The inferred recoverable resources, estimated at 1,437 ktNi, are up 13% from the previous year, as a result of work carried out on the peripheral deposits of Kouaoua and the areas outside the mining centres.

SLN's mining production in 2017 amounted to 58.3 ktNi (thousands of tonnes of nickel), corresponding to the tonnages of nickel contained in the ore carried to the various shore sites (wharf or mechanical loading).

177% of recoverable resources consumed in 2017 were renewed.

Reserves are estimated at 867 ktNi at year-end 2017, compared to 960 ktNi published at 1 January 2017. This decrease is a result of the effects of economic optimisation of the projects and the inclusion of accessibility constraints in the Méré region, despite the addition of new reserves at the Thio site and the effects mentioned on the recoverable resources. The proportion of proven reserves remained stable (53% in 2017 compared to 54% in 2016).

SLN draws up its mining and industrial plan on the basis of all its reserves and part of the recoverable resources regarded as economically exploitable but not yet included in any mining project.

MINERAL RESOURCES FOR HYDROMETALLURGY

For the whole of the mineral deposits of Société Le Nickel-SLN and at a cut-off grade of 1.0% Ni, inferred and measured mineral resources in laterites are currently estimated at 6,000 ktNi.

Outside the centres with mineralurgical processing facilities, exploration results on low-grade saprolite zones, which are currently uneconomical for pyrometallurgy processing, point on a preliminary basis to 2,000 kt in nickel content which may be recoverable using the hydrometallurgical process developed by ERAMET, or exported to be processed by ferronickel producers.

Mineral resources for hydrometallurgy have not been audited to date. They are, however, estimated using the methodology defined for estimating resources intended for the Doniambo plant.

2.8.2.4 RESERVES AND RESOURCES OF PT WEDA BAY NICKEL

MINERAL RESOURCES

The data on mineral resources relate to the tonnages, Ni content and thousands of tonnes of nickel contained in ore envelopes within limonite and saprolite strata at a 1% Ni cut-off rate, without applying any transformation or enrichment factors. Mineral resources are calculated at the 1% Ni cut-off grade, and are broken down by prospect, distinguishing between lateritic and saprolitic products.

Average dry densities for laterites and saprolites were established on the basis of measurements performed in 1999-2001 and 2008-2012.

Given the small proportion of sound dividing rock, the saprolite tonnages and nickel content provided are representative of the saprolitic column as a whole.

Global resources are calculated by 3D block modelling performed by the Pt Weda Bay Nickel geology team. Measured and indicated resources are estimated by ordinary kriging, while inferred resources are estimated either by inverse square distance or by ordinary kriging when kriging is permitted by variogram quality.

Local resources were estimated for the Bukit Limber Barat deposit by Tenzing Pty Ltd, and on the Coastal, Tofu Blowen and Kao Rahaï masses, by the ERAMET Pt Weda Bay Nickel teams, using multivariate uniform conditioning.

The figures set out below are from local estimates for the saprolites classed as measured or indicated resources converted into reserves, and of global estimates for the other masses in the saprolites and the laterite horizon.

Due to the postponement of the project, there was no prospecting campaign in 2016 and the mineral resources remain unchanged compared to the figures published at 1 January 2017.

The mineral resources correspond to an overall nickel tonnage of 9.3 million tonnes, of which almost 60% were classified as measured and indicated resources.

ESTIMATION OF LIMONITE AND SAPROLITE MINERAL RESOURCES AT 1 JANUARY 2018

	1 JANUARY 2018		
MINERAL RESOURCES	MT	% NI	KTNI
Limonite			
Measured	36.0	1.26	455
Indicated	68.0	1.22	829
Inferred	44.9	1.21	543
Total	**148.9**	**1.23**	**1,827**
Saprolite			
Measured	98.8	1.72	1,694
Indicated	169.8	1.54	2,613
Inferred	215.2	1.49	3,206
Total	**483.8**	**1.55**	**7,513**
Grand total	632.7	1.48	9,340

Studies from 2016-2017 also identified masses made up of ore with an average nickel content varying between 1.8 and 2.0%, representing 35% of the mineral resources measured and indicated for saprolites.

RESERVES

Due to the postponement of the hydrometallurgical ore processing project, reserves associated with it have not been published. These reserves will have to be updated once an optimal processing project has been decided upon, based on economic parameters related to the adopted process.

2.8.2.5 TIZIR'S RESERVES AND RESOURCES

MINERAL RESOURCES

The data on mineral resources are mineral-sand tonnages and heavy-mineral contents (HM) identified in seven adjacent mineral masses. The update of the mineral resources at 1 January 2018 is based on the figures published in 2017 minus the mineral resources exploited during 2017, corresponding to 46.8 million tonnes @1.7% HM, and the resources located immediately under the area exploited in 2017, i.e. 6.5 million tonnes @0.8% HM.

TIZIR MINERAL RESOURCES AT 1 JANUARY 2018

MINERAL RESOURCES	T.V. MT	*IN SITU* HM MT	HM %	ZIRCON %	LEUCOXENE %	RUTILE %	ILMENITE %
Measured	1,456	20.9	1.4	10.7	3.2	2.5	72
Indicated	350	4.8	1.4	10.7	3.2	2.5	72
Inferred	41	0.5	1.2	10.7	3.2	2.5	72
Total	1,847	26.2	1.4	10.7	3.2	2.5	72

Mineral resources were estimated at a cut-off grade of 1.0% HM applied to grade accumulations up to a depth of 6 metres and below the natural groundwater level, except for two masses where accumulation occurs at groundwater. The heavy metal assemblages (zircon, ilmenite, rutile and leucoxene) are reported in percentages of HM.

RESERVES

The reserves correspond to part of the mineral resource contained in the dredge path and in the adjacent zones pushed using the bulldozer. The route of the dredge was optimised by removing any sharp turns, updating inhabited area exclusions (plus and minus), and adjusting the water level relative to the upper surface of the aquifer. The reserves incorporate mining dilution and the subtraction of production in 2017, and are based on the economics of the project. The cut-off grade applied is 1.3% HM for the first five years, then 1.0% HM. Reserves are included in mineral resources.

TIZIR'S RESERVES AT 1 JANUARY 2018

RESERVES	ORE IN TONNES MT	HM MT	HM %	ZIRCON %	LEUCOXENE %	RUTILE %	ILMENITE %
Measured	1,392	20.2	1.5	10.7	3.2	2.5	72
Indicated	373	4.5	1.2	10.7	3.2	2.5	72
Total	1,765	24.7	1.4	10.7	3.2	2.5	72

RESOURCES AND RESERVES AT 1 JANUARY 2018

Compared with 2017, mineral resources have decreased due to the removal of all ore present in the upland area.

However, the reserves have increased sharply (+13%) thanks to the optimisation of the route of the dredge, which has allowed the lifespan of the Grande Côte mine to be extended to 2050 at the nominal operating rate.

2.8.2.6 RESOURCES OF ERAMINE SA

DRAINABLE RESOURCES

Drainable resources were calculated in April 2017 by Montgomery and Associates acting as "Qualified Persons", at the Centenario-Ratonès salt flats.

The calculation used the effective porosities for each lithological unit in the aquifer. The cut-off grade of 200 mg/l was applied to the resource envelopes. The results are presented for the zone located inside the perimeter of the concessions owned by Eramine SA.

The equivalent LCE ("lithium carbonate equivalent") tonnage is calculated using the mass of lithium multiplied by a factor from the atomic mass of each element of lithium carbonate: 5.322785.

DRAINABLE RESOURCES AT 1 JANUARY 2018

DRAINABLE RESOURCES	BRINE VOLUME (million cubic metres)	AVERAGE DENSITY	LI CONTENT (MG/L)	LCE (KILOTONNES)
Measured	916	1.17	408	1,991
Indicated	1,442	1.13	379	2,912
Inferred	3,010	1.16	311	4,987
Total	5,368	1.15	366	9,890

EXTRACTABLE RESOURCES

Brine volumes and "Lithium Carbonate Equivalent" (LCE) tonnages were calculated for a pumping field including a ramp-up of production over the first two years. The pumping field consists of 12 wells in the first year and 21 wells in year 20, ultimately reaching 24 wells in year 40. Each well has an extraction rate of 17L/sec, allowing the calculation of the actual pumping hours. The pumping field is only defined for the Ratonès salt flat.

EXTRACTABLE RESOURCES AT 1 JANUARY 2018 (MODFLOW MODEL 2017)

EXTRACTABLE RESOURCES	LCE AVERAGE ANNUAL MASS AT 40 YEARS (KILOTONNES)	CONCENTRATION OF LITHIUM METAL AT 40 YEARS (MG/L)
Measured (86%) + Indicated (10%) + Inferred (4%)	991	430

The lithium content is the contents extracted from the shaft field averaged out over the duration of pumping.

The equivalent LCE tonnage is calculated using the mass of lithium multiplied by a factor from the atomic mass of each element of lithium carbonate, or 5.322785.

The average mass of LCE extracted up to the fortieth year of production is 25 kt.

2.8.2.7 RESOURCES OF MABOUMINE

MINERAL RESOURCES

Data concerning mineral resources refer to tonnages, niobium content and thousands of tonnes of niobium, rare-earth metal content (metal equivalent) and thousands of tonnes of rare-earth metals, tantalum content and thousands of tonnes of tantalum, and uranium content and thousands of tonnes of uranium in the superficial banded ore estimated in the 3D modelled envelope, with no application of any transformation or beneficiation factors. The mineral resources of the superficial banded ore are calculated with a cut-off grade of 0.4% Nb_2O_5.

The average dry densities of the ores were established on the basis of measurements performed in 2013.

Global resources are estimated by ordinary kriging in a 3D block model.

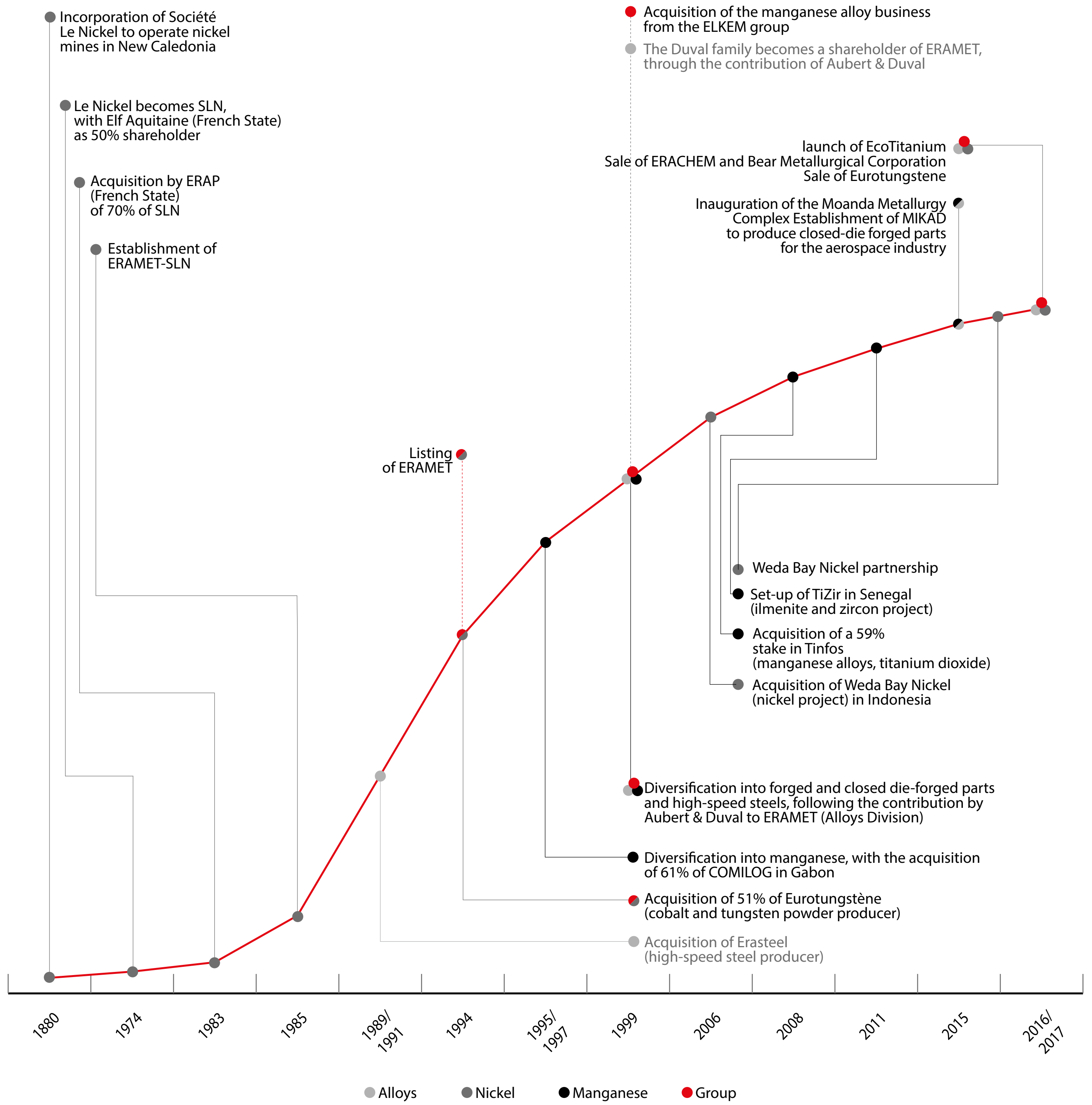
Mineral resources and their classification were certified in 2015 by SGS Géostat. The distinction between inferred mineral resources (1) and (2) is based on the level of information relative to the estimated elements (TR, Ta and U not estimated in inferred resources (2)).

MINERAL RESOURCES FOR SUPERFICIAL BANDED ORE WITH A CUT-OFF GRADE OF 0.4% NB_2O_5

MINERAL RESOURCES	MT	% NB	KTNB	% TR	KTTR	% TA	KTTA	% U	KTU
Measured	66.5	0.98	650	0.97	644	0.3	20	0.2	15
Indicated	-	-	-	-	-	-	-	-	-
Inferred (1)	79.3	0.7	554	1.04	828	0.2	16	0.2	16
Inferred (2)	49.7	0.85	420	-	219(*)	-	NE	-	NE

NE: Not estimated.
(*) Estimated for Cerium only.
Note: The figures presented are rounded to 100,000 tonnes for ore and 1,000 tonnes for metals. Grades are calculated on rounded tonnages.

2.9 COMPANY HISTORY



1880

Société Le Nickel was incorporated in 1880 to operate nickel mines in New Caledonia. Under the majority control of the Rothschild family since the end of the 19th century, in the late 1960s it became the parent company of all the Rothschild group's mining subsidiaries (Le Nickel-Peñarroya-Mokta group).

1974

The nickel business was spun off into a subsidiary under the name Société Métallurgique Le Nickel-SLN: Elf Aquitaine acquired a 50% interest in this new company. The former company Société Le Nickel changed its name to Imétal, thereafter holding the remaining 50% in Société Métallurgique Le Nickel-SLN.

1983

As part of an industrial, shareholding and financial restructuring programme, ERAP, a French state-owned company, acquired a 70% stake in the share capital of Société Métallurgique Le Nickel-SLN. Imétal and Elf Aquitaine's interests were reduced to 15% each.

1985

Société Métallurgique Le Nickel-SLN, owner of the mining assets in New Caledonia, became a wholly-owned subsidiary of a new parent company known as ERAMET-SLN, in which the shareholders continued to be ERAP (70%), Imétal (15%) and Elf Aquitaine (15%).

From 1989 onwards, in order to smooth out the effects of nickel cycles, the Company adopted a strategy of diversifying in complementary business activities.

1989-1991

Acquisition of the French company La Commentryenne and Swedish company Kloster Speedsteel in the high-speed steels sector. These two companies were merged in 1992 to form a new company known as Erasteel.

1991

Long-term commercial and financial partnership with Nisshin Steel. At the end of October 1994, Nisshin Steel held a 10% stake in Société Métallurgique Le Nickel-SLN.

1992

Société Métallurgique Le Nickel-SLN and ERAMET-SLN took on their current names of Société Le Nickel-SLN and ERAMET, respectively.

1994

Acquisition of a 51% stake in Eurotungstène, a cobalt and tungsten powder producer.

A private placement was followed by a listing of 30% of ERAMET's share capital on the Paris Stock Exchange's *"Second Marché"*.

1994

The BRGM group (*Bureau de Recherches Géologiques et Minières,* a French state-owned company) transferred ownership of its Cofremmi subsidiary, the owner of nickel ore reserves in New Caledonia, in return for shares representing 2.34% of ERAMET's new share capital.

1995-1996

ERAMET acquired a 46% stake in COMILOG (Gabon), a producer of manganese ore, ferromanganese and manganese-based chemicals.

1997

ERAMET acquired an additional 15% in COMILOG from Gengabon (Gencor Group).

1998

Agreement to swap Poum/Koniambo mining rights in New Caledonia.

1999

- The Group consolidated SIMA (Duval family), a producer and transformer of high-performance special steels.
- Sale of a 30% stake in Société Le Nickel-SLN to ERAP in exchange for ERAMET shares; ERAP then transferred the stake to a New Caledonian publicly-owned entity, Société Territoriale Calédonienne de Participation Industrielle (STCPI). The French government sold ERAP's remaining interest to Cogema, which then became part of the AREVA group.
- Acquisition of the manganese business (refined alloys) of the Norwegian group Elkem.

After these operations, the Group's businesses were organised into three Divisions—Nickel, Manganese and Alloys—and the Group's capital was mostly held by private shareholders (Cogema/AREVA and SORAME/CEIR—Duval family), with the French government retaining a non-controlling interest.

2000

- Acquisition of the Mexican company Sulfamex, producing manganese-based agrochemicals.
- Opening of the Moanda industrial complex in Gabon.

2002

Acquisition of the Guilin manganese alloy plant (China).

2003

Acquisition of a 100% stake in the Trappes research centre (France) and 100% of the shares of Eurotungstène.

2005

Acquisition of 100% of the shares of Bear Metallurgical (a subsidiary of Gulf Chemical and Metallurgical Corp.) in the United States. SETRAG was granted a 30-year concession to operate the Trans-Gabon railway. Incorporation of Maboumine, a subsidiary of COMILOG in Gabon, whose business purpose is mining exploration at the deposit of Mabounié (niobium, rare earths, uranium, phosphates).

2006

Acquisition of Weda Bay Nickel in Indonesia.

2007

Shares in ERAMET were swapped for those in SLN for STCPI as part of the SLN shareholders' agreement.

2008

- Acquisition of a 58.93% controlling interest in the Norwegian group Tinfos.
- Creation of UKAD for preliminary mining and first transformation of titanium (forging bars).

2009

- Sale of 33.4% of Strand Minerals (Weda Bay project holding company) to Mitsubishi Corporation.
- ERAMET increased its stake in Eralloys (formerly Tinfos, Norway) to 100% after buying up the non-controlling interests. Sale of Nizi, an international trading business acquired in 2008 with Tinfos.
- Acquisition of Valdi (France), engaged in the recycling of non-ferrous metals.

2010

Agreement with the Gabonese Republic for a phased increase (up to 2015) of its stake in the capital of COMILOG.

2011

Creation of TiZir, a joint venture in mineral sands with Mineral Deposits Ltd.

2012

Acquisition by Fonds Stratégique d'Investissement (which became Bpifrance) of the ERAMET shares previously held by Areva.

2013

Appointment, following a joint nomination by BPI and by SORAME and CEIR, of a director to represent Gabon on the ERAMET Board.

2014

Start-up of the Moanda metallurgy complex in Gabon and (via TiZir) of Grande Côte in Senegal (mineral sands).

2015

- Launch of EcoTitanium, Europe's leading producer of aviation-grade titanium producer using recycled materials.
- Creation of MKAD, a new plant machining large titanium parts, a joint venture between Aubert & Duval and Mecachrome. The aim is to use the plant to transform the titanium produced by EcoTitanium.

2016

- Sale of ERACHEM, Somivab and Bear Metallurgical corporation.
- Start of MKAD production.
- Opening of the *École des mines* in Moanda.

2017

- Launch of EcoTitanium.
- Disposal of Erasteel's stake in HeYe and Acquisition of HEIML, subsequently renamed EIML.

3

FINANCIAL STATEMENTS

3.1 COMMENTS ON THE INDIVIDUAL AND CONSOLIDATED FINANCIAL STATEMENTS

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	3,652	2,984
EBITDA	871	375
Current operating income	608	84
Operating income	567	(95)
Net income Group share before impairment of assets and tax receivables	217	(43)
Impairment of assets and deferred tax assets	(42)	(167)
Attributable to the Group	*(14)*	*(136)*
Net income	228	(237)
Net income, Group share	203	(179)
Net cash generated by operating activities	687	121
Capital employed	2,584	2,838
Industrial investments	230	217
Net debt	(376)	(836)
Ratio of net debt to equity	19%	47%

The tables and associated comments which follow in this chapter use consolidated performance indicators taken from the Group's reporting in which the operating performance of the joint ventures are accounted for under proportionate consolidation. A reconciliation with the published data is presented in paragraph 3.1.1.9.

3.1.1 GENERAL COMMENTS

3.1.1.1 INCOME STATEMENT

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	**3,652**	**2,984**
EBITDA	**871**	**375**
Amortisation and depreciation of non-current assets	(250)	(268)
Provisions for risks and expenses	(13)	(23)
Current operating income	**608**	**84**
Impairment of assets	9	(110)
Other operating income and expenses	(50)	(69)
Operating income	**567**	**(95)**
Financial income	(117)	(79)
Share of income from associates	(1)	(2)
Income taxes	(221)	(61)
Net income for the period	**228**	**(237)**
• attributable to non-controlling interests	25	(58)
▪ attributable to the Group	203	(179)
Basic earnings per share (€)	7.67	(6.79)

3.1.1.2 SALES

The ERAMET group's sales increased by 22% to €3,652 million compared to 2016.

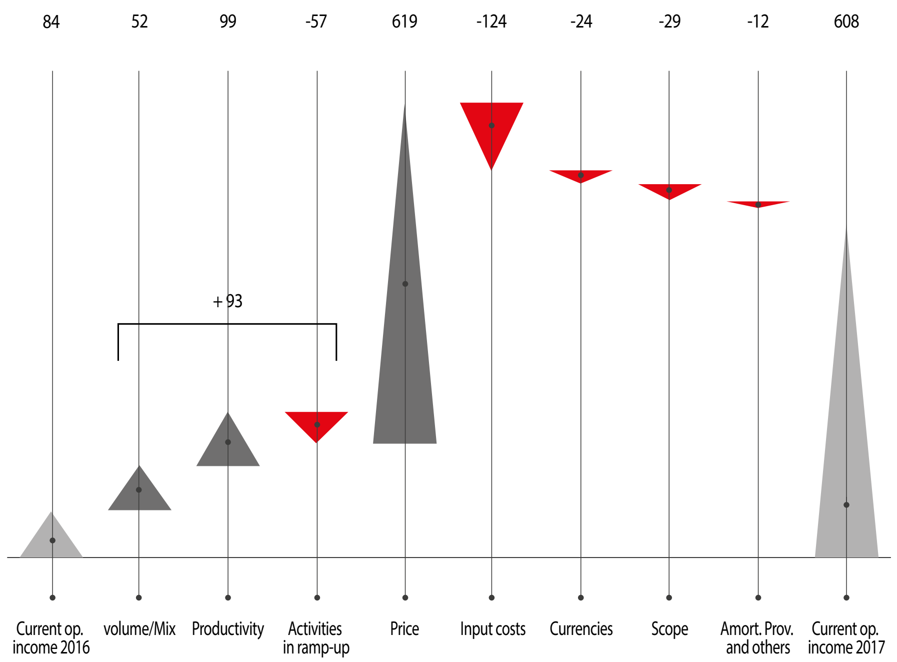
In 2017, ERAMET Manganese's sales grew by 33% to €1,919 million. Sales by ERAMET Nickel and ERAMET Alloys also increased, up 8% and 15% to €644 million and €1,087 million, respectively, compared to 2016.

3.1.1.3 CURRENT OPERATING INCOME

The ERAMET group's current operating income was €608 million, a sharp increase of €524 million compared to 2016 (€84 million), with a strong positive contribution by ERAMET Manganese of €738 million (+€519 million compared to 2016) and stable results for ERAMET Nickel and ERAMET Alloys.

This was primarily due to improved sales prices for manganese ore and alloys, and cost reduction and productivity improvement plans throughout the Group.

Changes in current operating income between 2016 and 2017 were as follows:



3.1.1.4 OPERATING INCOME

The operating income of €567 million showed a marked improvement on the loss of €95 million in 2016. Other operating income and expenses (excluding impairment of assets) remained stable, rising from €69 million in 2016 to €71 million in 2017, including in particular the costs of studies for development projects and restructuring plans.

Operating income for 2017 was impacted positively by €30 million of net reversals of asset write-downs, mainly concerning ERAMET Manganese.

3.1.1.5 NET INCOME

Net income in 2017 was €228 million compared to -€237 million in 2016, due to:

- a net financial loss of €117 million, compared to €79 million in 2016, composed of:
  - the €84 million net borrowing cost, the result of an average net cash investment for the period of €1,573 million at an interest rate of around 1.00% and average gross debt of €2,319 million at an interest rate of 4.23%,
  - other financial income and expenses, leading to net expenses of €33 million;
- an income tax expense of €221 million, compared to a theoretical income tax expense of €155 million (net income before tax of €450 million x 34.43%); this difference is primarily due to the impact of unrecognised or limited deferred tax assets at certain loss-making companies within the scope of consolidation of -€95 million, including -€51 million in New Caledonia, partially offset by asset write-downs of +€17 million and the positive effects of the current income tax differential of foreign countries, amounting to +€19 million.

3.1.1.6 NET INCOME—GROUP SHARE

Group share of the profit was €203 million compared to a loss of €179 million in 2016, net of €25 million attributed to non-controlling interests from net results in 2017.

3.1.1.7 FINANCING[1]

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Operating activities		
EBITDA	871	375
Cash impact of items in EBITDA	(387)	(228)
Cash flow from operations	**484**	**147**
Change in WCR	203	(26)
Net cash generated by operating activities (1)	**687**	**121**
Investing activities		
Industrial investments	(230)	(217)
Other investment flows	19	30
Net cash used in investing activities (2)	**(211)**	**(187)**
Net cash used in financing activities	**(12)**	**100**
Impact of changes in exchange rate	(4)	8
(Increase)/decrease in net financial debt	**460**	**42**
Opening (net financial debt)	**(836)**	**(878)**
Closing (net financial debt)	**(376)**	**(836)**
Free Cash Flow (1) + (2)	476	(66)

The Group's net borrowings[2] stood at €376 million at 31 December 2017, compared to €836 million at 31 December 2016. This change was the result of the following:

- €687 million in net cash flows from operating activities (€121 million in 2016):
  - €484 million in cash generated from operations compared to €147 million in 2016, due to a large increase in earnings in 2017 compared to 2016 (current operating income up by €524 million),
  - +€203 million change in WCR;
- -€211 million in net cash flow from investing activities, primarily consisting of -€230 million in industrial investments, up 6% compared to 2016;
- -€12 million in net cash flow from financing activities;
- -€4 million in the impact of changes in foreign exchange rates.

The net debt to equity ratio (gearing) was 19% at 31 December 2017, a sharp decrease compared to 31 December 2016 (47%).

3.1.1.8 ECONOMIC BALANCE SHEET[3]

(€ MILLION)	31/12/2017	31/12/2016
Non-current assets	**2,710**	**2,818**
Inventories	887	933
Trade receivables	368	333
Trade payables	(391)	(390)
Simplified WCR	**864**	**876**
Other items of WCR	(305)	(156)
Total WCR	**559**	**720**
Total	3,269	3,538

(1) Table of debt flows (Note 3 to the consolidated financial statements).
(2) Net borrowings are comprised of short and long-term borrowings less cash and cash equivalents and current financial assets.
(3) Economic balance sheet (Note 3 to the consolidated financial statements).

(€ MILLION)	31/12/2017	31/12/2016
Shareholders' equity, Group share	1,694	1,515
Shareholders' equity, non-controlling interest	286	261
Shareholders' equity	**1,980**	**1,776**
Cash and cash equivalents and current financial assets	(2,075)	(1,698)
Loans	2,451	2,534
Net financial debt	**376**	**836**
Ratio of net financial debt to shareholders' equity (gearing)	*19%*	*47%*
Employee-related liabilities and provisions	**730**	**740**
Net deferred tax	**173**	**142**
Derivatives	**10**	**44**
Total	3,269	3,538

The total economic presentation of the Group's balance sheet at 31 December 2017 was €3,269 million compared to €3,538 million at 31 December 2016.

This decrease of €269 million was primarily due to:

- a €108 million decrease in non-current assets, mainly due to the depreciation and impairment of assets above industrial investments and a decrease in total WCR of €161 million;
- the decrease in net financial debt (-€460 million, see Section on Financing), partially offset by an increase in shareholders' equity to €1,980 million (+€ 204 million) which is mainly explained by the result for the financial year 2017.

Contingent liabilities in connection with legal disputes are explained in Note 12 to the consolidated financial statements.

Policy and objectives for management of financial risks, including the Group's hedging policy and the exposure to price, credit, liquidity and cash-flow risks are set out in Note 7 to the consolidated financial statements, Financial instruments and risk management.

3.1.1.9 RECONCILIATION OF GROUP REPORTING AND PUBLISHED FINANCIAL STATEMENTS

(€ MILLION)	FINANCIAL YEAR 2017 PUBLISHED(1)	CONTRIBUTION OF JOINT VENTURES	FINANCIAL YEAR 2017 ADJUSTED(2)	FINANCIAL YEAR 2016 PUBLISHED(1)	CONTRIBUTION OF JOINT VENTURES	FINANCIAL YEAR 2016 ADJUSTED(2)
Sales	3,528	124	3,652	2 897	87	2,984
EBITDA	845	26	871	366	9	375
Current operating income	598	10	608	91	(7)	84
Operating income	513	54	567	(47)	(48)	(95)
Net income, Group share	203	-	203	(179)	-	(179)
Net cash generated by operating activities	687	-	687	98	23	121
Industrial investments	224	6	230	206	11	217
(Net financial debt)	(237)	(139)	(376)	(675)	(161)	(836)
Shareholders' equity	1,989	(9)	1,980	1,791	(15)	1,776
Shareholders' equity - Group share	1,694	-	1,694	1,515	-	1,515

(1) Published data with joint ventures consolidated using the equity method, as per current regulations.
(2) Data from Group Reporting, where joint ventures are consolidated proportionally.

3.1.1.10 FORESEEABLE OUTLOOK

In a still very volatile environment, in which we remain vigilant with regard to the demand for metals, particularly in China, the Group's markets remain generally well oriented at the beginning of 2018.

3.2 CONSOLIDATED FINANCIAL STATEMENTS FOR 2017

3.2.1 INCOME STATEMENT

(€ MILLION)	NOTES	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	**3/4**	**3,528**	**2,897**
Other products		24	57
Cost of sales		(2,519)	(2,390)
Administrative and selling expenses		(160)	(164)
Research and development expenditure	4	(28)	(34)
EBITDA	**3**	**845**	**366**
Amortisation and depreciation of non-current assets and provisions for liabilities and charges	4	(247)	(275)
Current operating profit (loss)	**3/4**	**598**	**91**
Other operating income and expenses	5	(85)	(138)
Operating profit (loss)	**3**	**513**	**(47)**
Financial income	6	(93)	(58)
Share of income from joint ventures and associates	9	18	(66)
Income taxes	10	(216)	(61)
Profit (loss) for the period		**222**	**(232)**
• attributable to non-controlling interests	5	19	(53)
• attributable to equity holders of the parent	3/5	**203**	**(179)**
Basic earnings per share (€)	5	7.67	(6.79)
Diluted earnings per share (€)	5	7.03	(6.79)

3.2.2 STATEMENT OF COMPREHENSIVE INCOME

(€ MILLION)	NOTES	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Profit (loss) for the period		**222**	**(232)**
Translation differences for subsidiaries' financial statements in foreign currency		(58)	22
Change in revaluation reserve for available-for-sale assets		(3)	7
Change in revaluation reserve for hedging instruments	7	35	59
Income taxes		(7)	(1)
Items recyclable to profit or loss		**(33)**	**87**
Revaluation of net defined benefit plan liabilities	11	6	(17)
Income taxes		(1)	2
Items not recyclable to profit or loss		**5**	**(15)**
Other comprehensive income		**(28)**	**72**
• attributable to non-controlling interests	5	-	7
• attributable to equity holders of the parent		**(28)**	**65**
Total comprehensive income		194	(160)
• attributable to non-controlling interests		19	(46)
• attributable to equity holders of the parent		**175**	**(114)**

These items are listed in the table of changes in equity under the section relating to OCI (Other Comprehensive Income).

3.2.3 STATEMENT OF CASH FLOWS

(€ MILLION)	NOTES	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Operating activities			
Profit (loss) for the period		222	(232)
Non-cash income and expenses	6	260	389
Cash flow from operations		**482**	**157**
Net change in working capital requirement	8	205	(59)
Net cash flow from operating activities[1]	**3**	**687**	**98**
Investing activities			
Acquisition of non-current assets	9	(236)	(212)
Disposal of non-current assets	5	31	7
Net change in non-current financial assets	9	(3)	(14)
Net change in current financial assets	6	(63)	(135)
Joint ventures capital increase		(9)	-
Share capital increase—controlled companies	9	-	(97)
Impact of changes in consolidation scope	6	13	131
Net cash used in investing activities		**(267)**	**(320)**
Financing activities			
Issue of equity instruments (ODIRNAN)	6	-	100
Interest paid on ODIRNAN	6	(4)	-
Buyback of ERAMET equity shares	6	(8)	-
Loan issues	6	876	1,183
Loan repayments	6	(1,011)	(113)
Change in bank overdrafts	6	32	(32)
Other changes	6	(9)	9
Net cash used in financing activities		**(124)**	**1,147**
Impact of changes in exchange rate		(3)	3
Increase (decrease) in cash and cash equivalents		293	928
Opening cash and cash equivalents	**6**	**1,360**	**432**
Closing cash and cash equivalents	**6**	**1,653**	**1,360**
(1) Including under operating activities			
Interest income	*6*	*13*	*16*
Interest paid	*6*	*(81)*	*(71)*
Tax paid	*10*	*(56)*	*(33)*

3.2.4 STATEMENT OF CHANGES IN EQUITY

(€ MILLION)	NUMBER OF SHARES	CAPITAL	SHARE PREMIUMS	RESERVES/ AVAILABLE-FOR-SALE ASSETS	RESERVES/ HEDGING INSTRUMENTS	RESERVES/ DEFINED BENEFIT PLANS	TRANSLATION ADJUSTMENTS	OTHER RESERVES	ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT	ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	TOTAL SHAREHOLDERS' EQUITY
Shareholders' equity at 1 January 2016	**26,543,218**	**81**	**373**	**-**	**(80)**	**(61)**	**27**	**1,126**	**1,466**	**322**	**1,788**
Profit (loss) for the period								**(179)**	**(179)**	**(53)**	**(232)**
Other comprehensive income				7	51	(13)	20		65	7	72
Total comprehensive income		**-**	**-**	**7**	**51**	**(13)**	**20**	**(179)**	**(114)**	**(46)**	**(160)**
Share capital increase	7,225	-	1					(1)	-		-
Equity instruments (ODIRNAN)								100	100		100
Share-based payment								3	3		3
Other movements				2				58	60		60
Total transactions with shareholders		**-**	**1**	**2**	**-**	**-**	**-**	**160**	**163**	**-**	**163**
Shareholders' equity at 31 December 2016	**26,550,443**	**81**	**374**	**9**	**(29)**	**(74)**	**47**	**1,107**	**1,515**	**276**	**1,791**
Profit (loss) for the period								**203**	**203**	**19**	**222**
Other comprehensive income				(4)	20	9	(53)		(28)	-	(28)
Total comprehensive income		**-**	**-**	**(4)**	**20**	**9**	**(53)**	**203**	**175**	**19**	**194**
Share capital increase	83,217		3					(3)	-		-
Share-based payment								6	6		6
Buyback of equity shares								(8)	(8)		(8)
Interest from ODIRNAN								(4)	(4)		(4)
Other movements								10	10		10
Total transactions with shareholders		**-**	**3**	**-**	**-**	**-**	**-**	**1**	**4**	**-**	**4**
Shareholders' equity at 31 December 2017	26,633,660	81	377	5	(9)	(65)	(6)	1,311	1,694	295	1,989

MAIN COMPONENTS OF CHANGES IN EQUITY

Premiums essentially consist of issue premiums, representing the difference between the par value of the shares issued and the amount of the contributions in cash or in kind received on issue.

Reserves on available-for-sale assets include changes in the fair value of bonds classified as Other current financial assets.

Hedging instrument reserves comprise the cumulative change in the effective portion of the fair value of derivatives relating to future cash flow hedging in connection with transactions that have not yet impacted the Net profit for the period. This is offset in Derivatives under assets or liabilities, depending on whether hedging gains or losses are recognised.

Reserves on Defined benefit plans include the impact of changes in actuarial assumptions used for commitments, and the variance between actual returns and the discount rates on the plans' hedging assets.

Translation adjustments account for the conversion differences deriving from the translation of the financial statements of foreign subsidiaries into Euros. They also include the fair value changes of the net investment hedges of foreign subsidiaries.

AT 31 DECEMBER 2017

ERAMET bought a total of 145,000 of its treasury shares in the market in 2017, at a total cost of €8 million.

AT 31 DECEMBER 2016

ERAMET launched an offering of net share settled undated bonds convertible into new shares (ODIRNAN) for a principal amount of €100 million recognised in equity.

Other movements in shareholders' equity, Group share relate primarily to Mitsubishi's decision to exercise its option to sell its holding in Strand Minerals (Indonesia) Pte Ltd.

3.2.5 BALANCE SHEET

ASSETS

(€ MILLION)	NOTES	31/12/2017	31/12/2016
Intangible assets and goodwill	9	349	372
Property, plant and equipment	9	1,924	1,976
Investments in joint ventures and associates	9	115	107
Non-current financial assets	9	121	141
Deferred tax	10	2	4
Other non-current assets	8	86	99
Non-current assets		**2,597**	**2,699**
Inventories	8	849	896
Customers	8	361	330
Other current assets	8	170	195
Tax receivables	8/10	22	39
Derivatives	7	47	29
Current financial assets	6	394	331
Cash and cash equivalents	6	1,653	1,360
Current assets		**3,496**	**3,180**
Total assets		6,093	5,879

LIABILITIES

(€ MILLION)	NOTES	31/12/2017	31/12/2016
Capital		81	81
Share premiums		377	374
Revaluation reserve for available-for-sale assets		5	9
Revaluation reserve for hedging instruments		(9)	(29)
Revaluation reserve for net defined benefit plan liabilities		(65)	(74)
Translation adjustments		(6)	47
Other reserves		1,311	1,107
Attributable to equity holders of the parent		**1,694**	**1,515**
Attributable to non-controlling interests	5	295	276
Shareholders' equity		**1,989**	**1,791**
Employee-related liabilities	11	204	219
Provisions	12	494	482
Deferred tax	10	173	150
Non-current borrowings—due after more than one year	6	1,602	2,022
Other non-current liabilities	8	4	5
Non-current liabilities		**2,477**	**2,878**
Current provisions—due in less than one year	12	31	38
Current borrowings—due in less than one year	6	682	344
Suppliers	8	363	371
Other current liabilities	8	328	346
Tax payables	8/10	168	34
Derivatives	7	55	77
Current liabilities		**1,627**	**1,210**
Total liabilities		6,093	5,879

ERAMET is a French public limited company with a Board of Directors, governed by the provisions of Articles L. 225-17 and R. 225-1 *et seq.* of the French Commercial Code and the provisions of its Articles of Association. As required by law, the Company is audited by two Statutory Auditors.

The ERAMET group's consolidated financial statements at 31 December 2017 were approved by the ERAMET Board of Directors on 20 February 2018.

The accompanying notes are an integral part of the consolidated financial statements.

3.2.6 NOTES TO THE CONSOLIDATED STATEMENTS

NOTE 1 - DESCRIPTION OF THE ERAMET GROUP'S BUSINESS

The ERAMET group is one of the world's largest producers of:

- alloy metals, especially **manganese** and **nickel**, which are used to improve the properties of steel;
- **high-performance special steels and alloys** used by industries such as aeronautics, power generation and tooling.

The ERAMET group is divided into three Divisions.

ERAMET MANGANESE EXTRACTS AND PROCESSES MANGANESE ORE

- **COMILOG** operates the Moanda mine in Gabon.
- The manganese extracted is then processed in the Group's metallurgical plants in France, Norway and the United States. The Group produces the widest range of alloys on the market.

ERAMET NICKEL EXTRACTS AND PROCESSES NICKEL ORE

- **Le Nickel-SLN** operates five mines and one metallurgical plant in New Caledonia. The ERAMET group is also involved in the **Weda Bay Nickel project** to mine a large nickel deposit in Indonesia.
- ERAMET **Sandouville** is a refinery which produces pure nickel, nickel chloride, nickel carbonate and cobalt chloride.

ERAMET ALLOYS CREATES, PROCESSES AND TREATS ALLOYS

- **Aubert & Duval** and **Erasteel** make special steels and superalloys, in particular for the aeronautics and power generation sectors. These markets require high added-value metallurgical expertise.
- The ERAMET group has also expanded into titanium, aluminium and aluminium-lithium alloys and into the powder metallurgy business.

The ERAMET group is also exploring large projects in new business segments with strong growth potential, such as mineral sands (titanium dioxide and zircon) and lithium.

NOTE 2 - KEY EVENTS IN THE REPORTING PERIOD

ERAMET JOINS THE SBF 120 INDEX

Following the decision of the Euronext Paris Scientific Advisory Board, ERAMET joined the SBF 120 stock market index on 18 December 2017.

DEVELOPMENTS IN ERASTEEL'S HOLDINGS IN CHINA

On 29 September 2017, Erasteel finalised the increase of its holdings in the Chinese high-speed steel market.

Erasteel became a 100% shareholder in HeYe-Erasteel Innovative Materials Co. Ltd (HEIML), a Chinese company based in Tianjin specialising in the manufacture of high-speed steel bars and wire, by acquiring the 51% stake held by HeYe Special Steel Co., a subsidiary of AT&M (Advanced Technology & Materials Co., Ltd.). This transaction amounted to 59.5 million yuan, or about €8 million.

Erasteel sold its 10.29% stake in the Chinese company HeYe Special Steel Co. to the latter. The amount of the transaction was 109.5 million yuan, or about €14 million.

BOND ISSUE OF €500 MILLION MATURING IN FEBRUARY 2024

In September 2017, ERAMET arranged a bond issue of €500 million maturing in February 2024. This bond issue, with a coupon of 4.196%, was subscribed to by a diversified base of French and international institutional investors. This issue is unrated.

In addition, ERAMET made a redemption offer for existing bonds maturing in November 2020 for a total of €64.9 million, reducing the outstanding amount to €460 million at 31 December 2017.

STRENGTHENING THE TURNAROUND PLAN FOR LE NICKEL-SLN IN NEW CALEDONIA

ERAMET announced its plan to strengthen the turnaround plan of its subsidiary Le Nickel-SLN in New Caledonia.

In the context of the rapidly evolving global nickel industry, and considering that the achievement of the target of USD 4.5/lb set for the end of 2017 is essential but not sufficient to ensure the sustainability of the company during troughs in the economic cycle, a new cash cost target of USD 4.0/lb was set for the end of 2020.

A detailed analysis of the costs of SLN and its main competitors shows that the two main items at variance are productivity on the one hand, and energy costs on the other. Therefore, this proposed plan will focus on new actions aimed at:

- increasing the productivity of the company through measures to increase working time and restructure the organisation;
- reducing SLN's energy bill (currently the most expensive in the industry), through energy efficiency measures and reviewing the price of electricity. These actions will be carried out independently of the project to build a new power station driven by New Caledonia, which is not expected to come into service before 2022.

On 7 September 2017, the SLN Board of Directors approved these measures to strengthen the turnaround plan, making it possible to improve SLN's competitiveness from a structural perspective, which is the only way to ensure the long-term sustainability of the business in a demanding and competitive market.

BOND ISSUE BY TIZIR

In July 2017, TiZir Ltd (company accounted for using the equity method of accounting) issued a new USD 300 million (€250 million) bond maturing in July 2022. For the most part, this bond refinanced the previous one, which matured in September 2017.

INAUGURATION OF ERAMET SANDOUVILLE'S NEW FACILITIES

The *Estuaire* project, launched in 2013 and completed in June 2017, focused on the upgrade of both the unit's industrial assets and its business model. ERAMET Sandouville aims to strengthen its position in the high-purity nickel market.

The programme consists of adapting part of the value production chain to process a new matte, concentrated ore that forms the plant's raw material. This transformation was accompanied by the conversion of the production site into a subsidiary, having previously been an ERAMET SA facility.

The restart of the facilities is being done gradually since the beginning of the second half-year 2017. The investment of €34.5 million is the largest since the site's creation in 1978.

TWO-YEAR EXTENSION TO REVOLVING CREDIT FACILITY MATURITY AND PARTIAL REPAYMENT

On 16 January 2017, the ERAMET group signed a renegotiation agreement concerning its Revolving Credit Facility (RCF) of €981 million, extending its maturity by two years. The original instalments of €85 million in January 2017 and €896 million in January 2018 are €115 million in January 2018, €85 million in January 2019 and €781 million in January 2020.

A total of €730 million of the Revolving Credit Facility was repaid in 2017 (€500 million in May 2017 and €230 million in July 2017) reducing the amount drawn to €250 million at 31 December 2017.

SALE OF EUROTUNGSTÈNE FINALISED

As part of its asset disposal programme and following the agreement concluded on 9 December 2016, ERAMET finalised the sale of Eurotungstène (production and marketing of metal powders and pre-alloyed powders) to Umicore, with effect from 3 April 2017.

SIGNATURE OF A FRAMEWORK AGREEMENT FOR THE RECOVERY OF THE NICKEL DEPOSITS IN WEDA BAY, INDONESIA

ERAMET signed a framework agreement with the Chinese steel group Tsingshan with a view to determining the conditions for partnership to increase the value of the asset. The Tsingshan Group is the world's leading stainless steel producer.

This partnership would use a pyrometallurgical process to produce nickel ferroalloy, with a volume of about 30,000 tonnes of nickel content per year, from the ore mined from the Weda Bay deposit in Indonesia.

This partnership entails the Tsingshan Group acquiring an interest in Strand Minerals Pte Ltd. ERAMET will hold a 43% stake and the Tsingshan Group 57%.

The next steps in the implementation of this framework agreement are partly subject to government and environmental approval of the joint ERAMET/Tsingshan project. The transaction is expected to be finalised in 2018.

DEPLOYMENT OF A NEW CYCLE OF GOVERNANCE

Ms Christel Bories succeeded Mr Patrick Buffet as Chairman and Chief Executive Officer at the end of the Shareholders' Meeting of 23 May 2017. Ms Bories had been appointed Deputy CEO by the Board of Directors on 23 February 2017.

NOTE 3 · OPERATIONAL PERFORMANCE OF DIVISIONS AND THE GROUP—SEGMENT REPORTING

The ERAMET group is divided into three Divisions: ERAMET Nickel, ERAMET Alloys and ERAMET Manganese. Each Division offers different products and services and relies on distinct technologies and sales strategies. Their operational and financial performance is therefore monitored separately. Their contribution to the main financial indicators of the Group is given below.

ACCOUNTING METHOD	ESTIMATES, ASSUMPTIONS AND JUDGEMENTS
The Divisions' financial statements are prepared in compliance with the accounting principles adopted for the Group's reporting. In this context, the operational performances of joint ventures—the subgroup TiZir (ERAMET Manganese) and the company UKAD (ERAMET Alloys)—are accounted for using the proportionate consolidation method. The reconciliation with the published data is given in the Joint venture contribution column. Transactions between Divisions are carried out under market conditions.	The Executive Committee, the chief operating decision-maker, regularly assesses the performance of each Division against the following indicators: ▪ **Sales;** ▪ **EBITDA,** including the gross profit (difference between sales and the cost of sales), administrative and selling expenses and research & development expenditure before depreciation, amortisation and provisions, which are presented separately; ▪ **Current operating profit (loss),** including EBITDA, depreciation and amortisation and provisions for liabilities and charges. Current operating profit (loss) excludes material transactions that are considered to be unusual in nature, in particular events relating to restructuring, impairment losses and disposals of assets; ▪ **Cash flows generated by operating activities,** including EBITDA, other operational cash flows not impacting EBITDA and the change in working capital requirement (WCR); ▪ **Industrial investments,** including acquisitions of intangible assets and property, plant and equipment. The Executive Committee also monitors consolidated indicators such as: ▪ **Net profit (loss), Group share,** defined as the net profit after tax attributable to ERAMET shareholders, after accounting for the percentage of non-controlling interest in each Group subsidiary; ▪ **Net financial debt,** representing the gross financial debt (long and short-term borrowings) less current financial assets, and cash and cash equivalents. These items include the valuation of debt-hedging derivatives; ▪ **Gearing,** defined as the ratio of net financial debt to shareholders' equity (Group and non-controlling interest). The Holding companies that provide the Group's central services (cash management, currency risk management, Group reinsurance management) do not constitute a Division. Their aggregates are shown in a column with the interdivision eliminations (Holding and eliminations).

RECONCILIATION OF PUBLISHED FINANCIAL STATEMENTS AND GROUP REPORTING

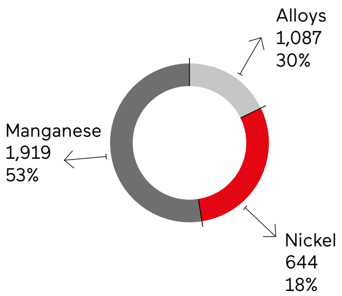
(€ MILLION)	FINANCIAL YEAR 2017 PUBLISHED(1)	CONTRIBUTION OF JOINT VENTURES	FINANCIAL YEAR 2017 REPORTING(2)	FINANCIAL YEAR 2016 PUBLISHED(1)	CONTRIBUTION OF JOINT VENTURES	FINANCIAL YEAR 2016 REPORTING(2)
Sales	3,528	124	3,652	2,897	87	2,984
EBITDA	845	26	871	366	9	375
Current operating profit (loss)	598	10	608	91	(7)	84
Operating profit (loss)	513	54	567	(47)	(48)	(95)
Net profit (loss), Group share	203	-	203	(179)	-	(179)
Net cash generated by operating activities	687	-	687	98	23	121
Industrial investments	224	6	230	206	11	217
(Net financial debt)	(237)	(139)	(376)	(675)	(161)	(836)
Shareholders' equity	1,989	(9)	1,980	1,791	(15)	1,776
Shareholders' equity, Group share	1,694	-	1,694	1,515	-	1,515

(1) Published data with joint ventures accounted for using the equity method, as per current regulations.
(2) Data from Group Reporting, where joint ventures are consolidated proportionally.

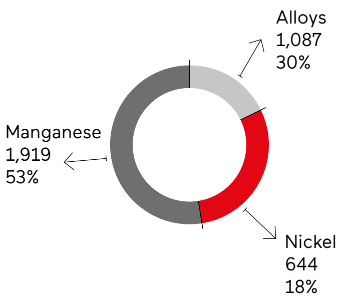
PERFORMANCE INDICATORS BY DIVISION

(€ MILLION)	MANGANESE	NICKEL	ALLOYS	HOLDING AND ELIMINATIONS	TOTAL
Financial Year 2017					
Sales	1,919	644	1,087	2	3,652
EBITDA	861	(44)	84	(30)	871
Current operating profit (loss)	738	(125)	32	(37)	608
Industrial investments (intangible assets and property plant & equipment)	89	80	59	2	230
Net cash generated by operating activities	722	(69)	90	(56)	687
Financial Year 2016					
Sales	1,439	595	949	1	2,984
EBITDA	358	(24)	74	(33)	375
Current operating profit (loss)	219	(119)	27	(43)	84
Industrial investments (intangible assets and property plant & equipment)	104	56	55	2	217
Net cash generated by operating activities	243	(137)	22	(7)	121

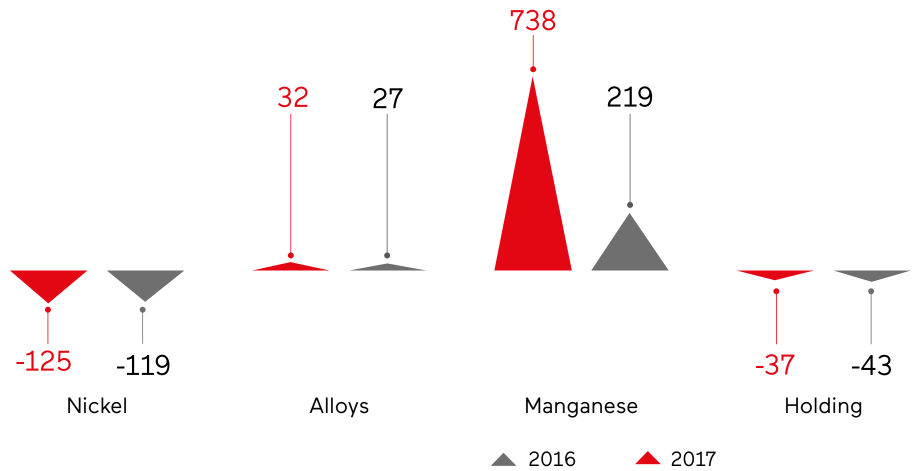
2017 REPORTING SALES BY DIVISION



2016 REPORTING SALES BY DIVISION



2017/2016 REPORTING CURRENT OPERATING PROFIT BY DIVISION



SALES, INDUSTRIAL INVESTMENTS AND NON-CURRENT ASSETS BY GEOGRAPHICAL AREA

(€ MILLION)	FRANCE	EUROPE	NORTH AMERICA	ASIA	OCEANIA	AFRICA	SOUTH AMERICA	TOTAL
Sales (sales destination)								
Financial Year 2017	**371**	**1,320**	**669**	**1,097**	**23**	**93**	**79**	**3,652**
Financial Year 2016	342	940	619	938	28	75	42	2,984
Industrial investments (intangible assets and property plant & equipment)								
Financial Year 2017	**87**	**21**	**5**	**-**	**52**	**64**	**1**	**230**
Financial Year 2016	74	30	9	-	42	61	1	217
Non-current assets (excluding deferred tax)								
Financial Year 2017	**692**	**326**	**12**	**133**	**565**	**1,027**	**2**	**2,757**
Financial Year 2016	698	345	9	164	590	1,065	2	2,873

CONSOLIDATED PERFORMANCE INDICATORS

Segment reporting information is supplemented with the main consolidated performance indicators monitored by the Executive Committee. These indicators are taken from Group reporting and are used for the financial disclosure of the Group's results and performance.

INCOME STATEMENT

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	**3,652**	**2,984**
EBITDA	**871**	**375**
Amortisation and depreciation of non-current assets	(250)	(268)
Provisions for risks and expenses	(13)	(23)
Current operating profit (loss)	**608**	**84**
Impairment of assets	9	(110)
Other operating income and expenses	(50)	(69)
Operating profit (loss)	**567**	**(95)**
Financial income	(117)	(79)
Share of income from associates	(1)	(2)
Income taxes	(221)	(61)
Profit (loss) for the period	228	(237)
• attributable to non-controlling interests	25	(58)
• attributable to the Group	**203**	**(179)**
Basic earnings per share (€)	7.67	(6.79)

STATEMENT OF CHANGES IN NET DEBT

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Operating activities		
EBITDA	871	375
Cash impact of items in EBITDA	(387)	(228)
Cash flow from operations	**484**	**147**
Change in WCR	203	(26)
Net cash generated by operating activities (1)	**687**	**121**
Investing activities		
Industrial investments	(230)	(217)
Other investment flows	19	30
Net cash used in investing activities (2)	**(211)**	**(187)**
Net cash used in financing activities	**(12)**	**100**
Impact of changes in exchange rate	(4)	8
(Increase)/decrease in net financial debt	460	42
Opening (net financial debt)	**(836)**	**(878)**
Closing (net financial debt)	**(376)**	**(836)**
Free Cash Flow (1) + (2)	476	(66)

The reconciliation of cash and cash equivalents in the statement of cash flows to the net financial debt in the ERAMET group reporting is as follows:

(€ MILLION)	31/12/2017	31/12/2016
Cash and cash equivalents	**1,653**	**1,360**
Other current financial assets	394	331
Loans	(2,284)	(2,366)
Joint venture contribution	(139)	(161)
Net financial debt—Group reporting	(376)	(836)

ECONOMIC BALANCE SHEET

(€ MILLION)	31/12/2017	31/12/2016
Fixed assets	**2,710**	**2,818**
Inventories	887	933
Trade receivables	368	333
Trade payables	(391)	(390)
Simplified WCR	**864**	**876**
Other items of WCR	(305)	(156)
Total WCR	559	720
Total	3,269	3,538

(€ MILLION)	31/12/2017	31/12/2016
Shareholders' equity, Group share	1,694	1,515
Shareholders' equity, non-controlling interest	286	261
Shareholder equity	**1,980**	**1,776**
Cash and cash equivalents and current financial assets	(2,075)	(1,698)
Loans	2,451	2,534
Net financial debt	**376**	**836**
Ratio of net financial debt to shareholders' equity (gearing)	*19.0%*	*47.1%*
Employee-related liabilities and provisions	**730**	**740**
Net deferred tax	**173**	**142**
Derivatives	**10**	**44**
Total	3,269	3,538

NOTE 4 - CURRENT OPERATING PROFIT (LOSS)

The current operating profit (loss) reflects the performance of the ERAMET group's ordinary business activities as presented and defined in Note 3. This section presents its components: sales, cost of sales, administrative and selling expenses, research & development expenditure, and depreciation, amortisation and provisions.

SALES

ACCOUNTING METHOD
Sales mostly comprise sales of ores (nickel and manganese) and manufactured goods (special steels, alloys, superalloys, etc.) to third parties. The earnings from the sale of these products are recognised from the time all the risks and rewards attached to the ownership of the sold product have been transferred to the client. Sales are gross sales less trade rebates. Transportation and manufacturing expenses are included in the cost price of the goods sold.

Consolidated sales for 2017 were €3,528 million compared to €2,897 million in 2016, an increase of 22% (€631 million).

The comparison with the Group's reported sales and the distribution by Division are provided in Note 3.

COST OF SALES AND OTHER INCOME

ACCOUNTING METHOD	ESTIMATES, ASSUMPTIONS AND JUDGEMENTS
The cost of sales mainly comprises costs borne in industrial, mining and metallurgical facilities, in particular the consumption of raw materials, energy costs, personnel costs, and logistics and transport costs. It also accounts for the impacts of the change in and valuation of raw material inventories, work-in-progress and finished products. Other income includes items related to current operating profit (loss), such as translation adjustments on sales and insurance proceeds. Currency transactions are recognised at the monthly exchange rate for the month of the transaction effective date. Gains and losses arising from the conversion of operating receivables and payables are recognised in Current operating profit (loss). In the case of hedged transactions, the translation adjustments arising from the difference between the monthly exchange rate used to recognise sales and receipts or purchases and payments and the hedging rate for the settlement of transactions are also recognised in Current operating profit (loss).	The transaction date is the date on which it is executed. For practical reasons, the transaction date used is the month in which the transaction is booked. The rate applied to recognise currency transactions in a given month corresponds to the average daily rate applicable in the previous month.

ADMINISTRATIVE AND SELLING EXPENSES

ACCOUNTING METHOD
Administrative and selling expenses mainly comprise personnel costs for non-industrial sites and other administrative and sales support services.

RESEARCH & DEVELOPMENT EXPENDITURE

ACCOUNTING METHOD
Research and development expenditure relates to expenses for scientific and technical activities necessary for the research, development and implementation of new manufacturing processes or the improvement of existing processes. Research and development expenses do not include expenses incurred for development projects whose technical feasibility and profitability have not yet been demonstrated. These expenses are recognised in Other operating income and expenses (see Note 5). Once the technical feasibility and profitability of a project have been established, the development expenses incurred are capitalised. These expenses also include the geology expenses incurred in mining sites that are already in operation.

EXPENSES FOR THE PERIOD

(€ MILLION)	31/12/2017	31/12/2016
Non-capitalised research and development expenditure	28	34
of which geological expenditure ERAMET Nickel	4	4

AMORTISATION AND DEPRECIATION OF NON-CURRENT ASSETS AND PROVISIONS FOR LIABILITIES AND CHARGES

ACCOUNTING METHOD

Amortisation and depreciation of non-current assets

Non-current assets can be depreciated when their expected use is limited in time or based on production units.
Where the duration or the pace of utilisation of an asset cannot be determined reliably, the straight-line method is applied.
The selected depreciation method is applied across all similar assets with the same conditions of use.
Depreciation begins at the date on which the asset is put into service.
Any significant change in the planned use of the asset, in terms of duration or pace, for example, will result in the depreciation being revised for the current and subsequent years. Likewise, in the case where impairment loss provisions are set aside or reversed following the comparison between the value in use of a non-current asset and its carrying amount (Note 9), the depreciation basis is modified prospectively, i.e. the depreciation is adjusted based on the new duration or the new pace of use for the current and future reporting periods.
The depreciation for the reporting period is recognised under a separate heading, Amortisation and depreciation of non-current assets, between EBITDA and Current operating profit (loss).

Provisions for risks and expenses

See Note 12.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

The ERAMET group uses two depreciation methods: the straight-line method and the units of production method.

Straight-line depreciation method

The depreciation of property, plant and equipment is calculated on a straight-line basis over the estimated useful life at 31 December 2017:
Constructions
between 10 and 50 years
Industrial and mining facilities
between 5 and 50 years
Other property, plant and equipment
between 2 and 10 years
Assets invested in the SETRAG concession are depreciated over the shorter of their useful lives or the remaining period of the concession.
Computer software is amortised over a variable period not exceeding five years.

Units of production method

The economic benefits generated by the use of certain industrial assets are determined in relation to the level of production, in particular in the start-up phase of new production units. These assets are depreciated using the units of production method.
The depreciation calculation accounts for the quantities produced during the reporting period, expressed as a percentage of the total quantities of product to be extracted or produced in the current and future reporting periods.
If the production is not deemed to fluctuate significantly from one year to the next, as with the assets whose material lifespan is shorter than the life of the plant or the mine to which they relate, the assets are depreciated using the straight-line method mentioned above over the life of the plant or the mine.

Revision of depreciation periods

The residual values and useful life of non-current assets are revised and adjusted at the end of each reporting period, as appropriate. Change is seen as a change in estimates, and impacts only the current and subsequent reporting periods.
The ERAMET group measures its existing assets and the depreciation period when reviewing mining plans (ERAMET Nickel and ERAMET Manganese) and plant operation plans at the end of each reporting period. When it is established that the life of the allocated assets no longer matches the remaining period of expected returns, their depreciation period is modified prospectively. Uncertainties are inherent in the estimation of reserve and resource quantities, especially as regards assumptions about future prices, the geology of the mines, the mining methods used and associated costs incurred to develop and mine the reserves and resources. Changes in these assumptions could lead to major adjustments in the estimation of reserves and resources, which may be the basis for impairment or modification in depreciation expense in future periods.

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Intangible assets—Note 9	(21)	(22)
Property, plant & equipment—Note 9	(214)	(230)
Amortisation and depreciation of non-current assets	**(235)**	**(252)**
of which amortisation and depreciation of acquisition price allocation	*(4)*	*(4)*
Provisions	(12)	(23)
Total	(247)	(275)

NOTE 5 - NET PROFIT (LOSS) GROUP SHARE AND NON-CONTROLLING INTEREST

The Net profit (loss) Group share is the net income for the period after tax, attributable to ERAMET shareholders, after accounting for the non-controlling interest in each of the Group companies.

Apart from the Current operating profit (loss), the Net profit for the period includes the following items:

- Other operating income and expenses (see below);
- Net financial income (Note 6);
- Share of income from joint ventures and associates (Note 9);
- Income tax (Note 10).

CURRENT OPERATING PROFIT (LOSS)—NET PROFIT (LOSS) GROUP SHARE CROSS-REFERENCE TABLE

(€ MILLION)	NOTES	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Current operating profit (loss)	**3/4**	**598**	**91**
Other operating income and expenses	5	(85)	(138)
Operating profit (loss)	**3**	**513**	**(47)**
Financial income	6	(93)	(58)
Share of income from joint ventures and associates	9	18	(66)
Income taxes	10	(216)	(61)
Profit (loss) for the period		**222**	**(232)**
• attributable to non-controlling interests	5	19	(53)
Net profit (loss), Group share	3/5	203	(179)

OTHER OPERATING INCOME AND EXPENSES

ACCOUNTING METHOD

Other operating income and expenses include only very limited, unusual, abnormal and infrequent income and expenses for significant amounts that the ERAMET group presents separately in its profit and loss account in order to **facilitate the understanding of current operating performance.** In particular, they include the following items:

- restructuring costs;
- costs incurred for development projects whose technical feasibility and profitability have not yet been demonstrated;
- defined benefits plan settlements and amendments;
- capital gains and losses on disposals of assets;
- impairment losses on goodwill and non-current assets.

BREAKDOWN BY CATEGORY

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Other operating income and expenses excluding impairment	(50)	(68)
Impairment of assets	(35)	(70)
Other operating income and expenses	(85)	(138)

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Niobium project	(5)	(6)
Lithium project	(14)	(11)
Plant C project	-	(1)
Weda Bay Project	11	(13)
Other projects	1	(17)
Development projects	**(7)**	**(48)**
Restructuring and redundancy plans	(9)	(24)
Employee benefits—plan amendment	(1)	15
Provisions for sites restoration—SLN	(22)	-
Capital gain from sale of ERAMET headquarter Tour Montparnasse	19	-
Capital gain from sale of ERACHEM interest	-	27
Capital loss on sale of Somivab interest	-	(5)
Other items	(30)	(33)
Other income and expenses	**(43)**	**(20)**
Total	(50)	(68)

The decrease in expenses on development projects between 2016 and 2017 is due to the Group's decision to reduce certain major projects at the end of 2015.

The proceeds from sale of the premises of the headquarter office located at Tour Montparnasse amounted to €25 million (includes in the disposal of non-current assets in the cash flow statement).

The impact of plan amendments in 2016 is mainly due to the change of some ERAMET Norway plans from defined benefit to defined contribution.

IMPAIRMENT OF ASSETS AND IMPAIRMENT LOSSES

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Losses on impairment tests—Goodwill	-	-
Losses on impairment tests—Intangible assets	-	-
Losses on impairment tests—Property, plant & equipment	(31)	(48)
Losses on impairment tests—intangible assets and property, plant & equipment	**(31)**	**(48)**
Other impairment of assets	(4)	(14)
Other provisions	-	(8)
Total impairment of assets and impairment losses—Note 9	(35)	(70)

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
ERAMET Nickel	-	(10)
ERAMET Alloys	(9)	(12)
ERAMET Manganese	(26)	(48)
Total impairment of assets and impairment losses	(35)	(70)

See Note 9—Investments, Impairment of assets.

NET EARNINGS PER SHARE, GROUP SHARE

ACCOUNTING METHOD
Net earnings per share can be obtained by dividing the Group share of net profit (loss) by the average number of shares outstanding during the reporting period. This average number of shares outstanding excludes treasury shares. Diluted earnings per share are calculated by taking into account the net profit (loss) Group share for the period and the number of shares adjusted for potentially dilutive effects, mainly represented by employee share subscription and purchase plans and the potential conversion of ODIRNAN.

	FINANCIAL YEAR 2017			FINANCIAL YEAR 2016		
	NET PROFIT (LOSS) GROUP SHARE	AVERAGE NUMBER OF SHARES	EARNINGS PER SHARE	NET PROFIT (LOSS) GROUP SHARE	AVERAGE NUMBER OF SHARES	EARNINGS PER SHARE
Basic earnings per share	203	26,469,276	7.67	(179)	26,378,347	(6.79)
Diluted earnings per share(1)	203	28,856,129	7.03	(179)	28,682,823	(6.79)

(1) Where basic earnings per share are negative, the diluted earnings per share are deemed equal to it, in which case the instruments are considered to be antidilutive.

NON-CONTROLLING INTEREST SHARE IN EARNINGS—MINORITY INTEREST

(€ MILLION)	% OF NON-CONTROLLING INTEREST	SHARE OF PROFIT (LOSS) FINANCIAL YEAR 2017	SHARE OF SHAREHOLDERS' EQUITY 31/12/2017	SHARE OF PROFIT (LOSS) FINANCIAL YEAR 2016	SHARE OF SHAREHOLDERS' EQUITY 31/12/2016
At beginning of period			**276**		**322**
Profit (loss) for the period			19		(53)
Change in revaluation reserve for financial instruments			5		7
Change in revaluation reserve for net defined benefit plan liabilities			(1)		(2)
Translation adjustments			(4)		2
Sub-total Other comprehensive income			-		7
Other movements			-		-
At period close		19	295	(53)	276
Le Nickel-SLN	44%	(66)	(16)	(71)	52
COMILOG S.A.	36.29%	85	300	18	212
Pt Weda Nickel Ltd	10%	-	9	-	10
Interforge	6%	-	2	-	2

See Statement of changes in equity.

NOTE 6 · NET FINANCIAL DEBT AND SHAREHOLDERS' EQUITY

NET FINANCIAL DEBT

Net financial debt is gross financial debt (long and short-term borrowings) less current financial assets and cash and cash equivalents. These items include the valuation of hedging derivatives related to borrowings.

ACCOUNTING METHOD
Borrowings are initially recognised on the basis of the amount received, less financing costs incurred. Borrowings are subsequently measured at amortised cost. Any variance between the amounts received and the redemption value of the borrowing is recognised in the profit and loss account under Net financial income (Borrowing costs) over the term of the borrowing, using the effective interest rate (EIR) method.

(€ MILLION)	31/12/2017	31/12/2016
Non-current borrowings—due after more than one year	(1,602)	(2,022)
Current borrowings—due in less than one year	(682)	(344)
Loans	(2,284)	(2,366)
Cash and cash equivalents	1,653	1,360
Other current financial assets	394	331
Net financial debt	(237)	(675)

LOANS

BORROWINGS BY CATEGORY

(€ MILLION)	31/12/2017	31/12/2016
Borrowings on capital markets	1,127	689
Borrowings from credit institutions	790	1,374
Bank overdrafts and creditor banks	71	39
Finance lease liabilities	55	59
Other borrowings and financial liabilities	241	205
Total	2,284	2,366
• Due after more than one year	1,602	2,022
• Due in less than one year	682	344

BORROWINGS ON CAPITAL MARKETS AND BANK LOANS

(€ MILLION)	NOMINAL	INTEREST RATE	MATURITY	31/12/2017	31/12/2016
Bond issue—ERAMET S.A.	€525 million	4.50%	2020	463	527
Bond issue—ERAMET S.A.	€500 million	4.196%	2024	502	-
Euro private placement—ERAMET S.A.[1]	€50 million	5.29%	2026	52	52
Euro private placement—ERAMET S.A.[1]	€50 million	5.10%	2026	51	51
Deutsche Bank *(Schuldschein)* loan—ERAMET S.A.	€60 million	6-month EURIBOR +2%	2020	59	59
Borrowings on capital markets				1,127	689
ICBC/BNP Paribas/BGFI—COMILOG S.A. loans	USD 217 million	6-month LIBOR +4.3%/+2.1%	2018/2022	74	96
Issued commercial paper—ERAMET S.A.	€194 million	Between 0.45% and 0.81%	1 year max.	194	-
Borrowing Base—ERAMET S.A.	€52 million	1-month EURIBOR +2.1%	2019	52	70
European Investment Bank—ERAMET S.A.	€80 million	1.736%	2025	72	81
European Investment Bank—ERAMET S.A.	€30 million	2.72%	2029	30	-
IFC/Proparco—SETRAG	€33 million	EURIBOR +4%/5%	2031	30	-
Revolving Credit Facility (RCF)	€981 million	6-month EURIBOR +0.75%/1.50%	2020	246	985
Other borrowings from credit institutions				92	142
Borrowings from credit institutions				790	1,374

(1) With investor put options that may be exercised after the seventh year, i.e. in 2021

Certain borrowings need to comply with financial ratios or covenants (Note 7).

CHANGE OVER THE PERIOD

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**2,366**	**1,344**
New borrowings	876	1,183
Loan repayments	(1,011)	(113)
Change in bank overdrafts	32	(32)
Other changes	(9)	9
Change to consolidation scope	7	(15)
Translation adjustments	23	(10)
At period close	2,284	2,366

New borrowings mainly concern:

- a €500 million bond issue (see Key events in the reporting period);
- issues of commercial paper amounting to €194 million;
- implementation of the new Borrowing Base financing agreement amounting to €53 million;
- the issue of a loan by SETRAG amounting to €33 million;
- drawdown of an EIB loan amounting to €30 million.

Loan repayments mainly concern:

- the repayment of the Revolving Credit Facility of €730 million;
- repayment of the old Borrowing Base financing agreement amounting to €70 million;
- bond buyback of €65 million (see Key events in the reporting period);
- the regular repayment of bank loan instalments, particularly by subsidiaries Aubert & Duval, COMILOG and SETRAG.

BORROWINGS BY CURRENCY AND MATURITY

(€ MILLION)	31/12/2017	31/12/2016
Euro	2,034	2,146
US dollar	176	162
CFA franc	36	31
Pound sterling	1	1
Norwegian krone	6	1
Other currencies	31	25
Total	2,284	2,366
Less than one year	682	344
One year to five years	842	1,793
More than five years	760	229
Total	2,284	2,366

CONFIRMED CREDIT FACILITIES

(€ MILLION)	31/12/2017	31/12/2016
Unused confirmed credit facilities[1]	730	-

(1) Bank covenants relating to these credit facilities are fully respected. These covenants relate to the ratio of the Group's net financial debt to shareholders' equity.

BORROWINGS BY INTEREST RATE

(€ MILLION)	31/12/2017		31/12/2016	
Interest-free		50		43
Fixed interest rates		1,516		1,083
• below 5%	1,349		914	
• between 5% and 10%	167		169	
• above 10%	-		-	
Variable interest rates		718		1,240
• below 5%	658		1,240	
• between 5% and 10%	60		-	
• above 10%	-		-	
Total		2,284		2,366

FINANCE LEASE LIABILITIES

	31/12/2017		31/12/2016	
(€ MILLION)	PAR VALUE	DISCOUNTED VALUE	PAR VALUE	DISCOUNTED VALUE
Less than one year	16	15	14	13
One year to five years	37	35	41	39
More than five years	6	5	8	7
Total before interest expense	**59**	**55**	**63**	**59**
Interest expense		4		4
Total	59	59	63	63

CASH AND CASH EQUIVALENTS

ACCOUNTING METHOD
Cash includes cash in hand and demand deposits, excluding bank overdrafts which appear under borrowings. Cash equivalents correspond to marketable securities and consist of investments held to meet short-term cash commitments. Marketable securities are recognised at their fair value in the balance sheet. To be considered a cash equivalent, they must be readily convertible to cash and subject to negligible risk of fluctuations in value. Changes in fair value are recognised in net profit (loss) for the period.

BREAKDOWN BY CATEGORY

(€ MILLION)	31/12/2017	31/12/2016
Cash	64	210
Cash equivalents	1,589	1,150
Total	1,653	1,360

BREAKDOWN BY CURRENCY

(€ MILLION)	31/12/2017	31/12/2016
Euro	1,540	1,106
US dollar	76	237
Yuan renminbi (China)	2	3
Norwegian krone	17	3
Other currencies	18	11
Total	1,653	1,360

BREAKDOWN BY INTEREST RATE TYPE

(€ MILLION)	31/12/2017	31/12/2016
Interest-free	45	198
Fixed interest rates	5	19
Variable interest rates	1,603	1,143
Total	1,653	1,360

Interest-free items mainly consist of non-interest-bearing sight deposits.

Cash includes cash and cash equivalents.

Cash equivalents mostly comprise investments managed by Metal Securities.

(€ MILLION)	31/12/2017	31/12/2016
Money market fund shares/units	1,287	871
Negotiable debt securities	159	151
Interest-bearing bank accounts	67	61
Other investments	76	67
Cash equivalents	**1,589**	**1,150**
Cash	64	210
Cash and cash equivalents	1,653	1,360

The change from one period to the next is analysed through the statement of cash flows prepared using the indirect method.

STATEMENT OF CASH FLOWS

NON-CASH INCOME AND EXPENSES

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Depreciation, amortisation, impairment and provisions	260	329
Accretion expenses	8	9
Financial instruments	1	(7)
Deferred tax	23	18
Proceeds from asset disposals	(14)	(26)
Share of income from joint ventures and associates	(18)	66
Non-cash income and expenses	260	389

IMPACT OF CHANGES IN CONSOLIDATION SCOPE

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
ERACHEM—sale price	-	148
ERACHEM—dividends received	-	11
ERACHEM—cash from sale less dividends paid	-	(35)
ERACHEM—net impact on cash	**-**	**124**
Sale price of Somivab interest	-	8
Disposal of Eurotungstène	2	-
Sale price of Heye interest	14	-
Acquisition 51% HEIML (net of cash acquired)	(4)	-
Other	1	(1)
Impact of changes in consolidation scope	13	131

CURRENT FINANCIAL ASSETS

ACCOUNTING METHOD
These assets mostly consist of bonds of listed European companies that do not satisfy the criteria to qualify as cash equivalents. These bonds are measured at their fair value on initial recognition. The fair value used for listed bonds is the stock-market value, and for unlisted bonds it is based on estimates using specific financial criteria that reflect the specific situation of each bond (similar transactions or discounted value of future cash flows). Where such bonds exhibit objective evidence of significant or lasting loss of value, the cumulative impairment loss, previously recognised in equity, is recognised in net profit (loss) for the period.

Changes in the fair value of these investments are recognised in transferable equity under the item Change in fair value of available-for-sale financial assets.

The net increase of €63 million in current financial assets between 2016 and 2017 (compared to +€135 million between 2015 and 2016) is shown in the net cash flows relating to investment operations.

FINANCIAL INCOME

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Net debt cost	(66)	(54)
Other financial income and expenses	(27)	(4)
Financial income	(93)	(58)

NET DEBT COST

ACCOUNTING METHOD

Net debt costs include expenses relating to gross debt and financial revenue in connection with bonds and investment securities. Borrowing costs relate to interest payable on the debt and other costs incurred in connection with the borrowing of funds. Borrowing costs directly linked to the acquisition, building or production of an asset that requires more than 12 months to be put into service are deducted from the financing expense to which they relate. All the other borrowing costs are expensed in the period in which they are incurred.

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Interest income	13	16
Cash interest payments	(73)	(67)
Amortised cost on borrowings	(7)	(4)
Net income on marketable securities	-	5
Net translation differences	1	(4)
Total	(66)	(54)

OTHER FINANCIAL INCOME AND EXPENSES

ACCOUNTING METHOD

Other financial income and expenses include all the components of net financial income except for income and expenses relating to the net debt cost.

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Investment and dividend income	2	2
Employee benefits—net interest	(5)	(7)
Accretion expenses	(8)	(9)
Financial instruments ineligible as hedges—currency	(1)	7
Securitisation financial expense	(5)	(3)
Impairment of securities and current accounts	(4)	(6)
Net translation differences	(13)	3
ERAMET/TiZir loan financial products	8	7
Other	(1)	2
Total	(27)	(4)

Accretion expenses relate to provisions for mining site restoration and the dismantling of industrial facilities, as detailed in Note 12—Provisions.

The financial instruments that do not qualify as hedges correspond to the portion of hedging instruments recognised in profit or loss.

SHAREHOLDERS' EQUITY

CHANGES TO THE SHARE CAPITAL

The share capital of €81,232,663 (31 December 2016: €80,978,851.15) is composed of 26,633,660 fully paid-up shares (31 December 2016: 26,550,443 shares) with a par value of €3.05 each.

	31/12/2017				31/12/2016			
	CAPITAL		VOTING RIGHTS		CAPITAL		VOTING RIGHTS	
	%	NUMBER OF SHARES	%	NUMBER OF SHARES	%	NUMBER OF SHARES	%	NUMBER OF SHARES
Registered shares								
SORAME and Compagnie d'Études Industrielles du Rouvray (CEIR)	36.93	9,835,834	43.94	19,671,668	37.05	9,835,834	44.02	19,671,668
FSI Equation, subsidiary of APE *(Agence des participations de l'État)*	25.57	6,810,317	30.43	13,620,634	25.65	6,810,317	30.48	13,620,634
S.T.C.P.I.	4.02	1,070,587	4.78	2,141,174	4.03	1,070,587	4.79	2,141,174
ERAMET S.A.	0.55	147,642	-	-	0.40	105,801	-	-
ERAMET S.A. share fund	0.20	52,273	0.23	104,746	0.20	52,373	0.23	104,746
Other	32.73	8,717,007	20.61	9,226,201	32.68	8,675,531	20.47	9,145,539
Total number of shares	100.00	26,633,660	100.00	44,764,423	100.00	26,550,443	100.00	44,683,761
of which registered shares	69.50	18,509,540	81.90	36,663,450	69.21	18,375,085	81.84	36,570,694
of which bearer shares	30.50	8,124,120	18.10	8,100,973	30.79	8,175,358	18.16	8,113,067

In accordance with the Shareholders' Agreement of 16 March 2012, which entered into force on 16 May 2012 and was renewed on 31 December 2016 for a period of one year expiring on 31 December 2017, subject to Decision and Notice No. 212C0647 of the *Autorité des marchés financiers* (AMF) at its conclusion as well as AMF Decision and Notice No. 216C1753 concerning changes to the concert with the acquisition by the *Agence des participations de l'État* (APE) of 100% of the share capital of FSI Equation, ERAMET is majority-owned by a group of shareholders declared to be acting in concert, including:

- a sub-concert between SORAME and CEIR, companies wholly owned by the Duval family, under a simultaneous shareholders' agreement of 19 July 1999, which entered into force on 21 July 1999 and was amended on 13 July 2009;
- the *Agence des participations de l'État* (APE), through its subsidiary FSI Equation.

The provisions of the Shareholders' Agreement mentioned above as well as those of the sub-concert are contained in key extracts of the AMF Decision and Notice texts numbered 216C1753, 212C0486 and 209C1013 (amended on 13 July 2009).

Since 1 January 2002, registered shares that meet the necessary conditions benefit from double voting rights.

ODIRNAN

ERAMET group launched in 2016 an offering of net share settled undated bonds convertible into new shares (ODIRNAN).

This issue has strengthened the balance sheet structure of the ERAMET group.

ODIRNAN is a perpetual bond with no maturity date. Holders do not have the option to redeem the instrument for cash in hand. The instrument can be redeemed in the event of liquidation of the Company with the payment of accrued and deferred coupons, as applicable. The organisation of the coupon payments is left up to ERAMET and may be delayed, as ERAMET has not decided on a dividend distribution since the penultimate interest payment date (or since the issue date for the first two payment dates). In case of non-payment of coupons, they will remain due and will constitute arrears which will bear interest at the applicable rate for bond coupons.

The coupon is fixed at an annual rate of 4% until October 2022. It will then switch to a variable rate from 5 October 2022, calculated at the 6-month EURIBOR rate plus a margin of 1,000 basis points ("step-up" clause). In the event of a change of control of ERAMET, the annual interest rate will be increased by 500 basis points unless the Company opts for early redemption within 45 days of the change of control.

Bond holders will receive an equity conversion right. The issuer may choose to deliver one of the following to bondholders exercising their right to receive shares:

- cash only;
- new shares only;
- or a combination of new shares and cash.

The characteristics of ODIRNAN shares led the ERAMET group to classify them as an equity instrument:

- there is no contractual obligation to repay the nominal value except in the event of liquidation of the issuer. The regulatory framework stipulating redemption in case of liquidation does not affect the classification as an equity instrument;
- the payment of coupons to bond holders is:
  - dependent on the liquidation of the issuer. As noted above, an obligation for the issuer to proceed with payment in case of liquidation does not establish the existence of a debt,
  - but rather is under the control of the issuer (dividends, share buy-back or equivalent, early redemption decided by the issuer, decision to pay the next bond coupon, etc.).

Finally, the default interest clause (capitalised at the same rate as the bonds) and the "step up" clause, which significantly increases the amount of coupons beyond a certain date if the instrument has not been

previously redeemed by the issuer, constitute economic constraints, not contractual obligations.

Therefore, given the characteristics of the instruments and elements mentioned above, ERAMET has no contractual obligation to pay compensation on perpetual debt instruments.

Finally, the different options mentioned above do not call into question the classification of equity instruments.

At 31 December 2017, 90,442 bonds were subject to equity conversion (83,217 in 2017) and 1 bond was repaid in cash in 2017. The number of bonds in circulation is therefore 2,067,985 (31 December 2016: 2,151,203), a decrease of 83,218 bonds in 2017.

The total value of bonds at 31 December 2017 is €95.8 million (31 December 2016: €99.7 million).

TREASURY SHARES

The table below summarises the treasury share transactions:

	TOTAL NUMBER OF SHARES	MARKET MAKER[1]	ALLOCATIONS TO EMPLOYEES[2]	TOTAL
Position at 1 January 2016		**123,219**	**95,057**	**218,276**
As a percentage of capital	26,543,218	0.46%	0.36%	0.82%
Final allocation of free shares			(51,547)	(51,547)
Purchases/sales		(60,928)		(60,928)
Position at 31 December 2016		**62,291**	**43,510**	**105,801**
As a percentage of capital	26,550,443	0.23%	0.16%	0.40%
Redemption mandate—March 2017			25,000	25,000
Redemption mandate—September 2017			120,000	120,000
Final allocation of free shares			(64,015)	(64,015)
Purchases/sales		(39,144)		(39,144)
Position at 31 December 2017		23,147	124,495	147,642
As a percentage of capital	26,633,660	0.09%	0.47%	0.55%

(1) Liquidity contract signed with Exane BNP Paribas.
(2) Instructions to buy back 25,000 shares in March 2017 and 120,000 shares in September 2017.

ERAMET treasury shares are classified under Other reserves and recognised at purchase cost for an amount of €14 million at 31 December 2017 (31 December 2016: €14 million). These transaction amounts were allocated to shareholders' equity.

NOTE 7 - FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

This note gives an overview of the financial instruments of the ERAMET group, the associated risks, its risk management objectives, sensitivity and monitoring of the financial risk management strategy.

ACCOUNTING METHOD

Financial instruments

Derivative assets and liabilities, current financial assets, and cash and cash equivalents are initially recognised in the balance sheet at their fair value (transaction price) adjusted for transaction costs. At each period closing, the change in fair value is recognised in income (Other financial income and expenses) unless a cash flow hedge exists. In that case, the change is recognised in Other comprehensive income and shown in equity (change in the revaluation reserve of hedging instruments).

Derivatives

The ERAMET group uses derivatives to hedge certain risks. To manage its currency risk, the ERAMET group uses foreign currency forwards/futures, foreign currency swaps and, to a lesser extent, foreign currency options. Foreign currency forwards/futures are recognised as hedges where the ERAMET group has defined and documented the hedging relationship and demonstrated its effectiveness. Interest rate risk is managed using interest-rate swaps. Lastly, the ERAMET group also uses collars and swaps when hedging commodity purchases and sales (nickel, fuel oil, aluminium and electricity).

Derivatives are measured at their fair value upon initial recognition. Subsequently, the fair value of derivatives is remeasured at each reporting date. The fair value of foreign currency forwards/futures is estimated on the basis of market conditions. The fair value of interest rate derivatives is that which the ERAMET group would receive (or pay) to transfer current contracts at the reporting date. The fair value of commodity derivatives is estimated on the basis of market conditions. Derivatives are shown in the balance sheet under current assets or liabilities.

Hedging

Gains or losses on hedging instruments are recognised symmetrically with the gains or losses on the hedged items. However, changes in the fair value of hedges, independently of the hedged transactions, are recognised as profit or loss for the period under Current operating profit (loss) or Other financial income and expenses, depending on the nature of the hedge.

The ERAMET group identifies the hedging item and hedged item when the hedge is set up and formally documents the hedging relationship by identifying the hedging strategy, the hedged risk and the hedge effectiveness measurement method:

- Fair value hedge: the hedged item is remeasured in respect of the hedged risk and the hedging instrument is measured and recognised at fair value. The changes in both items are recognised simultaneously in Current operating profit (loss);
- Cash flow hedge: the hedged item is not remeasured. Only the hedging instrument is remeasured at fair value. To offset the remeasurement, the effective portion of the change in fair value that can be ascribed to the hedged risk is recognised net of tax in shareholders' equity. The cumulative amounts in shareholders' equity are recognised in income for the period when income is affected by the hedged item. The ineffective portion is retained in income for the period under Other financial income and expenses;
- Hedging of net investment in foreign subsidiaries: derivatives intended to hedge net foreign currency investment in foreign subsidiaries are treated as net foreign currency investment hedges. The gains or losses from such hedges, and the changes in fair value (apart from the time value) are recognised in equity as currency translation differences, and transferred to income when the subsidiary is sold;
- Recognition of derivatives that do not fulfil hedge accounting conditions: the ERAMET group uses these derivatives only to hedge future cash flows, and changes in fair value are immediately recognised in Other financial income and expenses.

Fair value measurement

The ERAMET group measures its financial instruments at fair value at each reporting date.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. When measuring fair value, it is assumed that the transaction to sell the asset or transfer the liability is carried out:

- on the main market for that asset or liability; or
- if there is no main market, on the best market for that asset or liability.

The fair value measurement of a non-financial asset considers the capacity of a market participant to generate economic benefits by making full use of the asset or by selling it to another market participant who will make full use of the asset.

The fair values of financial instruments are ranked according to a three-level hierarchy:

- Level 1: Listed prices (unadjusted) of the same assets and liabilities on an active market;
- Level 2: Listed price of a similar instrument on an active market, or another measurement technique based on observable parameters;
- Level 3: Measurement technique incorporating non-observable parameters.

The criteria for classifying and recognising financial assets and liabilities and any transfer from one level to another in the fair value hierarchy where applicable are given below.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

The uncertainties and estimates as well as the judgements used are considered for the valuation of forward/futures contracts, the application of hedge accounting and the valuation of derivatives measured at fair value.
To continue to apply hedge accounting to raw material purchases and sales (nickel, fuel oil, aluminium and electricity), the ERAMET group determines that the hedging instrument is efficient so as to offset the currency risk on its raw material purchases and sales, and ensures that the documentation complies with the requirements. The process for testing the efficiency of the hedge calls for the use of judgements and estimates.

Fair value measurement

Fair value represents an estimate at a given date and can change from one period to another due to market conditions and other factors.
The ERAMET group gives priority to the assumptions that the market participants would use to determine the price of the asset or the liability, considering that the market participants act in their own best economic interests. The ERAMET group uses measurement techniques that are appropriate in the circumstances and for which sufficient data is available to determine the fair value, maximising the use of pertinent observable inputs while minimising the use of non-observable inputs.

FINANCIAL INSTRUMENTS SHOWN IN THE BALANCE SHEET

	31/12/2017	BREAKDOWN BY TYPE OF INSTRUMENT					31/12/2016	BREAKDOWN BY TYPE OF INSTRUMENT				
(€ MILLION)	STATEMENT OF FINANCIAL POSITION	FAIR VALUE THROUGH P&L	AVAI-LABLE-FOR-SALE ASSETS	LOANS AND RECEI-VABLES	DEBTS CARRIED AT AMORTISED COST	DERIVA-TIVES	STATEMENT OF FINANCIAL POSITION	FAIR VALUE THROUGH P&L	AVAILABLE-FOR-SALE ASSETS	LOANS AND RECEI-VABLES	LIABILITIES CARRIED AT AMORTISED COST	DERIVA-TIVES
Non-consolidated equity investments	24		24				45		45			
Other non-current financial assets	97			97			96			96		
Other non-current assets	86			86			99			99		
Trade receivables	361			361			330			330		
Other current assets	170			170			195			195		
Derivatives	47					47	29					29
Other current financial assets	394		394				331		331			
Cash and cash equivalents	1,653	1,653					1,360	1,360				
Assets	2,832	1,653	418	714	-	47	2,485	1,360	376	720	-	29
Non-current borrowings—due after more than one year	1,602				1,602		2,022				2,022	
Other non-current liabilities	4			4			5			5		
Current borrowings—due in less than one year	682				682		344				344	
Trade payables	363			363			371			371		
Other current liabilities	328			328			346			346		
Derivatives	55					55	77					77
Liabilities	3,034	-	-	695	2,284	55	3,165	-	-	722	2,366	77

No reclassification among categories of financial instruments was carried out during the period. Equity investments and Other current financial assets are recognised in the balance sheet at fair value. Other non-current financial assets are measured at amortised cost calculated using the effective interest rate (EIR).

Borrowings are recognised at amortised cost measured at the effective interest rate (EIR).

The fair value of trade receivables and trade payables is equal to the value shown in the balance sheet, since for the most part they fall due in less than one year.

The fair value of financial instruments broken down by fair value hierarchy is as follows:

	31/12/2017	BREAKDOWN BY FAIR VALUE CATEGORY		31/12/2016	BREAKDOWN BY FAIR VALUE CATEGORY	
(€ MILLION)	BALANCE SHEET VALUE	LEVEL 1	LEVEL 2	BALANCE SHEET VALUE	LEVEL 1	LEVEL 2
Current financial assets	394	394		331	331	
Cash and cash equivalents	1,653	1,653		1,360	1,360	
Derivatives	47		47	29		29
Assets	2,094	2,047	47	1,720	1,691	29
Derivatives	55		55	77		77
Liabilities	55	-	55	77	-	77

EFFECTS OF FINANCIAL INSTRUMENTS ON THE PROFIT AND LOSS ACCOUNT

(€ MILLION)	FY 2017 IMPACT ON PROFIT (LOSS)	FINANCIAL INCOME AND EXPENSES	AMORTISED COST	FAIR VALUE	TRANSLATION ADJUSTMENTS	EARNINGS ON DISPOSAL	NET IMPAIRMENT
Investment securities	1	2				(3)	2
Other financial assets	(10)	(13)			(13)		16
Derivatives	(8)			(8)			
(Net debt)/Net cash	(63)	(61)	(7)	4	1		
Total	(80)	(72)	(7)	(4)	(12)	(3)	18

(€ MILLION)	FY 2016 IMPACT ON PROFIT (LOSS)	FINANCIAL INCOME AND EXPENSES	AMORTISED COST	FAIR VALUE	TRANSLATION ADJUSTMENTS	EARNINGS ON DISPOSAL	NET IMPAIRMENT
Investment securities	22	2				23	(3)
Other financial assets	(18)	(8)			3		(13)
Derivatives	(60)			(60)			
(Net debt)/Net cash	(55)	(53)	(4)	1	(4)	5	
Total	(111)	(59)	(4)	(59)	(1)	28	(16)

The financial revenue from equity investments consists of dividends of non-consolidated companies. The gains or losses on currency and commodity hedges are for the most part recognised in Current operating profit (loss). The portion that does not qualify as hedges is recognised in Other financial income and expenses.

BREAKDOWN OF DERIVATIVES INCLUDED IN THE STATEMENT OF FINANCIAL POSITION

	31/12/2017		31/12/2016	
(€ MILLION)	ASSETS	LIABILITIES	ASSETS	LIABILITIES
At beginning of period	**29**	**77**	**30**	**187**
Change in hedging instruments for the period—shareholders' equity(1)	10	(25)	-	(59)
Change in hedging instruments for the period—financial income/loss(2)	4	5	(4)	(11)
Net change in hedging derivatives(3)	4	(2)	3	(40)
Other movements	-	-	-	-
At period close	47	55	29	77
Net position in hedging derivatives(3)	14	13	10	15
Financial instruments—currency hedges	21	29	16	54
Financial instruments—interest-rate hedges	-	3	-	5
Financial instruments—commodity hedges	12	10	3	3

(1) The impact corresponds to the effective portion of the change in fair value of derivative instruments used to hedge currency, interest rate and commodity risks.
(2) The impact corresponds to the non-effective portion of the change in fair value of derivative instruments used to hedge currency, interest rate and commodity risks.
(3) Foreign-currency receivables and debts are translated at the closing rate, and the difference between the closing rate and the hedging rate is recognised under "Financial instrument assets and liabilities".

RISK MANAGEMENT

The ERAMET group uses derivatives to control its exposure to currency, interest rate and commodity risks. The Executive Committee has delegated the management of the main risks to the ERAMET group Finance Department. This management is carried out directly by ERAMET or via Metal Currencies, which was set up specifically to manage the ERAMET group's currency risk.

The ERAMET group's policy is to reduce its exposure to interest rate and foreign exchange fluctuations. Positions are traded either on organised markets, or over the counter with leading banking counterparties.

Gains or losses on hedging instruments are recognised symmetrically with the gains or losses on the hedged items. However, unrealised gains and losses on financing hedging transactions that are ineligible under hedging standards are recognised in Net profit (loss) for the period.

All transactions outstanding at the reporting date are recognised in the Statement of financial position, without an offsetting entry.

CURRENCY RISK

When the exposure stemming from borrowings taken out by ERAMET group companies in currencies other than their functional currencies is not offset by income in those foreign currencies, the ERAMET group may have recourse to hedging instruments. In addition, the ERAMET group uses financial instruments to limit its exposure to currency risk on its sales and on certain dollar-denominated costs.

The ERAMET group is exposed to two types of currency risk, namely:

- **Transactional risk** where a Group company has revenue in a currency other than its functional currency that is not offset by purchases in that currency;
- **Balance sheet risk** related to changes in the net assets of subsidiaries valued in currencies other than the euro.

The ERAMET group centralises the subsidiaries' currency risk. Each ERAMET group company reports its exposure in currencies other than its functional currency to Group Treasury. This management is part of a multiyear policy with procedures approved by the Executive Committee along with monthly reporting to its members. The ERAMET group manages the currency risk to the balance sheet for each case individually.

Transactional risks

As part of transactional risk management, currency hedging primarily involves the US dollar but also the Norwegian krone, the pound sterling, the Swedish krona and the Japanese yen. These hedges are designed to protect the ERAMET group's present and future positions on trade transactions, more than 50% of which are invoiced in foreign currencies, whereas production costs are for the most part denominated in Euros. The transactions are carried out via the company Metal Currencies.

The subsidiaries in question determine the amount of their net exposure based on multiyear budgets and forecasts. The associated risks are then hedged within a maximum horizon of thirty-six months if the amount is greater than €2 million or the equivalent thereof per currency, unless exemptions apply. The ERAMET group uses various instruments to hedge against currency risk: futures/forward contracts and options.

Balance sheet risk

The ERAMET group manages currency risks to the balance sheet, primarily related to the US dollar, by issuing financial debt denominated in the same currency as the net assets in question, or via currency swaps.

The breakdown of the hedging portfolio by currency is shown below:

AT 31 DECEMBER 2017 (FOREIGN CURRENCY UNIT MILLION)	2017 SALES			2018 SALES			2019 SALES AND BEYOND		
	AMOUNT	CURRENCY	PRICE	AMOUNT	CURRENCY	PRICE	AMOUNT	CURRENCY	PRICE
Commercial hedges									
EUR/USD	266	USD	1.18	332	USD	1.18	-	USD	-
EUR/NOK	292	NOK	9.48	840	NOK	9.71	300	NOK	9.78
Other hedges—total amount not detailed by year									
EUR/USD	106	USD	1.19						
EUR/NOK	275	NOK	8.93						

AT 31 DECEMBER 2016	2016 SALES			2017 SALES			2018 SALES AND BEYOND		
(FOREIGN CURRENCY UNIT MILLION)	AMOUNT	CURRENCY	PRICE	AMOUNT	CURRENCY	PRICE	AMOUNT	CURRENCY	PRICE
Commercial hedges									
EUR/USD	235	USD	1.10	270	USD	1.10	38	USD	1.24
EUR/NOK	318	NOK	8.93	575	NOK	9.32	310	NOK	9.73
Other hedges—total amount not detailed by year									
EUR/USD	316	USD	1.28						
EUR/NOK	460	NOK	8.85						

At 31 December 2017, the fair value of currency hedges covering transactional risks represented a net liability of €8 million (31 December 2016: net liability of €38 million).

In respect to the hedges of the USD 2018 sales, an increase or decrease of 0.10 in the EUR/USD exchange rate would have a pre-tax impact on the hedges recognised in equity at 31 December 2017 of +€17 million should exchange rates rise (31 December 2016: +€23 million) and approximately -€20 million should those rates fall (31 December 2016: -€28 million).

The notional amount of currency hedging contracts breaks down as follows:

	31/12/2017				31/12/2016			
(FOREIGN CURRENCY UNIT MILLION)	FORWARD SALES	FORWARD PURCHASES	CALL OPTIONS	PUT OPTIONS	FORWARD SALES	FORWARD PURCHASES	CALL OPTIONS	PUT OPTIONS
Currency against EUR								
• USD	584	137	267	317	959	162	116	105
• JPY	57				96			
• GBP	7	3				2		
• NOK	1,222		485	749	13	1,073	578	813
Currency against SEK								
• JPY	29					125		
• USD	4					5		

The pre-tax impact on shareholders' equity and profits of financial instruments hedging currency risks is shown below:

(€ MILLION)	FOREIGN EXCHANGE HEDGES			
	FINANCIAL YEAR 2017		FINANCIAL YEAR 2016	
	TRANSACTIONAL RISKS	BALANCE SHEET RISKS	TRANSACTIONAL RISKS	BALANCE SHEET RISKS
At beginning of period	**(17)**	**47**	**(104)**	**27**
Change in unexpired hedging portion[1]	7		(2)	
Change in ineffective portion via income[2]	(1)		7	
Change in effective portion via income[3]	11		82	
Translation adjustments and other movements		(53)		20
At period close	-	(6)	(17)	47
Changes recognised in shareholders' equity:				
• hedging reserve	18		80	
• translation reserve		(53)		20
Total	18	(53)	80	20
Changes recognised via income:				
• current operating profit (loss)	(11)		(82)	
• net financial income	(1)		7	
Total	(12)	-	(75)	-

(1) The impact corresponds to the effective portion of the change in fair value of derivative instruments used to hedge currency risks.
(2) The impact corresponds to the non-effective portion of the change in fair value of derivative instruments used to hedge currency risks.
(3) Foreign-currency receivables and debts are translated at the closing rate, and the difference between the closing rate and the hedging rate is recognised under "Financial instrument assets and liabilities".

INTEREST RATE RISK

Depending on market conditions and forecast changes in net financial debt, the ERAMET group's Finance Department monitors the allocation between fixed and floating rate debt and cash investments, and decides on whether to set up rate hedges. The financial instruments used are interest rate swaps, caps and floors. The Group's Treasury Department is responsible for setting up hedges.

The cash surpluses managed by Metal Securities are invested in:

- instruments linked to the EONIA (Euro OverNight Index Average) or EURIBOR (Euro InterBank Offered Rate) rates;
- fixed-rate instruments swapped against the EURIBOR.

These instruments are included in Other current financial assets and are hedged using interest rate futures (fixed rates against floating rates). Other cash surpluses managed by Metal Securities are primarily invested in instruments linked to the EONIA (Euro OverNight Index Average) rate.

COMMODITY RISK

The ERAMET group is exposed to commodity price volatility, affecting both its sales as a nickel and manganese producer and its production costs as a consumer of energy (fuel oil and electricity) and commodities (nickel and aluminium).

The ERAMET group holds derivative instruments for the purposes of reducing its exposure. To this end, the ERAMET group mainly uses forwards, tunnel options and call options.

The main Group entities involved are:

- ERAMET and Le Nickel-SLN for nickel sales;
- Aubert & Duval for nickel purchases;
- Le Nickel-SLN for fuel oil;
- Aubert & Duval for aluminium;
- Erasteel Kloster AB and ERAMET Norway A/S for electricity.

The exposures to manganese and coke price volatility are not hedged since there is no organised market for these commodities.

Hedges are contracted with horizons of one to four years, depending on the commodities, and are based on the budget. Only part of the forecast consumption or production is hedged (e.g. for fuel oil, a maximum of 80% of the budget is hedged). The ERAMET group uses various instruments to hedge and limit its exposure, namely forwards/futures and options.

At 31 December 2017, the fair value of hedges set up for the various commodities stood at €2 million net (31 December 2016: €0 million net).

The main commodities contracts outstanding are set out below:

	31/12/2017			31/12/2016		
(TONNES)	SWAPS	CALL OPTIONS	PUT OPTIONS	SWAPS	CALL OPTIONS	PUT OPTIONS
Nickel	4,918			6,457		
Aluminium				84		

A change of plus or minus 10% in commodity prices would have no material pre-tax impact on the hedges recognised through shareholders' equity.

LIQUIDITY RISK

The ERAMET group must ensure that it maintains a sufficient level of liquidity to meet its contractual obligations, including servicing its bank and bond debt.

In this context, the ERAMET group anticipates the regular renewal of its existing borrowings (credit facilities, bonds, leases, etc.) and establishes new modes of financing (ODIRNAN 2016), according to the opportunities available.

Furthermore, operational funds (investments and receivables) are implemented directly in the ERAMET group's subsidiaries.

ERAMET also aims to diversify its sources of funding, particularly between the bond and banking markets.

ERAMET centralises virtually all the cash requirements and surpluses of its controlled companies. This centralisation is performed by Metal Securities, which is responsible for managing the investment of cash surpluses.

The ERAMET group's financial liquidity position at 31 December 2017 was €2,690 million (31 December 2016: €1,698 million), of which €1,681 million is classified as cash and cash equivalents (31 December 2016: €1,367 million). These cash surpluses are, for the most part, transferred to Metal Securities, the Group company in charge of centralising and investing the ERAMET group's cash surpluses.

Revolving credit line

On 16 January 2017, the ERAMET group signed a renegotiation agreement concerning its Revolving Credit Facility (RCF) of €981 million, extending its maturity by two years. The original instalments of €85 million in January 2017 and €896 million in January 2018 are now €115 million in January 2018, €85 million in January 2019 and €781 million in January 2020. This facility has a single financial covenant (gearing), subject to cross-default.

This credit facility was drawn down in its entirety in early January 2016 and was partially repaid in 2017 for an amount of €730 million.

The ERAMET group is liable to repay its borrowings, primarily comprising financial market borrowings and bank borrowings, and its other liabilities and derivatives, for which the repayment schedule (including future interest) is given below:

		FUTURE PAYMENT SCHEDULE			
(€ MILLION)	STATEMENT OF FINANCIAL POSITION	LESS THAN ONE YEAR	ONE YEAR TO FIVE YEARS	OVER FIVE YEARS	TOTAL
Borrowings on capital markets	1,127	61	672	587	1,320
Borrowings from credit institutions	790	557	328	41	926
Bank overdrafts and creditor banks	71	71			71
Finance lease liabilities	55	16	37	6	59
Other borrowings and financial liabilities	241	74	28	181	283
Total borrowings	2,284	779	1,065	815	2,659
Derivatives	55	55			55
Trade and other payables	691	691			691
Total other financial liabilities	746	746	-	-	746

The schedule of future receipts on financial assets is set out below:

(€ MILLION)	STATEMENT OF FINANCIAL POSITION	FUTURE RECEIPTS SCHEDULE AT FAIR VALUE			
		LESS THAN ONE YEAR	ONE YEAR TO FIVE YEARS	OVER FIVE YEARS	TOTAL
Other current financial assets	394	394			394
Cash and cash equivalents	1,653	1,653			1,653
Total cash and cash equivalents	2,047	2,047	-	-	2,047
Derivatives	47	47			47
Trade and other receivables	617	531	86		617
Total other financial assets	664	578	86	-	664

Where appropriate, financial liabilities are covered by banking covenants at Group level or locally; the main covenants are described below:

COMPANY	TYPE OF FACILITY		RATIO	NOMINAL AMOUNT
ERAMET S.A.	Revolving credit line	Net debt decreased by SLN loan with the French State/Equity	< 1	€981 million
	Deutsche Bank *(Schuldschein)* loan	Restated net debt/Equity—Attributable to Group	< 1	€60 million
	Borrowing Base	Net debt/Shareholder's equity	< 1	€65 million
	European Investment Bank	Net debt/Shareholder's equity	< 1	€80 million
	European Investment Bank	Net debt/Shareholder's equity	< 1	€30 million
COMILOG S.A.	ICBC/BNP Paribas/BGFI loans	Net debt/Shareholder's equity	< 1.15	USD 217 million
		Net cash flow/Debt servicing	> 2	
		sales to ERAMET Norway A/S, Marietta COMILOG Dunkerque, ECM/Debt Servicing	> 150%	(1)
	CAT Finance	Net debt/EBITDA on a rolling 12-month basis	< 3	USD 40 million
		Net cash flow/Debt servicing	> 1.30	€11 million
		Net debt/Shareholder's equity	< 2	
	IFC/Proparco	Net debt/Shareholder's equity	< 1.15	€33 million
		Net debt/EBITDA on a rolling 12-month basis	< 4	
		Cash available	> €20 million	
TiZir	Bond issue	Shareholders' equity + subordinated loans/Total assets	> 35%	USD 300 million
		Liquidity	> USD 15 million	
Aubert & Duval	Crédit Agricole	Consolidated net debt/shareholder's equity	< 1.15	€7 million

(1) Covenant applicable only to one of the two USD 30 million loans subscribed by COMILOG.

ERAMET's covenants are determined on the basis of the published consolidated accounts. COMILOG's covenants are determined on the basis of COMILOG's separate and consolidated financial statements.

At 31 December 2017, the covenants showed no circumstances of accelerated maturity.

Moreover, at 31 December 2017, no cases of cross-default likely to impact funding at Group level were recorded.

CREDIT AND COUNTERPARTY RISK

The ERAMET group may be exposed to credit risk in the event of counterparty default: in relation to its customers and its financial partners, because of its cash surpluses invested by Metal Securities, the Group company established specifically for this purpose. The ERAMET group has several means to limit this risk: gathering information ahead of entering into transactions (from rating agencies, published financial statements, etc.), credit insurance and the establishment of letters of credit and documentary credits. Specifically for trade receivables, there is a dedicated credit manager for each Division of the Group.

The age of the Group's trade receivables and overdue receivables is shown below:

(€ MILLION)	31/12/2017 GROSS AMOUNT	31/12/2017 IMPAIRMENT	31/12/2017 NET AMOUNT	31/12/2016 GROSS AMOUNT	31/12/2016 IMPAIRMENT	31/12/2016 NET AMOUNT
On-time or not due	274	-	274	203	-	203
Delays:						
• less than one month	74	(1)	73	81	(1)	80
• one to three months	7	-	7	43	-	43
• three to six months	6	-	6	4	-	4
• six to nine months	3	(2)	1	1	(1)	-
• nine to twelve months	1	(1)	-	3	(3)	-
• over one year	10	(10)	-	7	(7)	-
Total trade receivables	375	(14)	361	342	(12)	330

No material unpaid or impaired receivables have been renegotiated.

EQUITY AND BOND RISK

ERAMET and its subsidiaries do not speculate on the stock markets; the investments held relate to unlisted controlled companies entirely in line with the Group's business activities.

In accordance with the Group's investment policy, which defines and limits the counterparty risk, the ERAMET group has purchased bonds subject to bond risk, recognised in Other current financial assets.

NOTE 8 - WORKING CAPITAL REQUIREMENT

(€ MILLION)	31/12/2016	CHANGE IN WCR STATEMENT OF FLOWS	CHANGE IN PAYABLES ON ASSET DISPOSALS	TRANSLATION ADJUSTMENTS AND OTHER	31/12/2017
Inventories	896	(21)		(26)	849
Customers	330	44		(13)	361
Suppliers	(371)	(24)		32	(363)
Simplified WCR	**855**	**(1)**	**-**	**(7)**	**847**
Other items of WCR	(66)	(204)	8	41	(221)
Total WCR	789	(205)	8	34	626

INVENTORIES

Inventories consist mainly of the products of the three Divisions of the Group—ERAMET Nickel, ERAMET Manganese and ERAMET Alloys—at different stages of the production process, and are recorded at the lower of cost and net liquidation value.

ACCOUNTING METHOD	JUDGEMENTS AND ESTIMATES
Inventories are measured using the weighted average unit cost for the industrial operations of ERAMET Alloys, and on a first-in-first-out (FIFO) basis for the industrial and mining operations of ERAMET Nickel and ERAMET Manganese. Inventories are carried at cost price and only include production costs, while not exceeding the realisable value. Costs stemming from sub-normal activity are eliminated from inventory measurement at the end of the reporting period. Impairment losses for raw materials are recognised when the net realisable value falls below the cost of entry into storage. Consumables are fully depreciated where the quantities are in storage over a much longer period than their estimated use. The impairment of spare parts that do not qualify for capitalisation is calculated on the basis of their use during the year. Spare parts inventory in excess of one year's use is fully depreciated. For work-in-process, intermediate and finished products in inventory for over a year, the forward-looking approach is applied on the basis of the order book and market validation of achievements within one year; the quantities beyond one year of consumption are fully depreciated, except in specific cases. Fixed production costs relating to recognised or planned sub-normal activity are not incorporated in inventory measurement, and are recognised as ordinary operating expenses for the period in which they are incurred. Sub-normal activity is taken into account when the actual production volume is considerably lower than the normal production volume (or normative capacity).	Judgement is exercised to determine the net realisable value, as well as to allocate the fixed and variable production overheads attributable directly to inventories.

(€ MILLION)	31/12/2017	31/12/2016
At beginning of period	**896**	**937**
Change in gross inventories	(27)	(11)
(Impairment)/net reversals for the period	6	18
Increase/(decrease) in net inventories—cash flows	(21)	7
Translation adjustments and other movements	(26)	(48)
At period close	849	896
Raw materials	222	229
Merchandise and finished products	245	252
Work-in-progress and semi-finished goods	313	341
Consumables and spare parts	69	74
Breakdown of impairment losses:		
• **At beginning of period**	**(122)**	**(147)**
• (Impairment)/net reversals for the period	6	18
• Translation adjustments and other movements	5	7
• **At period close**	**(111)**	**(122)**

Impairment provisions mainly relate to raw materials, merchandise and finished products.

TRADE AND OTHER RECEIVABLES

Trade and other receivables are amounts that the ERAMET group expects to collect from third parties.

ACCOUNTING METHOD	ESTIMATES AND JUDGEMENTS
Receivables are booked at transaction value at initial recognition and are subsequently measured at each reporting date at amortised cost. Foreign currency receivables and payables are re-measured at the rate prevailing at the period-end date. The resulting translation adjustments are recognised in Current operating profit (loss) or in Net financial income (Other financial income and expenses) depending on the type of receivable or debt (Note 4). Impairment losses are recognised for receivables where they are more than likely not to be recovered and it is possible to reasonably measure the amount of the impairment based on historical losses on receivables, the age of the receivable and an assessment of the risks involved. This impairment, offset in Current operating profit (loss), reduces the gross value of the receivable. Receivables disposed of under a securitisation contract are removed from the balance sheet when the ERAMET group has transferred the contractual rights to collect the cash amount and where almost all the risks and rewards attached to these receivables have been transferred to the transferee. Where risks remain but do not prejudice the removal of the receivables from the balance sheet, they are recognised under Other operating receivables together with the related security deposits (Note 8). Disposals with recourse against the ERAMET group in the event of payment default by the client means that these transferred receivables must be retained in the balance sheet.	Judgement must be exercised to determine when the ERAMET group could reasonably not recover the receivables. The impairment loss is calculated based on historical losses on receivables, the age of the receivable and an assessment of the risks involved.

(€ MILLION)	GROSS AMOUNT	IMPAIRMENT	NET AMOUNT 31/12/2017	NET AMOUNT 31/12/2016
At beginning of period	**779**	**(155)**	**624**	**608**
Change in gross amount	66		66	85
Impairment losses for the period		(19)	(19)	(27)
Changes in working capital requirement—cash flows			47	58
Translation adjustments and other movements	(59)	5	(54)	(42)
At period close	786	(169)	617	624
Trade receivables	**375**	**(14)**	**361**	**330**
Tax and payroll receivables	116	(4)	112	127
Security deposit—securitisation agreement	9	-	9	15
Other operating receivables	200	(151)	49	53
Other current assets	**325**	**(155)**	**170**	**195**
Receivables on the SETRAG concession agreement—non-current asset	1	-	1	2
TiZir shareholder current account—non-current asset	73	-	73	74
UKAD shareholder current account—non-current asset	4	-	4	14
Receivable for sale of ERACHEM—non-current asset	8		8	9
Other non-current assets	**86**	**-**	**86**	**99**
Total	786	(169)	617	624

The bulk of trade and other receivables are due in less than one year. Tax and payroll receivables include a VAT credit amount to the Gabonese government of €42 million at 31 December 2017 for the years 2014 to 2017 (€54 million at 31 December 2016).

SECURITISATION OF CUSTOMER RECEIVABLES

The ERAMET group uses factoring or securitisation as a source of funding for its receivables. Under these agreements, certain subsidiaries in France and the United States have committed to banking institutions to transfer their trade receivables totalling €210 million at 31 December 2017 (€162 million at 31 December 2016). The analysis of the transfer of risks and rewards resulted in either full deconsolidation or partial deconsolidation. At 31 December 2017, there were no non-deconsolidated receivables (compared to €13 million at 31 December 2016).

A security deposit may be required to cover the commitments given by the transferor subsidiaries to the financing company and will be returned upon the settlement of the transaction. It consists of reserves to hedge against credit risk, delayed payment risk and dilution risk. This deposit amounted to €9 million at 31 December 2017 (31 December 2016: €15 million).

(€ MILLION)	31/12/2017	31/12/2016
Trade receivables—Invoices assigned	(210)	(162)
Trade receivables—Invoices not deconsolidated	-	13
Other operating receivables—Security deposit	9	15

TRADE AND OTHER PAYABLES

Trade and other payables mainly comprises amounts owed to suppliers and tax authorities that have already been billed or are already due.

(€ MILLION)	31/12/2017	31/12/2016
At beginning of period	**722**	**779**
Changes in working capital requirement	81	(32)
Change in payables on non-current assets	(8)	(5)
Translation adjustments and other movements	(100)	(20)
At period close	695	722
Trade payables	**363**	**371**
Tax and payroll payables	257	212
Other operating payables	32	77
Payables on non-current assets	30	51
Deferred income	9	6
Other current liabilities	**328**	**346**
SETRAG debt for the purchase of own property and inventories—non-current	4	5
Other non-current liabilities	**4**	**5**

Most of the trade and other payables are due in less than one year.

The debts recognised under non-current liabilities include SETRAG S.A.'s 25-year debt to the Gabonese Republic for the transfer of the concession.

Other operating liabilities include €46 million at 31 December 2016 corresponding to the unpaid balance of the COMILOG tax audit for the years 2007 to 2013. This amount was settled in 2017 in the form of a cash settlement of €11 million and compensation with VAT credits of €35 million.

NOTE 9 · INVESTMENTS

The ERAMET group groups its investments into two categories:

- industrial investments relating to assets in connection with extraction or production equipment: intangible assets and property, plant and equipment;
- financial investments that mainly relate to interest held in joint ventures and non-consolidated companies, as well as other non-current financial assets.

ACQUISITION OF NON-CURRENT ASSETS

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Capital expenditure on property, plant & equipment for the period	206	189
Capital expenditure on intangible assets for the period	18	17
Total industrial capital expenditure	**224**	**206**
Change in payables for the acquisition of non-current assets—Note 8	8	5
Acquisition of investment securities	4	1
Total acquisition of non-current assets—Statement of cash flows	236	212

PROPERTY, PLANT AND EQUIPMENT

ACCOUNTING METHOD

Property, plant and equipment are stated in the balance sheet at their carrying amount, which is the acquisition or manufacturing cost less depreciation and impairment of losses incurred.
Land is not depreciated.
Spare parts deemed to be items of property, plant and equipment are capitalised and depreciated on the basis of their actual use.
Tooling specifically manufactured for certain customers is capitalised and depreciated over its likely useful life.
Major repairs are deemed to be components of items of property, plant and equipment.
Borrowing costs that are directly linked to the acquisition or production of an asset are incorporated into that asset's cost.
When operations commence, a provision is made to take into account the restoration of the mining site, offset by an environmental and dismantling asset that is depreciated on a straight-line basis during the operation of the mine. Revisions to these restoration cost estimates correct the value of this asset and provision by prospectively allocating the result over the period of operation, including the current year.
Finance leases transferring almost all of the risks and benefits inherent in ownership of the good to the ERAMET group are recognised as items of property, plant and equipment, offset by a financial debt (Note 6). These are amortised over their expected useful life on the same basis as the items of property, plant and equipment held or, if shorter, the term of the corresponding lease. Similarly, other agreements, and primarily sub-contracting, involving the use of a specific asset and the right to use it, are reclassified as leases where necessary.
The Trans-Gabon railway concession was recognised as follows: property owned by the ERAMET group is recognised as a balance sheet asset and depreciated over the shorter of its useful life or the remaining period of the concession.
Returnable assets representing the assets contributed to the concession by the Gabonese Republic that must be returned in the same state upon expiry of the agreement are not recognised in the balance sheet. Assets acquired by the ERAMET group following the signing of the concession agreement that must be turned over to the Gabonese Republic at the end of the concession are recognised as property, plant and equipment and depreciated over the term of the concession. A provision is made to cover the net value of the property, plant and equipment at the end of the concession based on investment assumptions.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

Judgement is exercised to determine all the expenses (e.g. labour, overheads) directly associated with the acquisition, construction, improvement or development of a non-current asset, including the costs of bringing it to the location and in the state that is required for its use as planned by Management.
Expenses for non-current assets are no longer capitalised once the non-current asset is practically completed and is capable of functioning as intended. To determine whether these conditions are met, a review must be carried out of the considerations applied in the same industries, predetermined by the Management's judgement with reference to the factors affecting the expected production capacity.
Where a non-current asset is composed of individual components which call for different methods or depreciation rates, judgement is exercised to determine how best to split the asset. Distinguishing between inspections and major revisions for repair and maintenance, and determining the appropriate period for amortising these costs, are a matter of judgement.

PROPERTY, PLANT AND EQUIPMENT BY CATEGORY

(€ MILLION)	GROSS AMOUNT	DEPRECIATION & AMORTISATION	IMPAIRMENT LOSSES	NET AMOUNT 31/12/2017	NET AMOUNT 31/12/2016
Land and buildings	1,086	(590)	(78)	418	449
Industrial and mining facilities(1)	3,363	(2,214)	(93)	1,056	1,076
Other property, plant and equipment	829	(544)	(6)	279	303
Work-in-progress, down-payments	173	-	(2)	171	148
Total	5,451	(3,348)	(179)	1,924	1,976
(1) of which:					
Assets funded by finance leases				*92*	*99*
Decommissioned assets—site restoration				*89*	*97*

CHANGE OVER THE PERIOD

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**1,976**	**2,116**
Investments for the period	206	189
Disposals for the period	(12)	(7)
Depreciation & amortisation for the period	(214)	(230)
Impairment losses for the period	(31)	(48)
Change in the gross amount of decommissioned assets	3	13
Translation adjustments and other movements	(4)	(57)
At period close	1,924	1,976
• Gross amount	5,451	5,606
• Depreciation & amortisation	(3,348)	(3,341)
• Impairment losses	(179)	(289)

INTANGIBLE ASSETS

ACCOUNTING METHOD	ESTIMATES AND JUDGEMENTS
Intangible assets are stated in the balance sheet at their carrying amount, which is the acquisition cost less amortisation and any impairment of losses incurred. **Goodwill** Goodwill is the difference between the acquisition price of an entity and the ERAMET group's share in the fair value of the identifiable asset or liability (including possible liabilities) of the acquired entity at the acquisition date. It is recognised at cost, less accumulated impairment losses. Goodwill in associates and joint ventures is recognised under investments in joint ventures and associates (Note 9). **Mining reserves** Amounts capitalised with respect to mineral deposits relate to partial asset contributions or permits acquired since 1974. Depending on the specific operating characteristics, mining reserves are amortised on the basis of the ratio of annual production to the estimated reserves or the length of the concession. Geology, prospecting and research expenses Geology, exploration, prospecting and mining research expenses incurred prior to operation are recognised as intangible assets, in compliance with IFRS 6—Exploration for and Evaluation of Mineral Resources. The royalties paid for mining prospecting and exploration are also recognised under intangible assets.	Judgement must be used to determine whether the expenditure on intangibles can be recognised as an intangible asset. If its useful life is limited in time, the intangible asset is amortised on a straight-line basis over the estimated useful life. The goodwill is allocated to the cash-generating unit from where it arose, for the purposes of impairment testing.

INTANGIBLE ASSETS BY CATEGORY

(€ MILLION)	GROSS AMOUNT	DEPRECIATION & AMORTISATION	IMPAIRMENT LOSSES	NET AMOUNT 31/12/2017	NET AMOUNT 31/12/2016
Goodwill	166	-	(11)	155	155
Indonesia mining reserves	237	-	(124)	113	128
Gabon mining reserves	61	(37)	-	24	25
New Caledonia mining reserves	47	(34)	-	13	13
Indonesia geology, prospecting and research expenses	438	-	(438)	-	-
Other geology, prospecting and research expenses	10	(9)	-	1	1
Software	116	(96)	(2)	18	25
Other intangible assets	41	(32)	-	9	11
Work-in-progress, down-payments	35	-	(19)	16	14
Total	1,151	(208)	(594)	349	372

The net goodwill of €155 million at 31 December 2017 (31 December 2016: €155 million) is mainly due to the acquisition of the Norwegian company Eralloys Holding A/S in 2008 for €149 million (31 December 2016: €150 million) and is allocated to the ERAMET Norway CGU.

CHANGE OVER THE PERIOD

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**372**	**370**
Investments for the period	18	17
Disposals for the period	1	-
Depreciation & amortisation for the period	(21)	(22)
Impairment losses for the period	-	-
Translation adjustments and other movements	(21)	7
At period close	349	372
Gross amount	1,151	1,265
Depreciation & amortisation	(207)	(213)
Impairment losses	(595)	(680)

WEDA BAY PROJECT IN INDONESIA

On 2 May 2006, the ERAMET group acquired Weda Bay Minerals Inc., a company listed on the Toronto stock exchange, whose subsidiary Pt Weda Bay Nickel holds a world-class nickel deposit on Halmahera island, Indonesia, as part of a Contract of Work (COW) concession. Following this acquisition, the ERAMET group carried out studies to mine that deposit.

Capitalised project expenditure mainly consists of geological, exploration and prospecting costs, as well as the costs of technical and economic studies.

The nickel market conditions took a turn for the worse in 2015, causing uncertainty in the short to medium term. In addition, the ERAMET group decided to put all major projects on hold.

At the same time, negotiations with Indonesia regarding the amendment of the terms of the COW to comply with the new Indonesian mining law were pursued to clarify certain aspects of the regulatory and taxation framework applicable to the project.

The ERAMET group's historical partners on the project—the Mitsubishi Corporation and Pacific Metals Co Ltd—decided in 2016 to exercise the option to sell to ERAMET their holdings in Strand Minerals Pte Ltd, standing at 30% and 3.4% respectively (see Key events in the reporting period).

Pt Antam has several purchase options allowing it to increase its holding, the terms and conditions of exercise of which are given in Note 14.

In 2017, ERAMET signed a framework agreement with the Chinese steel group Tsingshan with a view to determining the conditions for partnership to increase the value of the asset (see Key events in the reporting period).

SHARE CAPITAL INCREASE—CONTROLLED COMPANIES

The amount of €97 million shown in the Statement of cash flows for 2016 includes:

- €71 million paid by ERAMET to Mitsubishi and Pamco for the acquisition of a 33.4% stake in Strand Minerals Pte Ltd following the exercise of their put option;
- €26 million for the reimbursement of the shareholders' current account by Strand to Mitsubishi and Pamco (see Note 5—Working capital requirement).

IMPAIRMENT OF ASSETS AND IMPAIRMENT LOSSES

ACCOUNTING METHOD

Impairment tests are performed regularly: systematically at least once a year at the annual reporting date for goodwill and intangible assets with indefinite lives, and where there are indications of impairment. For intangible assets and items of property, plant and equipment with finite lives, impairment tests are carried out where there are indications of impairment.
Impairment testing consists in comparing the carrying amount of assets with their recoverable amount, which is defined as the higher of the value in use (or recoverable amount through use) and the fair value (or recoverable amount through sale), less selling costs.
Impairment losses are calculated as the difference between the recoverable and net book value and are recognised in the income for the period under Other operating income and expenses (Note 5).
Impairment losses recognised in goodwill are not reversible. For the other assets, previously recognised impairment losses are measured at each reporting date to identify whether the losses have decreased or no longer exist. An impairment loss is reversed only if the carrying amount of the asset does not exceed its net book value, as it would have been determined had no impairment been recognised.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

Cash-generating units (CGU) are homogeneous groups of assets whose continuous use generates independent cash flows.
The ERAMET group has defined its CGUs with reference to the various production sites of ERAMET Nickel, ERAMET Manganese and ERAMET Alloys.
Impairment tests are performed for each CGU. All intangible assets, including goodwill, and all items of property, plant and equipment are allocated to CGUs.
At 31 December 2017, the ERAMET group is divided into 11 CGUs, distributed as follows:

- three CGUs in ERAMET Nickel;
- six CGUs in ERAMET Manganese;
- two CGUs in ERAMET Alloys.

ERAMET group's General Management determines the existence of events calling for impairment testing based on several criteria.
Impairment loss indicators correspond mainly to changes and fluctuations in:

- raw material prices and the selling price of finished goods;
- economic and regulatory environment and market conditions;
- interest rates;
- technological level;
- asset performance and obsolescence.

An impairment test is carried out on the CGUs concerned when these indicators show a negative development.
To determine the value in use, the ERAMET group uses the method of discounted future cash flows generated from the use of the assets. The data used to calculate the discounted forecast cash flows is taken from the annual budgets and multiyear plans prepared by the Management of the CGUs concerned. These plans are created on the basis of 5-10 year projections, in keeping with mining and industrial cycles, plus a final value corresponding to the capitalisation to infinity of normative cash flows. Plans for certain CGUs are prepared for longer periods corresponding to the operating period of the sites without assigning a terminal value.
The growth rates used are the same as those used in budgets. The growth rates to infinity used for the terminal values are generally between 1% and 3%, depending on the CGU.
The discount rate applied to calculate the value in use is the weighted average cost of capital, namely:

- 10% for mining activities (also 10% in 2016);
- 8.5% for metallurgical activities (8% in 2016);
- 11.5% for the Grande Côte CGU (also 11.5% in 2016), company accounted for using the equity method of accounting (see "Investments in joint ventures and associates").

The ERAMET group may measure the recoverable amount using other methods that it deems relevant in the context of the CGUs concerned. These methods may include estimated transaction values.
Whatever the method used, the assumptions used are Management's best estimates. The ERAMET group regularly reviews its estimates and assessments to take account of past experience and other factors that are deemed relevant with regard to economic conditions.

The change in impairment of assets and other impairment losses is broken down as follows:

(€ MILLION)	31/12/2016	IMPAIRMENT LOSS FINANCIAL YEAR 2017	TRANSLATION ADJUSTMENTS AND OTHER	31/12/2017
ERAMET Nickel	(679)	-	97	(582)
ERAMET Alloys	(76)	(9)	16	(69)
ERAMET Manganese	(258)	(26)	162	(122)
ERAMET Holding	(4)	-	-	(4)
Total	(1,017)	(35)	275	(777)
Goodwill	(18)	-	7	(11)
Intangibles	(662)	-	79	(583)
PP&E	(289)	(31)	141	(179)
Other provisions	(48)	(4)	48	(4)

The decrease in impairment of assets and other impairment losses is mainly due to changes in the scope of consolidation (disposal of Eurotungstène, deconsolidation of GCMC), effects of translation differences and reclassifications of amortisation recognised for the period.

SENSITIVITY

Sensitivity is determined with reference to changes in future cash flows and discount rates.

The ERAMET group's cash projections for its mining and metallurgical businesses are highly dependent on the sale price assumptions, especially that of ores (nickel, manganese, zircon, etc.), on euro-dollar parity, and on global demand for products sold by the Group.

CGU SLN—ERAMET NICKEL

The value in use is extremely sensitive to the price of nickel—the main hypothesis of the impairment test for this CGU.

This commodity is traded on the London Metal Exchange (LME). Directly observable forward prices do not reflect the long-term price. The target level for 2020 is thus determined by average industry consensus and corresponds to the previous levels reached prior to 2012. The price trend curve used to reach this target level is more conservative than the average consensus.

The selected prices are thus integrated into the 5-year business plan, which allows the cash flow projections of the CGU to be determined.

However, there is strong interdependence between the different variables, namely the value of the dollar, the price of Brent crude oil and the price of nickel, which generally do not impact the test in the same way.

The improvement in operating performance leading to a significant decrease in cash cost is ongoing, and it has been accentuated over the year with a new lower cash cost target announced in September 2017.

A decrease of USD 0.5/lb in the target nickel price, a 0.5% increase in the discount rate, or a decrease of 0.5% in the long-term growth rate under identical operating conditions would not result in recognition of an impairment loss, however would reduce the margin of comfort. On the other hand, if the long-term price levels were to be revised downwards substantially, the test could result in an impairment loss.

GABON AND MANGANESE ALLOYS CGUS—ERAMET MANGANESE

Manganese ore is not a listed commodity. The price is adjusted according to supply and demand, particularly concerning alloy production forecasts and the marginal capacity of the South African producer.

To determine the forecast price of manganese ore, the ERAMET group uses an internal model that takes into account the marginal cost of South African production, available logistical means (trains or trucks) and ZAR/USD parity.

The price forecasts thus determined are integrated into the business plans of the Gabon and manganese alloys CGUs. These price forecasts can be compared with studies issued by the CRU (Commodities Research Unit), an independent body that carries out studies on certain metals, including manganese.

Regarding the Gabon CGU, a 0.5% increase in the discount rate, a 0.5% decrease in long-term growth rate or a fall of 1% in the EBITDA margin of the final year would not result in the recognition of an impairment loss.

AUBERT & DUVAL CGU—ERAMET ALLOYS

The business plan provides for an increase in profitability of this activity on the basis of plans for productivity, reduced structural costs and improved sales. The plans to reduce costs and improve productivity were initiated as of end-2012. A 1% decrease in the EBITDA margin rate of the final year, a 0.5% increase in the discount rate or a fall of 0.5% in the long-term growth rate would not result in the recognition of an impairment loss.

RESIDUAL VALUES BY GROUP OF CGUS

The residual values of invested capital are detailed as follows by CGU group:

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
ERAMET Nickel		
Net intangible assets and property, plant & equipment	732	747
Working capital requirement	138	163
Total	**870**	**910**
ERAMET Alloys		
Net intangible assets and property, plant & equipment	501	476
Working capital requirement	323	369
Total	**824**	**845**
ERAMET Manganese		
Net intangible assets and property, plant & equipment	1,025	1,102
Working capital requirement	113	197
Total	**1,138**	**1,299**
ERAMET Holding and others		
Net intangible assets and property, plant & equipment	15	23
Working capital requirement	52	60
Total	**67**	**83**
ERAMET group		
Net intangible assets and property, plant & equipment	2,273	2,348
Working capital requirement	626	789
Total	2,899	3,137

Capital employed is defined as the sum of net tangible assets, property, plant and equipment and working capital requirements. It is used to determine the accounting values of assets tested as part of asset impairment tests.

INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

ACCOUNTING METHOD	ESTIMATES, ASSUMPTIONS AND JUDGEMENTS
Joint ventures are companies over which ERAMET has joint control, meaning that the decisions concerning the relevant activities require the unanimous consent of all controlling parties. Associates are companies over which the ERAMET group has significant influence. Joint ventures and associates are accounted for using the equity method of accounting and are initially recognised at cost. Their carrying amount includes the goodwill determined at their acquisition less accumulated impairment. The consolidated financial statements include ERAMET's share in earnings and the equity movements of the companies accounted for using the equity method, after adjustments to bring the accounting rules of those companies in line with those of the ERAMET group. The dividends received from joint ventures and associates are deducted from their balance sheet value. An impairment test is carried out when there are indicators that the recoverable amount may fall below its carrying amount (Note 9).	Significant influence exists when ERAMET has the powers to take part in financial and operating decisions of the Company but does not exercise control or joint control over these policies. ERAMET has significant presumed influence if it holds 20% to 50% of the voting rights of a company. ERAMET group's General Management determines the existence of events calling for impairment testing under the same conditions as those given in the Impairment of assets section.

BREAKDOWN BY ENTITY

(€ MILLION)			SHARE OF PROFIT (LOSS)	SHARE OF SHAREHOLDERS' EQUITY	SHARE OF PROFIT (LOSS)	SHARE OF SHAREHOLDERS' EQUITY
COMPANY	COUNTRY	% HOLDING	2017	31/12/2017	2016	31/12/2016
TiZir subgroup	United Kingdom	50%	28	112	(64)	95
UKAD	France	50%	(9)	(1)	(1)	-
Total joint ventures			**19**	**111**	**(65)**	**95**
HeYe Erasteel Innovative Materials Ltd	China	49%	(1)	-	(1)	8
EcoTitanium	France	21.75%	-	4	-	4
Total associates			**(1)**	**4**	**(1)**	**12**
Total			18	115	(66)	107

TIZIR SUBGROUP

On 27 July 2011, the ERAMET group and Mineral Deposits Ltd (MDL) entered into an agreement to create a joint venture, the British company TiZir Ltd, bringing together the Norwegian company TiZir Titanium & Iron A/S (TTI) and the Grande Côte Opérations S.A. (GCO) mineral sands project in Senegal. The final agreements were completed on 25 October 2011.

The fully contributory balance sheet of the TiZir subgroup is as follows:

(€ MILLION)	31/12/2017	31/12/2016
Non-current assets	633	644
Non-cash current assets	88	70
Liabilities excluding gross financial payables	(51)	(59)
Net debt	(462)	(495)
Non-controlling interest	(16)	(30)
Shareholders' equity, Group share	224	190
Share of shareholders' equity	112	95

The investments made for TiZir in Senegal (Grande Côte) and Norway (TTI) totalled €10 million in 2017 (FY 2016: €21 million).

In addition, the TiZir Ltd bond issue of USD 275 million which matured in September 2017 was refinanced with a new USD 300 million bond issue maturing in 2022 (see Key events in the reporting period).

The fully contributory profit and loss account of the TiZir subgroup is as follows:

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	199	145
EBITDA	55	16
Current operating profit (loss)	27	(13)
Non-controlling interest	(11)	10
Net profit (loss), Group share	56	(128)
Share of profit	28	(64)

Translation adjustments of -€12 million for 2017 (FY 2016: +€3 million) were posted to items recyclable to profit or loss in the ERAMET group's Statement of comprehensive income.

FINANCIAL YEAR 2017

A provision of €44 million (Group share) on the value of the investment was reversed at 31 December 2017, due to the outlook for a positive trend in the sale price of zircon and ilmenite, as well as the significant improvement in 2017 results and the end of the ramp up of the facilities in Senegal. The selling price assumptions were determined using the medium- and long-term consensus of market experts.

A 0.5% increase in the discount rate would have an impact of about €11 million (Group share) on the reversal amount. A 10% decline in the long-term zircon prices would have a negative impact of about €36 million (Group share).

The accumulated provision on the value of the investment as of December 31, 2017 is USD 86 million, or €72 million (Group share).

FINANCIAL YEAR 2016

An impairment loss of the investment value of €40 million (Group share) was recognised at 31 December 2016, given the expected decline in zircon sale prices. The selling price assumptions were determined using the medium- and long-term consensus of market experts.

NON-CURRENT FINANCIAL ASSETS

ACCOUNTING METHOD	JUDGEMENTS
Other non-current financial assets include other long-term financial assets and non-consolidated equity investments. Other non-current financial assets relate to loans or current accounts extended to non-consolidated companies or companies under joint control. They are initially recognised at fair value plus acquisition costs and are measured on each reporting date at amortised cost using the effective interest rate (EIR) method, less any offsetting provisions for impairment losses recognised in income for the period (Other financial income and expenses, see Note 6). Non-consolidated equity investments are recognised in the balance sheet at their acquisition cost or their value on the date of their deconsolidation, less any offsetting provisions for impairment losses recognised in income for the period (Other financial income and expenses, see Note 6).	The ERAMET group has divided its non-consolidated subsidiaries into two categories: ▪ controlled companies that are not consolidated owing to their low impact on the ERAMET group's financial statements; ▪ non-controlled companies corresponding to holdings in companies over which the ERAMET group has no control or significant influence.

BY CATEGORY

(€ MILLION)	GROSS AMOUNT	IMPAIRMENT	NET AMOUNT 31/12/2017	NET AMOUNT 31/12/2016
Deposits and guarantees	16	-	16	15
Shareholders' loan—TiZir	48	-	48	51
Other non-current financial assets	145	(112)	33	30
Total excluding non-consolidated equity investments	**209**	**(112)**	**97**	**96**
Non-consolidated equity investments	160	(136)	24	45
Total	369	(248)	121	141

The shareholders' loan to TiZir accounts for the loan amount granted by ERAMET to its subsidiary under joint control, TiZir Ltd.

Other non-current financial assets chiefly relate to financial current accounts or loans granted to non-consolidated companies (MKAD) or equity affiliates (Ukad, Ecotitanium).

CHANGE

(€ MILLION)	31/12/2017	31/12/2016
At beginning of period	**141**	**153**
Net change in non-current financial assets—statement of flows	3	14
Acquisition/disposal of investment securities	(6)	1
Impairment	19	(21)
Other movements	(36)	(6)
At period close	121	141

BY CURRENCY

(€ MILLION)	31/12/2017	31/12/2016
Euro	40	33
US dollar	52	57
CFP franc	4	5
Other currencies	1	1
Total	97	96

BY INTEREST RATE TYPE

(€ MILLION)	31/12/2017	31/12/2016
Interest-free	14	8
Fixed interest rates	26	21
Variable interest rates	57	67
Total	97	96

Interest-free items mainly relate to deposits and guarantees as well as certain loans to employees.

NON-CONSOLIDATED EQUITY INVESTMENTS

(€ MILLION) COMPANY	COUNTRY	% HOLDING	GROSS AMOUNT	IMPAIRMENT	NET AMOUNT 31/12/2017	NET AMOUNT 31/12/2016
Main controlled companies:						
• Brown Europe	France	100%	-	-	-	8
• Aubert & Duval SA (Irun) (ex-Metallied)	Spain	100%	2	(2)	-	-
• Erasteel GmbH	Germany	100%	3	-	3	2
• ERAMET Alloys UK Ltd	United Kingdom	100%	3	-	3	2
• Aubert & Duval Mold and Die Technology	China	85%	3	-	3	2
• Aubert & Duval Special Steel GmbH	Germany	100%	3	(3)	-	-
• La Petite-Faye	New Caledonia	100%	-	-	-	2
• Sodépal	Gabon	100%	7	(7)	-	-
• GCM Liquidation Co (ex-GCMC)	Gabon	100%	92	(92)	-	-
• Maboumine	Gabon	76.14%	26	(26)	-	-
Main non-controlled companies:						
• HeYe Special Steel Ltd	China	10%	-	-	-	14
• Squad	India	50%	6	-	6	3
Other companies			15	(6)	9	12
Total			160	(136)	24	45

Controlled but non-consolidated companies are mainly sales entities, the services of which are fully assigned to the ERAMET group, and industrial companies (shaping, wire-drawing and drawing of metallurgical products).

Equity investments in controlled companies are not consolidated since they have no material impact on the ERAMET group's consolidated financial statements.

NOTE 10 - TAXES

This note explains the income tax expense and related tax amounts shown in the profit and loss account and balance sheet. The section on deferred tax provides information on expected future tax payments.

ACCOUNTING METHOD	ESTIMATES, ASSUMPTIONS AND JUDGEMENTS
Income tax includes both current and deferred tax. The income tax expense is recognised in the profit and loss account, except where it relates to a business acquisition or items recognised directly in equity or in Other comprehensive income. Current income tax includes taxes that the ERAMET group expects to pay on its taxable income for the reporting period at the prevailing tax rates or rates substantively enacted at the reporting date, as well as any adjustments for tax relating to prior reporting periods. Deferred tax is recognised as temporary differences between the carrying amount of the assets and liabilities measured for the purposes of financial reporting and the tax basis of those assets and liabilities measured at the income tax rate and tax laws enacted or substantively enacted at the reporting date and effective in the period in which these temporary differences should be used. Deferred tax assets, including those related to loss carry-forwards, which are determined by fiscal entity, are recognised whenever it can be shown that they are likely to be realised. The deferred tax assets and liabilities are classified in the balance sheet as non-current items and are offset if the entity has a legally enforceable right of set-off as is the case with the French tax consolidation group. Deferred tax liabilities on investments in subsidiaries, associates and joint ventures are recognised unless where the ERAMET group can determine the timetable for the reversal of the related temporary differences, and where it is likely that such differences will not reverse in the foreseeable future. Provisions are made for non-recoverable tax on dividends planned in the foreseeable future.	The ERAMET group operates in several countries. Its income is therefore taxed at various income tax rates. Given the magnitude of the operations and the complexity of tax regulations, the ERAMET group must assess uncertainties and exercise judgement to estimate the tax amount that it will eventually pay. The tax amount finally paid depends on various factors that include negotiations with tax authorities and the outcome of tax audits. The ERAMET group estimates deferred tax based on the temporary differences between the assets and liabilities shown in its consolidated financial statements and the tax bases of these assets and liabilities determined under the applicable tax laws. The deferred tax asset amount is generally recognised insofar as a probable taxable profit will be available in the future against which deductible temporary differences can be used. Consequently, the deferred tax asset that is recognised and considered as realisable can be reduced if the projected profit cannot be obtained. To assess the likelihood that these assets will be realised, the ERAMET group reviews the following information in particular: ▪ projected future profitability; ▪ extraordinary losses not expected to recur in the future; ▪ past taxable profits; and ▪ tax strategies.

INCOME TAX

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Current tax	(193)	(43)
Deferred tax	(23)	(18)
Tax income/(expense)	(216)	(61)

EFFECTIVE TAX RATE

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Operating profit (loss)	513	(47)
Financial income	(93)	(58)
Pre-tax profit (loss) of consolidated companies	**420**	**(105)**
Standard taxation rate in France (%)	**34.43%**	**34.43%**
Theoretical tax income/(expense)	**(145)**	**36**
Impact on theoretical tax of:		
• permanent differences between accounting and taxable profit	2	28
• taxes on dividend distribution (withholding tax)	(9)	-
• impairment of assets	2	3
• standard tax rate differences in foreign countries	18	2
• tax credits	4	5
• unrecognised or limited deferred tax assets	(85)	(142)
• miscellaneous items	(3)	7
Actual tax income/(expense)	(216)	(61)
Effective tax rate	**51%**	**-58%**

The decrease in the tax rate of French companies to 28% from 2019 onwards has no impact on the consolidated financial statements of the ERAMET group. Deferred tax assets are limited to the amount of deferred tax liabilities in the French tax consolidation group given the history of losses in the past years.

FINANCIAL YEAR 2017

Unrecognised or limited deferred tax assets mostly relate to the tax loss carry-forwards of Le Nickel-SLN totalling €51 million, the French tax consolidation (€11 million) and other limited or unrecognised deferred tax assets in certain subsidiaries totalling €22 million.

The difference in current tax rates of foreign countries comes mainly from Norway with a tax rate of 24%.

FINANCIAL YEAR 2016

Unrecognised or limited deferred tax assets mostly relate to the tax loss carry-forwards of Le Nickel-SLN totalling €57 million, the French tax consolidation group (€34 million) and other limited or unrecognised deferred tax assets in certain subsidiaries totalling €51 million (Guilin, GCMC, SETRAG, COMILOG-CMM).

MAIN STANDARD TAX RATES IN FOREIGN COUNTRIES

(%)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
China	12.5%-25.0%	12.5%-25.0%
United States	35.75%	35.97%
Gabon	35.0%	35.0%
Norway	24.0%	25.0%
New Caledonia	35.0%	35.0%
Sweden	22.0%	22.0%

CHANGE IN TAX RECEIVABLES AND TAX PAYABLES

(€ MILLION)	31/12/2017	31/12/2016
At beginning of period	**5**	**27**
Current tax—income statement	(193)	(43)
Tax paid	56	33
Translation adjustments and other movements	(14)	(12)
At period close	(146)	5
• Current tax receivables	22	39
• Current tax payables	168	34

DEFERRED TAXES IN THE BALANCE SHEET

BREAKDOWN BY CATEGORY

(€ MILLION)	31/12/2017	31/12/2016
Tax loss carry-forwards(1)	31	26
Intangible assets and property, plant & equipment	45	51
Inventory valuation	39	41
Financial instruments	31	37
Employee-related liabilities	60	78
Other provisions for liabilities and charges	42	55
Other items	15	12
Deferred tax assets before netting	**263**	**300**
Deferred tax netting by tax entity	(261)	(296)
Deferred tax assets	**2**	**4**
Regulated provisions and special amortisation and depreciation	(229)	(209)
Intangible assets and property, plant & equipment	(130)	(142)
Inventory valuation	(7)	(26)
Financial instruments	(25)	(24)
Employee-related liabilities	(3)	(17)
Other provisions for liabilities and charges	(16)	(16)
Distribution of dividends	(9)	-
Other items	(15)	(12)
Deferred tax liabilities before netting	**(434)**	**(446)**
Deferred tax netting by tax entity	261	296
Deferred tax liabilities	**(173)**	**(150)**
Net deferred tax liabilities	(171)	(146)
(1) Limited deferred tax assets for tax loss carry-forwards	*509*	*516*

CHANGE IN DEFERRED TAXES IN THE BALANCE SHEET

(€ MILLION)	ASSETS	LIABILITIES	NET AMOUNT FINANCIAL YEAR 2017	NET AMOUNT FINANCIAL YEAR 2016
At beginning of period	**4**	**(150)**	**(146)**	**(128)**
Deferred tax offset in shareholders' equity	2	(10)	(8)	1
Deferred tax on profit (loss)	(4)	(19)	(23)	(18)
Deferred tax netting by tax entity	35	(35)	-	-
Translation adjustments and other movements	(35)	41	6	(1)
At period close	2	(173)	(171)	(146)

Deferred tax assets and liabilities are reported separately in the balance sheet after offsetting within each tax entity. Except for the French tax consolidation group, every company is an independent tax entity.

FRENCH TAX CONSOLIDATION GROUP

Tax losses of €477 million at 31 December 2017 (31 December 2016: €411 million) mainly arose during the past five reporting periods and have been capitalised as deferred tax assets and then impaired.

NOTE 11 · PERSONNEL COSTS AND EMPLOYEE BENEFITS

WORKFORCE AND PERSONNEL COSTS

AVERAGE WORKFORCE AND WORKFORCE AT END OF PERIOD BY DIVISION

The average workforce and workforce at end of period include all fully consolidated companies at 31 December of each year.

	FINANCIAL YEAR 2017	31/12/2017	FINANCIAL YEAR 2016	31/12/2016
	AVERAGE WORKFORCE	WORKFORCE AT PERIOD END	AVERAGE WORKFORCE	WORKFORCE AT PERIOD END
Workers	1,434	1,408	1,535	1,471
Employees, technicians and supervisors	738	702	849	821
Executives	221	210	250	242
ERAMET Nickel	**2,393**	**2,320**	**2,634**	**2,534**
Workers	1,888	1,868	2,541	1,941
Employees, technicians and supervisors	1,453	1,427	1,691	1,508
Executives	594	575	719	620
ERAMET Manganese	**3,935**	**3,870**	**4,951**	**4,069**
Workers	2,660	2,704	2,590	2,588
Employees, technicians and supervisors	1,469	1,490	1,446	1,451
Executives	525	543	519	519
ERAMET Alloys	**4,654**	**4,737**	**4,555**	**4,558**
Workers	38	25	31	31
Employees, technicians and supervisors	158	168	162	157
Executives	199	208	216	205
ERAMET Holding and others	**395**	**401**	**409**	**393**
Workers	6,020	6,005	6,697	6,031
Employees, technicians and supervisors	3,818	3,787	4,148	3,937
Executives	1,539	1,536	1,704	1,586
Total	11,377	11,328	12,549	11,554

The total workforce managed in the HR reporting system implemented by the Group, which includes non-consolidated companies and companies accounted for using the equity method, totalled 12,590 employees at 31 December 2017 (12,777 employees at 31 December 2016).

PERSONNEL COSTS BY CATEGORY

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Wages and salaries	(462)	(471)
Social security contributions and other personnel costs	(185)	(190)
Profit sharing	(23)	(11)
Share-based payment	(6)	(3)
Personnel costs subtotal	**(676)**	**(675)**
Personnel costs—temporary staff	(34)	(28)
Total personnel costs including temporary staff	(710)	(703)
Personnel costs (including temporary staff) as % of sales	20%	24%
CICE (tax credit for competitiveness and employment—shown deducted from personnel costs)	8	7

EMPLOYEE-RELATED LIABILITIES

The ERAMET group offers its employees many long-term benefits, such as retirement packages, pension plans, healthcare plans and long-service awards. The characteristics of these benefits vary in line with the governing laws and regulations in each country and the agreements in force in each company.

ACCOUNTING METHOD

Employee-related liabilities are either defined benefit plans or defined contribution plans. Defined benefit plans specify the amount that an employee will receive at the time of retirement whereas defined contribution plans specify how the contributions are calculated.

Defined contribution plans

For these plans, the ERAMET group makes payments to a fund manager and is released from its obligations for the current period and prior periods. As a result, these plans do not show any deficit or surplus and are not included in the balance sheet. The contributions are expensed when paid.

Defined benefit plans and other long-term benefits

A defined benefit plan is a post-employment benefit plan that is distinct from the defined contribution plan. The cost of the retirement benefits and other benefits accrued to employees is established actuarially for each plan using the projected unit credit cost method. They are assessed annually by independent actuaries. The obligations of the ERAMET group are recognised as balance sheet liabilities and correspond to the difference between the present value of the obligations in respect of defined benefits and the fair value of plan assets at the reporting date. Plan assets consist of assets held in pension funds or insurance policies.

The costs of services rendered are recognised in Current operating profit (loss) in the period in which they are incurred. The costs of past services resulting from amendments and curtailments to the plan, as well as the gains and losses upon plan settlement are recognised in Other operating income and expenses. The interest expense for net obligations is included in Other financial income and expenses.

The actuarial gains (losses) (including the impact of foreign exchange) on plan assets and the obligation in respect of defined benefits are recognised directly in Other comprehensive income for the period in which they arise. They are recognised immediately in income in the case of long-term benefits.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

The cost of employee benefits and the value of the obligations are calculated using assumptions such as discount rates, salary increases, retirement age, life expectancy, inflation and cost of healthcare. These assumptions are determined annually by the ERAMET group's Management.

The discount rates used are mostly calculated for each zone or country based on the average rates of private issuers observed in those zones or countries at each reporting date.

The rates vary from country to country:

- in the Eurozone and in the United States, the discount rates were determined on the basis of AA10+ corporate bonds;
- in Norway, the discount rate is determined based on secured bonds such as mortgage-backed bonds;
- in New Caledonia, given that the corporate and government bond markets are illiquid, the rate is determined with reference to the French sovereign bond rate adjusted for local inflation;
- in Gabon, the discount rate used is based on the local bond rate.

MAIN ACTUARIAL ASSUMPTIONS AND RELATED SENSITIVITY

The actuarial assumptions used vary according to the economic and demographic conditions existing in the country in which the plan is in force. The main actuarial assumptions used for measuring these liabilities are as follows:

	31/12/2017		31/12/2016	
	RATES		RATES	
	DISCOUNT	INFLATION	DISCOUNT	INFLATION
Eurozone	1.50%	1.80%	1.50%	1.80%
United States	3.60%	2.00%	3.80%	2.00%
Norway	2.50%	1.75%	2.50%	1.75%
New Caledonia	2.20%	0.60%	2.60%	0.60%
Gabon	7.00%	2.50%	6.00%	2.50%

SENSITIVITY

An increase or decrease of 0.5 percentage point in the discount rate or inflation rate, with other actuarial assumptions remaining constant, will have the following impact:

	DISCOUNT RATE				INFLATION RATE			
	INCREASE BY +0.5%		DECREASE BY -0.5%		INCREASE BY +0.5%		DECREASE BY -0.5%	
	(€ MILLION)	(%)	(€ MILLION)	(%)	(€ MILLION)	(%)	(€ MILLION)	(%)
France	(17)	-9%	19	10%	(2)	-1%	3	1%
United States	(4)	-4%	5	6%	-	0%	-	0%
Norway	(1)	-10%	-	0%	-	0%	(1)	-8%
New Caledonia	(2)	-5%	1	3%	-	0%	-	0%
Gabon	(1)	-3%	1	3%	-	0%	-	0%
Other countries	(1)	-10%	2	20%	-	0%	(2)	-22%
Total	(26)	-7%	28	7%	(2)	-1%	-	0%

DESCRIPTION OF THE MAIN DEFINED BENEFIT PLANS AND ASSOCIATED RISKS

The ERAMET group's main defined benefit plans are offered in France, United States, Gabon and New Caledonia. The main plan assets are therefore located in these countries. The main characteristics of the plans described below relate to these four countries.

Retirement packages are generally paid as a lump sum or annuities determined on the basis of the employee's length of service, final salary or average final remuneration. Pre-retirement and supplementary healthcare benefits and life insurance are also provided under the pension plan, along with long-service awards in the form of a lump sum that varies according to the number of years' service completed.

In the United States, most defined benefit plans are no longer accessible to new employees. They participate in defined contribution plans.

In New Caledonia, the obligations also include the payment of a loyalty bonus awarded after 10 years of service and then every five years, calculated as a percentage of the basic salary, as well as the granting of plane tickets whose number, value and frequency depends on the employee's professional category.

RISKS ASSOCIATED WITH THE PLANS

The ERAMET group is exposed to the standard risks inherent to defined benefit plans, such as higher-than-expected salary increases, increased inflation rates or lower-than-expected returns, as well as actuarial risks, especially investment risk, interest rate risk and longevity risk. The plans are also exposed to the risk of internal negotiation to reach a more favourable agreement, and the risk of increase in taxes or annuities for supplementary pension plans.

GOVERNANCE POLICY

Under the laws governing defined benefit plans, it is the ERAMET group's duty to manage the plan assets and design investment policies that define, for each prefinanced plan, the investment objectives, the asset allocation target, risk mitigation strategies, and other components required by law for pension plans.

INVESTMENT POLICIES AND RISK MANAGEMENT INITIATIVES

The investment policies are designed to obtain long-term return on investment which, combined with contributions, will enable the plans to have sufficient assets to be able to pay the promised benefits while keeping risk at an acceptable level.

The asset allocation target is determined on the basis of the expected market conditions and climate, the maturity profile of plan liabilities, the level of cover of the respective plans, and the risk tolerance of the plans' beneficiaries.

In France, the plans are funded by insurers through Group life insurance contracts. The investments are made by the insurers in their respective euro funds. These funds, of which over 80% is invested in buy and hold rate products, have suffered from a deterioration in bond returns for some years now and are still exposed to default risk on returns in a protracted low interest rate period.

In the United States, the financial management of funds is entrusted to various asset managers who are among the key players in the business. Index-based management is used for the most part and active management for the remainder. Globally, 81% of the asset allocation is in government bonds and American companies, denominated in USD, with the objective of matching the liability duration. The remaining 19% is invested in funds in American equities, world equities and emerging market equities and bonds. The risks inherent to these financial assets are therefore curve risk, duration risk, credit risk and inflation risk for bonds, and market risk and capital risk for equities. Nonetheless, in 2017, the markets in which the assets are invested performed positively.

OVERALL COST OF EMPLOYEE-RELATED LIABILITIES

The cost of employee-related liabilities is recognised in the Income Statement and in the Statement of comprehensive income below:

	PENSION PLANS		END OF CAREER BENEFITS		OTHER BENEFITS		TOTAL EMPLOYEE-RELATED LIABILITIES	
(€ MILLION)	2017	2016	2017	2016	2017	2016	2017	2016
Service cost	3	5	6	6	2	7	11	18
Past service cost[1]	-	(10)	-	(5)	1	-	1	(15)
Net interest expense	2	3	2	3	1	1	5	7
Cost recognised in income	**5**	**(2)**	**8**	**4**	**4**	**8**	**17**	**10**
Impact of revaluation on commitments	(4)	4	6	14	1	1	3	19
• experience	(1)	(3)	-	-	-	-	(1)	(3)
• demographic assumptions	2	9	(1)	11	1	1	2	21
• financial assumptions	(5)	(2)	7	3	-	-	2	1
Impact of revaluation on pension plan assets	(9)	(2)	-			-	(9)	(2)
Cost recognised in other comprehensive income	**(13)**	**2**	**6**	**14**	**1**	**1**	**(6)**	**17**
Total cost recognised in comprehensive income	(8)	-	14	18	5	9	11	27

(1) Pension plan changes and curtailments

The impact of costs of past services in 2016 (€15 million) mainly relates to the change made in some ERAMET Norway plans (see Note 5: Other operating income and expenses).

CHANGE IN OBLIGATIONS AND PLAN ASSETS

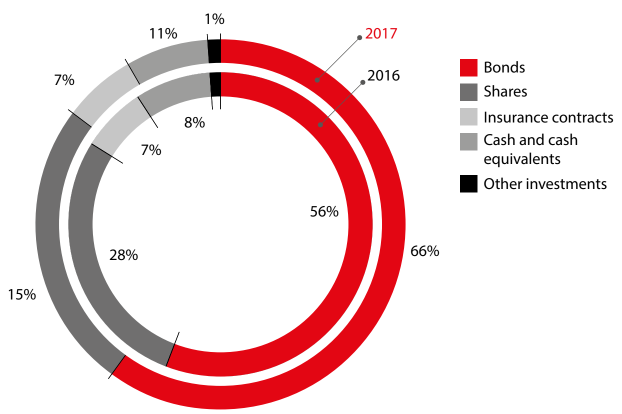
The table below illustrates the change in obligation by plan type, distribution by beneficiary and based on whether or not pre-financing is used, as well as the change in the fair value of the plan assets and its differentiation by category (listed and unlisted assets).

	PENSION PLANS				END OF CAREER BENEFITS				OTHER BENEFITS				TOTAL EMPLOYEE-RELATED			
(€ MILLION)	2017		2016		2017		2016		2017		2016		2017		2016	
Change in obligation																
Obligation at beginning of period	**246**		**322**		**103**		**102**		**47**		**43**		**396**		**467**	
• Cost recognised in income	9		4		9		6		3		8		21		18	
• Impact of revaluation	(4)		4		6		14		1		1		3		19	
• Contributions and benefits paid	(10)		(31)		(4)		(20)		(8)		(4)		(22)		(55)	
• Change to consolidation scope	(1)		(57)		(1)		2		-		1		(2)		(54)	
• Translation differences and other movements	(15)		4		-		(1)		-		(2)		(15)		1	
Obligation at period close	225		246		113		103		43		47		381		396	
Obligation attributable to																
• *Working beneficiaries*	*74*		*96*		*113*		*103*		*35*		*40*		*222*		*239*	
• *Beneficiaries entitled to deferred benefits*	*10*		*10*		-		-		-		-		*10*		*10*	
• *Pensioners*	*141*		*140*		-		-		*8*		*7*		*149*		*147*	
	225		*246*		**113**		*103*		**43**		*47*		**381**		*396*	
Obligation																
• *prefinanced*	*192*	*85%*	*203*	*83%*	*50*	*44%*	*44*	*43%*	-	-	-	-	*242*	*64%*	*247*	*62%*
• *not financed*	*33*	*15%*	*43*	*17%*	*63*	*56%*	*59*	*57%*	*43*	*100%*	*47*	*100%*	*139*	*36%*	*149*	*38%*
	225		*246*		**113**		*103*		**43**		*47*		**381**		*396*	
Change in plan assets																
Fair value of plan assets at beginning of period	**154**		**215**		**23**		**37**		**-**		**-**		**177**		**252**	
• Interest income recognised in income	4		7		-		1		-		-		4		8	
• Impact of revaluation	9		2		-		-		-		-		9		2	
• Contributions paid	9		2		1		1		-		-		10		3	
• Benefits paid	(9)		(30)		-		(16)		-		-		(9)		(46)	
• Change to consolidation scope	(1)		(44)		-		-		-		-		(1)		(44)	
• Translation differences and other movements	(13)		2		-		-		-		-		(13)		2	
Fair value of plan assets at period close (II)	**153**		**154**		**24**		**23**		**-**		**-**		**177**		**177**	
Plan assets																
• *Listed on an active market*	*153*	*100%*	*154*	*100%*	*12*	*50%*	*12*	*52%*	-	-	-	-	*165*	*93%*	*166*	*94%*
• *Unlisted*	-	-	-	-	*12*	*50%*	*11*	*48%*	-	-	-	-	*12*	*7%*	*11*	*6%*
	153		*154*		**24**		*23*		**-**		-		**177**		*177*	
Net liabilities in the balance sheet (I) - (II)	72		92		89		80		43		47		204		219	

The table below shows the breakdown between the main countries, the obligations in connection with employee-related liabilities, plan assets, net liability and financial cover ratio.

	31 DECEMBER 2017				31 DECEMBER 2016			
(€ MILLION)	CURRENT VALUE OF BONDS (A)	FAIR VALUE OF FINANCIAL ASSETS (B)	NET LIABILITIES IN THE BALANCE SHEET (A) + (B)	FINANCIAL COVERAGE RATE - (B)/(A)	CURRENT VALUE OF BONDS (A)	FAIR VALUE OF PLAN ASSETS (B)	NET LIABILITIES IN THE BALANCE SHEET (A) + (B)	FINANCIAL COVERAGE RATE - (B)/(A)
France	198	(73)	125	36.9%	203	(66)	137	32.5%
United States	89	(83)	6	93.3%	104	(90)	14	86.5%
Norway	10	(3)	7	30.0%	12	(3)	9	25.0%
New Caledonia	39	(11)	28	28.2%	39	(11)	28	28.2%
Gabon	35	-	35	-	29	-	29	-
Other countries	10	(7)	3	70.0%	9	(7)	2	77.8%
Total	381	(177)	204	46.5%	396	(177)	219	44.7%

The chart below illustrates how the funds are invested.



PROJECTED CASH OUTFLOWS

The global average term was 14.4 years at 31 December 2017 (31 December 2016: 14.6 years).

In 2018, contributions for employee-related liabilities are estimated at €1 million. Future benefits, whether paid by levies on investments or directly by the ERAMET group, are estimated at €17 million.

BONUS SHARE PLAN AND SHARE-BASED PAYMENTS

ACCOUNTING METHOD

The ERAMET group has established various share award plans that are all equity-settled plans: "democratic" plans open to all employees that are not subject to performance criteria and "selective" plans open to certain employees and corporate officers subject to performance requirements.

The fair value of the services received in consideration for the granting of these options is definitively measured with reference to the fair value of the options on the grant date and the number of options that will have vested by the end of the vesting period.

The total fair value thereby determined is apportioned on a straight-line basis over the full vesting period for the plans, with the number of vested exercisable options assumed at the beginning of the vesting period being reviewed at every reporting date.

This fair value is recognised in Current operating profit (loss) as administrative and selling expenses, offset by an increase in shareholders' equity.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

Judgement must be exercised to determine the fair value of share award plans at the award date.

The fair value of "democratic" plans is estimated using the Black-Scholes-Merton model.

"Selective" plans are subject to two performance conditions: one intrinsic condition based on the ERAMET group's financial performance and one external condition based on the ERAMET stock performance. The fair value of these plans is measured using the Monte Carlo model.

The assumptions used to measure the plans are based on:

- expected volatility determined on the basis of an observation of the stock's historical performance;
- a risk-free zero coupon rate over the term of the plan;
- a future distribution rate based on the average for the last five years.

The bonus share awards to employees with tax residence in France fully vest after a two-year vesting period for democratic plans, and after three years for selective plans, on the understanding that the beneficiaries must retain the shares awarded to them for an additional two years.

The bonus share awards to employees with tax residence outside France fully vest and are freely transferable after a four-year period.

Share-based payments relate only to bonus share plans for the benefit of employees and settled in the form of shares. They represented an expense of €6 million for the 2017 reporting period (FY 2016: €3 million).

Three new bonus share plans were granted on 23 February 2017 and 23 May 2017:

- one plan for all employees on 23 February 2017 for an initial total of 23,626 shares;
- one plan open to certain employees and corporate officers on 23 February 2017, of which:
  - part of the shares are subject to two performance conditions—an internal condition with two indicators (current operating profit/sales and cash flow from operating activities) for two thirds and an external condition for one third—for an initial total of 92,009 shares, and
  - part of the shares are not subject to performance conditions, for an initial total of 50,137 shares;
- a share plan for Ms Christel Bories, in her role as Chairman and Chief Executive Officer with effect from 23 May 2017, amounting to a total of 12,500 performance shares, the characteristics and conditions of which are identical to those of the performance share plan granted to certain employees and corporate officers as described above.

The criteria for share awards and the assessment of the accounting expense are the same as those described above.

The characteristics of the three new bonus share award plans for 2017 are as follows:

		NUMBER OF SHARES	EXERCISE PRICE (€)	MATURITY (YEARS)(1)	RISK FREE RATE	AVERAGE DIVIDEND RATE	FAIR VALUE OF OPTION (€)(2)
Plan open to all employees	France/Italy	10,076	free	2 + 2	-0.37%	1.00%	49.29
	World	13,550	free	4 + 0	-0.07%	1.00%	50.23
Plan open to certain employees and corporate officers	France/Italy	104,291	free	3 + 2	-0.22%	1.00%	50.74/28.33
	France	12,500	free	3 + 2	-0.30%	1.00%	41.86/22.84
	World	37,855	free	4 + 0	-0.07%	1.00%	50.23/28.73

(1) Maturity = vesting period + lock-in period.
(2) Bonus share award plans whose share awards are subject to two performance conditions have two fair values: the first being the intrinsic condition and the second being the external condition.

The change in the number of bonus share awards in the 2016 and 2017 reporting periods was as follows:

(NUMBER OF BONUS SHARES)	31/12/2017	31/12/2016
At beginning of period	**413,709**	**441,191**
New plans 2017/2016	178,272	159,233
Definitive allocations	(64,015)	(51,547)
Prescribed shares	(25,775)	(7,879)
Obsolete stock	(43,671)	(127,289)
At period close	458,520	413,709
Distribution by year of allocation		
2017	-	98,453
2018	114,591	129,279
2019	145,608	143,351
2020	148,987	42,626
2021	49,334	-

NOTE 12 · PROVISIONS

A provision is a debt recorded in the balance sheet. It is an estimated value owing to uncertainty as to the time of payment and the amount to be paid. The main provisions set aside by the ERAMET group relate to site restoration and environmental and social risks (especially restructuring).

ACCOUNTING METHOD

The ERAMET group sets aside a provision, where its amount can be reliably estimated, to cover all liabilities arising from past events that are known at the reporting date and the settlement of which is likely to result in an outflow of resources to settle the liability.

Provisions for site restoration and dismantling, provisions for environmental risks

The provisions for mining site restoration are recognised when mining sites are opened and as and when they show degradation, and are then remeasured and accreted at each reporting date. Where there is a legal or contractual obligation to restore mining or industrial sites, a restoration provision is made, offset by an environmental and dismantling asset. The provision is based on site-by-site estimates of the cost of this work. The asset is amortised over the life of the operation of the mine or the industrial site. Restoration costs are discounted over the period remaining until the expected end of operation of the mine or site, and the effects attributable to the passage of time (accretion expenses) are recognised in Net profit (loss) for the period under Other financial income and expenses (see Note 6).
Provisions are made for all other environmental contingencies on the basis of estimated future costs without, however, making any allowance for insurance indemnities receivable. For industrial sites where there are no plans to discontinue operations, no provision is made for site restoration.
Depending on the governing laws in each country, an environmental bond issued by a banking or financial institution to the benefit of local authorities may need to be set up for the rehabilitation of mining and industrial sites.

Restructuring and redundancy plans

Provisions are made for restructuring and redundancy costs where such measures have been planned in detail and announced before the reporting date or whose implementation has begun.

ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

Provisions for site restoration and dismantling

The Group's industrial sites follow the environmental regulations in force in each country where they are located. The ERAMET group must meet regulatory and constructive obligations with regard to the restoration of certain mining sites at the end of operation.
Provisions for site restoration and dismantling of industrial sites are estimated on the basis of forecast cash flows by maturity and discounted using an inflation rate and a discount rate determined in accordance with local economic conditions.
These provisions are recognised in relation to the immediate deterioration of an asset to be restored or dismantled and changes in assumptions will therefore correct this value with a prospective effect.
The planned end date of operation of the mines or industrial sites does not exceed up the year 2060 in New Caledonia, the years 2032 and 2042 in Gabon and the year 2074 for the industrial sites in the United States.
The ERAMET group measures its provision for site restoration and dismantling at each reporting date or as new information becomes available. The final costs of site restoration and dismantling are therefore uncertain by their very nature. These uncertainties may lead to actual expenditure in the future whose amount may differ from the current provision amount. Therefore, major adjustments may be made to the provisions set aside, which may impact future income.
The provisions made are based on good practice in the sector and are calculated as follows:

- **For mining,** calculation of a cost per hectare for site restoration (replanting, landscaping, soil management, etc.) based on the cleared areas. The costs are based on estimated internal costs or the cost of providers, depending on the nature and complexity of the areas to be restored.
- **For the dismantling of facilities,** cost estimation based on external estimates or experience from dismantling/remediation work performed on other Group sites.
- These costs are inflated and accreted based on the estimated useful lives. The estimated rates, including the discount rate, are fixed according to the same terms as those used for the assessment of employee-related liabilities (see Note 11).

The provision for site restoration represents the best estimate of the discounted value of future costs to be incurred.

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**520**	**597**
Allocations (reversals) for the period	8	19
• allocations for the period	68	71
• used (reversals) for the period	(42)	(50)
• unused (reversals) for the period	(18)	(2)
Accretion expenses	8	9
Dismantling assets	3	13
Translation adjustments and other movements	(14)	(118)
At period close	525	520
• Due after more than one year	494	482
• Due in less than one year	31	38
Environmental contingencies and site restoration	435	404
Employees	17	31
Other liabilities and charges	73	85

SITE RESTORATION, DISMANTLING AND ENVIRONMENTAL CONTINGENCIES

(€ MILLION)	31/12/2017	31/12/2016
Site restoration[(1)]	390	373
Environmental contingencies	45	31
Total	435	404
• (1) of which provisions offsetting a dismantling asset	296	300
• Due after more than one year	435	398
Due in less than one year	*-*	*6*

SITE RESTORATION AND DISMANTLING

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**373**	**349**
Allocations (reversals) for the period	16	7
• allocations for the period	25	12
• used (reversals) for the period	(3)	(5)
• unused (reversals) for the period	(6)	-
Accretion expenses	8	9
Dismantling assets	3	13
Translation adjustments and other movements	(10)	(5)
At period close	390	373
Le Nickel-SLN (New Caledonia)—ERAMET Nickel	315	280
COMILOG (Gabon)—ERAMET Manganese	35	43
ERAMET Marietta (United States)—ERAMET Manganese	26	29
COMILOG France—ERAMET Manganese	14	14
GCMC (United States)—ERAMET Manganese	-	6
Other companies	-	1

REGULATORY FRAMEWORK OF PROVISIONS FOR SITE RESTORATION AND DISMANTLING

New Caledonia

For mining, the 2009 Mining Code establishes the general framework. The provisions are allocated to each of the mine sites in their prefectural operating licence.

For industrial operations governed by ICPE, the regulatory framework is based on Article 3 of the decision of the South Province of 25 September 2008, whose implementation involves the application of certain metropolitan circulars relating to site safety.

The provisions for wash facilities (industrial facilities on mine sites) are for their part included in the ICPE prefectural orders for each of the sites concerned.

Gabon

The existing provisions used as a reference for Gabon have not been set out in detail (no implementing circular). However rehabilitation projects are based on the decree establishing the conditions for application of Law No. 005/2000 of 12 October 2000 (Mining Code), as amended and supplemented by Order 2002 on the Mining Code in the Gabonese Republic.

The provision under Article 78 was also accounted for, in line with Article 21.5 of the COMILOG Mining Convention.

United States

Provision is made for two key components:

- restoration of waste water basins, a regulatory requirement contained in the local permit ("Permit to Install");
- work performed as part of the "Voluntary Action Plan" negotiated with the US Environmental Protection Agency (EPA) in 2010 in connection with the "Ohio waste laws" as part of the cessation of activities at the North site (asbestos removal and dismantling of the corresponding facilities).

The discount and inflation rates used to determine the site restoration and dismantling provisions are detailed below:

	31/12/2017		31/12/2016	
	DISCOUNT RATE	INFLATION RATE	DISCOUNT RATE	INFLATION RATE
United States	3.60%	2.00%	3.80%	2.00%
New Caledonia	2.20%	0.60%	2.60%	0.60%
Gabon	7.00%	2.50%	6.00%	2.50%

An increase or decrease of 0.25% in the discount rate would result in an increase or decrease of around €25 million in provisions at 31 December 2017 (31 December 2016: €14 million), mainly affecting Le Nickel-SLN in New Caledonia.

Estimated expenditure is allocated as follows in percentage terms:

(€ MILLION)	31/12/2017	31/12/2016
2018-2022/2017-2021	6%	15%
2023-2027/2022-2026	8%	13%
2028 and beyond/2027 and beyond	86%	72%

EMPLOYEES

(€ MILLION)	31/12/2016	31/12/2016
ERAMET Alloys	8	18
ERAMET Manganese	3	7
ERAMET Holding	1	2
Restructuring and redundancy plans	**12**	**27**
Other labour liabilities and charges	5	4
Total	17	31

OTHER LIABILITIES AND CHARGES

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
At beginning of period	**85**	**179**
Allocations (reversals) for the period	(6)	15
• allocations for the period	24	23
• used (reversals) for the period	(18)	(8)
• unused (reversals) for the period	(12)	-
Translation adjustments and other movements	(6)	(109)
At period close	73	85
Provision for free return—Concession	28	26
Provisions for tax contingencies	5	18
Commercial disputes	5	5
Other provisions for liabilities and charges	35	36

NOTE 13 - RELATED-PARTY TRANSACTIONS

ACCOUNTING METHOD

Transactions with related parties comprise the following:
- ordinary transactions with non-consolidated companies and associates;
- gross compensation and benefits to directors and members of the Executive Committee.

CURRENT TRANSACTIONS WITH NON-CONSOLIDATED COMPANIES AND ASSOCIATES

INCOME STATEMENT

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales		
• Non-consolidated controlled subsidiaries	24	26
• Associates and joint ventures	8	6
Cost of sales, administrative and selling expenses		
• Non-consolidated controlled subsidiaries	(4)	(4)
• Associates and joint ventures	(50)	(49)
Net debt cost		
• Non-consolidated controlled subsidiaries	-	-
• Associates and joint ventures	-	-

The cost of sales and administrative and selling expenses mainly correspond to Aubert & Duval's purchases from UKAD (a company accounted for using the equity method of accounting).

BALANCE SHEET

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Trade and other receivables		
• Non-consolidated controlled subsidiaries	10	22
• Associates and joint ventures	26	27
Trade and other payables		
• Non-consolidated controlled subsidiaries	3	1
• Associates and joint ventures	10	10
Net financial assets (liabilities)		
• Non-consolidated controlled subsidiaries	9	10
• Associates and joint ventures	60	64

GROSS COMPENSATION AND BENEFITS TO DIRECTORS AND MEMBERS OF THE EXECUTIVE COMMITTEE

(€ THOUSAND)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Short-term benefits		
• Fixed compensation	3,291	2,414
• Variable compensation	2,573	1,913
• Attendance fees	765	843
Other benefits		
• Post-employment benefits	3,692	673
• Retirement package	-	-
• Compensation paid in shares	1,205	1,193
Total	11,526	7,036

NOTE 14 - OFF-BALANCE SHEET COMMITMENTS, OTHER COMMITMENTS, CONTINGENT LIABILITIES AND OTHER DISCLOSURES

The ERAMET group has reached agreements with third parties to cover the good performance of its obligations. These obligations are dependent upon subsequent events that may result in the ERAMET group's making or receiving a payment. They are not recognised in the balance sheet if they are not likely to increase the obligations already reported in the balance sheet.

OFF-BALANCE SHEET COMMITMENTS

(€ MILLION)	31/12/2017	31/12/2016
Commitments made	270	298
• Operating activities	105	106
• Financing activities	165	192
Commitments received	5	14
• Operating activities	5	14
• Financing activities	-	-
Available credit facilities	730	-

These commitments mostly relate to:

- operating activities: client and environmental bank guarantees, other endorsements and bank guarantees (customs, leases), letters of credit;
- financing activities: guarantees, pledges, collateral and mortgages for external financing of equity method and non-consolidated companies.

FUNCTIONAL GUARANTEES FOR THE PERFORMANCE OF BUSINESS CONTRACTS

Functional guarantees are any commitments relating to business contracts, given by ERAMET and its subsidiaries to clients.

These commitments mainly consist of advance payment bonds and product guarantees post delivery of goods.

To finance the performance of the contract, the ERAMET group collects advance payments from the client. To guarantee their refund in case of a breach of its contractual obligations, the ERAMET group may, at the client's request, establish an advance payment bond. These bank guarantees amounted to €16 million at 31 December 2017 (31 December 2016: €16 million).

Product warranties fall under the ERAMET group's limit of liability defined contractually for each business contract. The ERAMET group does not recognise provisions for guarantees given that there have been no warranty claims from its clients.

The ERAMET group considers its financial risk relative to all the above guarantees to be low, based on historical data and on the existence of civil liability policies that would limit the financial consequences on the Group's consolidated financial statements.

FINANCING ACTIVITIES

Off-balance sheet commitments relating to financing activities mainly correspond to the commitments given in respect of the ERAMET group's share in the TiZir Ltd bond issue and the commitments given to MDL in the context of the financing of the joint venture, TiZir Ltd, through a subordinated loan (see Other commitments).

OTHER COMMITMENT RECEIVED

The company Le Nickel-SLN has a €50 million available financing from the French State out of a total of €200 million due on June 30, 2024. The amount drawn at the end of 2017 amounts to €150 million (unchanged on 2017).

FUTURE LEASE PAYMENTS

(€ MILLION)	31/12/2017	31/12/2016
Less than one year	27	32
One year to five years	80	84
More than five years	103	107
Total	210	223

OTHER COMMITMENTS

INVESTMENT IN SENEGAL THROUGH THE TIZIR LTD JOINT VENTURE

The ERAMET group, together with its partner Mineral Deposits Ltd (MDL), has expanded its investment in the mineral sands operation in Senegal.

In addition to the initial investment, each partner contributed USD 137.5 million as capital, the full amount of which was paid out in 2013. Furthermore, the ERAMET group (via ERAMET S.A.) granted a shareholders' loan of USD 45 million to TiZir Ltd, the full amount of which was paid out in 2013.

The partners were also party to a mutual USD 25 million guarantee covering certain specific contingencies.

The two partners contributed equally to financing the joint venture through a subordinated loan of USD 105 million, of which the last tranche was paid out in September 2015.

In 2015, the ERAMET group committed to granting a loan to MDL to the extent that the latter would not be able to honour some of the calls for funds.

At 31 December 2016, the ERAMET group (via Eralloys Holding, a wholly-owned subsidiary of ERAMET S.A.) granted a loan of USD 13.2 million to MDL to allow the company to make its contribution to calls for funds from 22 December 2015 onwards. MDL repaid this loan in full to Eralloys Holding in 2017.

TRANS-GABON RAILWAY CONCESSION—SETRAG

Under the terms of the 2005 agreement, signed for an initial period of 30 years, SETRAG, the concession holder, is required to meet operating capacity targets (volume of goods and number of passengers).

The concession holder is free to set prices. Its main shareholder, COMILOG, is committed to ensuring that the necessary funding is made available to cover the capital expenditure required to achieve the operating capacity targets.

On 16 October 2015, SETRAG and the Gabonese Republic signed an amendment to the concession agreement for the management and operation of the Trans-Gabon railway. The aim of the amendment is to sustainably restore the technical capacity of the railway and the economic viability of the concession holder. This amendment thus provides for a remedial investment plan estimated at €316 million over eight years, of which €93 million will be provided by the Gabonese state and €213 million by SETRAG. The necessary funding for the implementation of this plan was put in place in 2016.

At 31 December 2017, cumulative investments amounted to €38 million, broken down into €24 million and €14 million respectively in 2017 and 2016. Two tranches of the IFC/Proparco loan were drawn in 2017, amounting to a total of €33 million.

CALL OPTION ON PT WEDA BAY NICKEL IN FAVOUR OF PT ANTAM

The Indonesian state company Pt Antam, which owns 10% of Pt Weda Bay Nickel, has a call option exercisable between the submission date of a feasibility study by an independent banking institution and 30 days later. This option, which relates to 15% of Pt Weda Bay Nickel's share capital, will be priced at 150% of the expenses incurred at the time of the decision to begin construction. Pt Antam also has an additional call option exercisable during the first 60 days of the 14th year of production on an interest of between at least an additional 5% and the percentage required to hold a maximum interest of 40%. If Pt Weda Bay Nickel's shares are listed, the price of the shareholding will be calculated based on the average market price for the 60 days preceding and 60 days following the option exercise. If Pt Weda Bay Nickel is not listed, the shareholding value will be assigned by independent experts.

CONTINGENT LIABILITIES

Contingent liabilities arise from:

- past events which, by nature, can be solved only if one or more unpredictable future events occur or do not occur;
- a current obligation resulting from past events but not recognised because:
  - it is not likely that an outflow of resources embodying economic benefits will be required to settle the obligation, or
  - the amount of the obligation cannot be measured with sufficient reliability.

To measure their potential impact, the ERAMET group exercises judgement to a great extent and may rely on estimated outcomes of future events.

Contingent liabilities are not recognized in the financial statements unless they arise from a business combination. Significant contingent liabilities are, if any, described in the notes.

TAX AUDIT IN ITALY

Aubert & Duval is subject to a tax audit for the years 2009 to 2016, focusing on the assumption of the existence of a permanent establishment in Italy.

Aubert & Duval's tax audit for 2009 to 2016 ended this year with a settlement of €1.7 million in favour of the Italian tax authorities.

COMILOG CUSTOMS INSPECTION

In 2017, COMILOG continued discussions with the customs tax administration as part of its audit. It is not possible to comment on the outcome of the review at this stage in proceedings.

ENVIRONMENTAL LIABILITIES

On certain sites there are pollution indices for which it is not possible to determine (i) the precise nature, (ii) the extent, (iii) the remediation obligations, (iv) the date of completion, making it impossible to reliably determine an amount of potential commitment and its maturity.

If assumptions such as the cease of the activity, a regulatory change, site operating conditions were to occur, the Group would be led to review its position and recognised a provision based on these most current information.

OTHER INFORMATION

ICPE (FACILITIES CLASSIFIED FOR ENVIRONMENTAL PROTECTION) REGULATION APPLICABLE TO THE DONIAMBO ELECTRIC POWER PLANT

By order of the President of the Assembly of South Province, New Caledonia on 12 November 2009, new, more stringent technical directives regarding airborne emissions were declared applicable at the latest by 1 September 2013 in the present electric power plant at Doniambo. By order of 27 December 2016, the President of the Assembly of South Province extended the deadline for the application of the new limits for airborne emissions to 30 June 2019.

GCMC AND BMC PLACED UNDER CHAPTER 11 PROTECTION

In June 2016, GCMC, a wholly-owned subsidiary of COMILOG, specialising in the recycling of oil catalysts in the United States, and its wholly owned subsidiary BMC, filed a voluntary petition before the competent court in Pennsylvania for protection under Chapter 11 of the US Bankruptcy code. Chapter 11 allows companies to continue operating for the duration of the proceedings and may facilitate the search for a buyer.

The two companies have found buyers for their assets and the two legal structures are being liquidated as at 31 December 2017.

NOTE 15 - FEES PAID TO THE STATUTORY AUDITORS

	ERNST & YOUNG		KPMG		OTHER		TOTAL	
(€ THOUSAND)	2017	2016	2017	2016	2017	2016	2017	2016
Statutory audit, certification, examination of individual and consolidated financial statements								
• ERAMET S.A.	205	178	219	222	-	-	424	400
• Fully consolidated companies	890	857	707	768	87	422	1,684	2,047
Sub-total	**1,095**	**1,035**	**926**	**990**	**87**	**422**	**2,108**	**2,447**
	75 %	*82 %*	*65 %*	*76 %*	*86 %*	*100 %*	*70 %*	*82 %*
Other work and services directly relating to the statutory audit								
• ERAMET S.A.	88	44	55	73	-	-	143	117
• Fully consolidated companies	133	104	48	25	2	-	183	129
Sub-total	**221**	**148**	**103**	**98**	**2**	**-**	**326**	**246**
	15%	*12%*	*7%*	*8%*	*2%*	*0%*	*11%*	*8%*
Other services provided by the Statutory Auditor firms to fully consolidated subsidiaries								
• Legal, tax and employee-related	112	46	394	210	12	-	518	256
• Other	39	33	4	4	-	-	43	37
Sub-total	**151**	**79**	**398**	**214**	**12**	**-**	**561**	**293**
	10%	*6%*	*28%*	*16%*	*12%*	*0%*	*19%*	*10%*
Total	1,467	1,262	1,427	1,302	101	422	2,995	2,986

NOTE 16 - EVENTS AFTER THE REPORTING DATE

REPAYMENT OF THE REVOLVING CREDIT FACILITY BALANCE AND DECREASE IN THE OUTSTANDING BALANCE

The balance of €250 million of the revolving credit facility (RCF) was repaid in full on 18 January 2018.

On February 13, 2018, this Revolving Credit Facility was extended for an amount of €981 million and a five-year term, led to a new maturity in January 2023. The available amount is maintained at €981 million.

NOTE 17 - BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

GENERAL PRINCIPLES AND DECLARATION OF COMPLIANCE

Pursuant to European Regulation 1606/2002 of 19 July 2002 on the application of international accounting standards, the consolidated financial statements of the ERAMET group for the financial year ended 31 December 2017 have been prepared in Euros rounded to the nearest million, unless instructed otherwise, in accordance with IFRS (International Financial Reporting Standards) as adopted by the European Union at 31 December 2017.

The accounting principles applied for the preparation of the annual consolidated financial statements are in line with IFRS and the related interpretations, as adopted by the European Union at 31 December 2017 and available on the website: http://ec.europa.eu/finance/accounting/ias/index_fr.htm.

The accounting principles and methods adopted for the consolidated financial statements at 31 December 2016 are those that were used for the consolidated financial statements at 31 December 2015, except for the IFRS interpretations, standards and amendments adopted by the European Union and IASB whose application is mandatory for reporting periods opened as from 1 January 2017 (and for which the ERAMET group had not opted for early application).

These standards and amendments have had no impact on the ERAMET group's consolidated financial statements.

The ERAMET group did not adopt the standards, interpretations and amendments published respectively by IASB and IFRS IC (IFRS Interpretations Committee) whose application was not mandatory for the reporting periods opened as of 1 January 2017. These are currently being studied to estimate their potential impact.

PROGRESS ON PROJECTS TO IMPLEMENT NEW IFRS STANDARDS (IFRS 9, IFRS 15, IFRS 16)

IFRS 9 Financial Instruments applies as of 1 January 2018. The application of this new standard will not have a significant impact on recognition or classification and measurement of financial assets and liabilities. The change in approach in relation to hedge accounting will also have no impact on the consolidated financial statements.

IFRS 15, Revenue from Contracts with Customers, effective from 1 January 2018, will not have a significant impact on revenue recognition despite the sub-division of certain sales into two distinct performance obligations (sales of goods and transport/insurance).

Specific analyses of the revenue recognition of tools and dies of the Alloys division, especially in relation to the assignment of the use of dies to revenues generated from mass production (long-term contracts), did not reveal any divergence between the current treatment and IFRS 15 requirements.

The impact of the application of **IFRS 16, Leases**, as of 1 January 2019, is currently being assessed with the completion of a detailed lease inventory. This assessment is based on the procedures in place to report information relating to off-balance sheet commitments (see Note 14 on future lease commitments). A dedicated management tool was put in place in the second half of 2017 to enable the operational monitoring of contracts and to automate any restatements. The application of this new standard will have an upward impact on net debt and fixed assets and an improvement in EBITDA.

CONSOLIDATION PRINCIPLES AND SCOPE

CONSOLIDATION PRINCIPLES

The consolidated financial statements of ERAMET group comprise the financial statements of ERAMET and those of its fully-consolidated and equity-method subsidiaries.

The subsidiaries are fully consolidated if ERAMET holds exclusive direct or indirect control. ERAMET has exclusive control over a subsidiary when it is exposed to variable returns from its involvement with that subsidiary and has the ability to affect those returns through its power over the subsidiary. ERAMET reassesses its control over a subsidiary if facts and circumstances indicate a change in any of the elements of control.

The subsidiaries are accounted for using the equity method if ERAMET exercises joint control or has significant influence (Note 9). The equity method of accounting consists of replacing the carrying amount of the holding in a joint venture or an associate by the acquisition cost of these shares adjusted for ERAMET's share in the equity at the reporting date.

TRANSLATION OF FOREIGN CURRENCY-DENOMINATED TRANSACTIONS AND FINANCIAL STATEMENTS

Foreign currency transactions are translated at the applicable exchange rate at the time of the transaction. Foreign currency debts and receivables are measured at the closing rate. Translation adjustments resulting from this conversion are recognised in income for the period, except those involving loans and borrowings between the ERAMET group companies, considered an integral part of the net investment in a foreign subsidiary. These are recognised directly in shareholders' equity under Translation adjustments, linked to the foreign subsidiary.

The financial statements of foreign entities with functional currencies other than the euro were translated using the official exchange rates at 31 December 2017 for balance sheet items, except for shareholders' equity, for which historical rates were applied. Items from the Profit and loss account and Statement of cash flows are translated at the average rate over the period. Translation adjustments stemming from currency fluctuations used to translate shareholders' equity and profit (loss) for the period are allocated to reserves. Translation adjustments are carried as a change to shareholders' equity and broken down between Group and non-controlling interests. Where a foreign subsidiary ceases to be consolidated, the cumulative amount of translation differences is recognised in profit or loss for the period.

The main currencies used preparing the consolidated financial statements for the 2016 and 2017 reporting periods are as follows (conversion into euro):

	FINANCIAL YEAR 2017		FINANCIAL YEAR 2016	
CURRENCY/CONVERSION RATE FOR €1	CLOSING	AVERAGE	CLOSING	AVERAGE
US dollar	1.1993	1.12767	1.0541	1.10732
Norwegian krone	9.8403	9.32025	9.0863	9.30045
Yuan renminbi	7.8044	7.62086	7.3202	7.34816
CFA franc (pegged)	655.957	655.957	655.957	655.957
CFP franc (pegged)	119.33174	119.33174	119.33174	119.33174

SCOPE OF CONSOLIDATION

(NUMBER OF COMPANIES)	31/12/2017	31/12/2016
Fully consolidated companies	49	50
Equity method companies	6	7
Number of consolidated companies	55	57

FINANCIAL YEAR 2017

At 31 December 2017, the following changes have been made to the consolidation scope compared to 31 December 2016:

- **additions to consolidation scope comprise,** as of 1 January 2017, Brown Europe, a wholly-owned subsidiary of ERAMET Holding Alloys; ERAMET Sandouville, a wholly-owned subsidiary of ERAMET Holding Nickel; and, as of 1 July 2017, the newly established ERAMET Nickel SAS, a wholly-owned subsidiary of ERAMET Holding Nickel;
- **removals from consolidation scope:**
  - Eurotungstène following its sale finalised on 3 April 2017,
  - GCM Liquidation Co (formerly GCMC), currently in liquidation;
- **acquisition by Erasteel of a 51% interest in HeYe Erasteel Innovative Materials Co Ltd (HEIML),** which became Erasteel Innovative Materials Co Ltd (EIML) and was fully consolidated as of September 2017;
- **merger of ERAMET Alloys** with ERAMET Holding Alloys;
- **mergers of Cominc and Poum** with Le Nickel-SLN.

FINANCIAL YEAR 2016

At 31 December 2016, the following changes have been made to the consolidation scope compared to 31 December 2015:

- **removals from consolidation scope** (see Key events in the reporting period):
  - ERACHEM subsidiaries following the sale of the company to PMHC II on 30 December 2016 (see Key events in the reporting period): ERACHEM COMILOG Inc., ERACHEM COMILOG Sprl, COMILOG US, GECC, ERACHEM Mexico,
  - the legal entity of BMC, following the sale of its assets and the liquidation of the company expected in early 2017,
  - Somivab, following the sale of the company;
- **additions to consolidation scope** at 1 January 2016 of the following wholly-owned subsidiaries of ERAMET: ERAMET Services, ERAMET Engineering, ERAMET Research;
- **addition to consolidation scope** at 1 January 2016 of EcoTitanium, established in 2015, of which ERAMET holds a 21.75% interest and consolidated using the equity method;
- **ERAMET's acquisition of a 33.4% stake in Strand Minerals Pte Ltd** from Mitsubishi and Pamco (see Key events in the reporting period).

All companies within the scope of consolidation share the same reporting date of 31 December.

LIST OF COMPANIES WITHIN THE SCOPE OF CONSOLIDATION AS AT 31 DECEMBER 2017

COMPANY	COUNTRY	HEAD OFFICE	CONSOLIDATION METHOD	PERCENTAGE (%)	
				CONTROL	INTEREST
ERAMET	**France**	**Paris**	**Consolidating entity**	-	-
Nickel					
Le Nickel-SLN	New Caledonia	Nouméa	Fully consolidated	56	56
Weda Bay Minerals Inc.	Canada	Halifax	Fully consolidated	100	100
Weda Bay Mineral Singapore Pte Ltd	Singapore	Singapore	Fully consolidated	100	100
Strand Minerals Pte Ltd	Singapore	Singapore	Fully consolidated	100	100
Pt Weda Nickel Ltd	Indonesia	Jakarta	Fully consolidated	90	90
ERAMET Holding Nickel	France	Paris	Fully consolidated	100	100
ERAMET Sandouville	France	Sandouville	Fully consolidated	100	100
ERAMET Nickel SAS	France	Paris	Fully consolidated	100	100
Manganese					
ERAMET Holding Manganese	France	Paris	Fully consolidated	100	100
ERAMET COMILOG Manganese	France	Paris	Fully consolidated	100	81.86
ERAMET Marietta Inc.	United States	Marietta	Fully consolidated	100	100
ERAMET Norway A/S	Norway	Porsgrunn	Fully consolidated	100	100
Eralloys Holding A/S	Norway	Baerum	Fully consolidated	100	100
DNN Industrier A/S	Norway	Odda	Fully consolidated	100	100
COMILOG S.A.	Gabon	Moanda	Fully consolidated	63.71	63.71
SETRAG S.A.	Gabon	Libreville	Fully consolidated	100	63.71
COMILOG Holding	France	Paris	Fully consolidated	100	63.71
COMILOG International	France	Paris	Fully consolidated	100	63.71
Port Minéralier d'Owendo S.A.	Gabon	Libreville	Fully consolidated	97.24	61.95
COMILOG France	France	Paris	Fully consolidated	100	63.71
COMILOG Dunkerque	France	Paris	Fully consolidated	100	63.71
TiZir Ltd	United Kingdom	London	Equity method	50	50
TiZir Titanium & Iron A/S	Norway	Tyssedal	Equity method	50	50
TiZir Mauritius Ltd	Mauritius	Mauritius	Equity method	50	50
Grande Côte Opérations S.A.	Senegal	Dakar	Equity method	45	45
COMILOG Asia Ltd	Hong Kong	Hong Kong	Fully consolidated	100	92.74
COMILOG Asia Ferro Alloys Ltd	Hong Kong	Hong Kong	Fully consolidated	100	92.74
Guilin COMILOG Ferro Alloys Ltd	China	Guangxi	Fully consolidated	100	92.74
COMILOG Far East Development Ltd	Hong Kong	Hong Kong	Fully consolidated	100	92.74
ERAMET COMILOG Shanghai Trading Co. Ltd	China	Shanghai	Fully consolidated	100	92.74
ERAMET COMILOG Shanghai Consultancy Services Co. Ltd	China	Shanghai	Fully consolidated	100	92.74
Alloys					
Erasteel SAS	France	Paris	Fully consolidated	100	100
Erasteel Champagnole	France	Champagnole	Fully consolidated	100	100
Valdi	France	Paris	Fully consolidated	100	100
Erasteel Kloster AB	Sweden	Söderfors	Fully consolidated	100	100
Erasteel Stubs Ltd	United Kingdom	Warrington	Fully consolidated	100	100
Erasteel Inc.	United States	New Jersey	Fully consolidated	100	100
Erasteel Trading Ltd	China	Tianjin	Fully consolidated	100	100
Erasteel Innovative Materials Co Ltd	China	Tianjin	Fully consolidated	100	100
ERAMET Holding Alloys	France	Paris	Fully consolidated	100	100
Aubert & Duval	France	Paris	Fully consolidated	100	100
Interforge	France	Clermont-Ferrand	Fully consolidated	94	94
Brown Europe	France	Laval-de-Cère	Fully consolidated	100	100
EcoTitanium	France	Paris	Equity method	21.75	21.75
UKAD	France	Paris	Equity method	50	50

COMPANY	COUNTRY	HEAD OFFICE	CONSOLIDATION METHOD	PERCENTAGE (%) CONTROL	PERCENTAGE (%) INTEREST
Holding and others					
Eras SA	Luxembourg	Luxembourg	Fully consolidated	100	100
Metal Securities	France	Paris	Fully consolidated	100	100
Metal Currencies	France	Paris	Fully consolidated	100	100
ERAMET Services	France	Paris	Fully consolidated	100	100
ERAMET Research	France	Trappes	Fully consolidated	100	100
ERAMET Ingénierie	France	Trappes	Fully consolidated	100	100
Eramine	France	Paris	Fully consolidated	100	100
Bolera Minera S.A.	Argentina	Buenos Aires	Fully consolidated	82.43	82.43
Eramine Sud America S.A.	Argentina	Buenos Aires	Fully consolidated	100	100

GLOSSARY

EBITDA
Earnings before financial income and expenses and other operating income and expenses, income tax, provisions for liabilities and charges, and depreciation of property, plant and equipment and amortization of intangible assets.

Current operating profit (loss)
Includes EBITDA, depreciation of property, plant and equipment, amortization of intangible assets and provisions for liabilities and charges. The current operating profit (loss) excludes material transactions that are considered unusual in nature, in particular events related to restructuring and impairment loses, shown in operating income and expenses.

Net profit (loss), Group share
Net profit for the period after tax, attributable to ERAMET shareholders, after accounting for the non-controlling interest in each of the ERAMET group companies

OCI (Other Comprehensive Income)
Transactions for which the change in value of an asset or liability is recognised directly in equity without passing through the profit and loss account. This is the case, for example, for unrealized gains or losses on hedging instruments, actuarial gains and losses relating to employee benefits, and certain translation differences.

Industrial investments
Includes the acquisition of property, plant and equipment and intangible assets.

Group reporting
Financial information prepared for the Executive Committee, the chief operating decision-maker (CODM), in which the operating performance of joint ventures, the subgroup TiZir Ltd and the company UKAD are accounted for using the proportionate consolidation method. This information is reconciled with published data and is used to measure the performance of the ERAMET group and its divisions (segment information—see note 3). It is also used for the ERAMET group's financial reporting.

Net financial debt
Represents the gross financial debt (long- and short-term borrowings) less cash and cash equivalents and current financial assets. These items include the valuation of debt-hedging derivatives.

Gearing
Ratio of net financial debt to total equity (Group non-controlling interest).

Financial liquidity
Includes cash and cash equivalents, current financial assets and the available amount in the credit facilities made available to ERAMET group companies.

3.2.7 AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2017

This is a translation into English of the Statutory Auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This Statutory Auditors' report includes information required by European regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting

OPINION

In compliance with the engagement entrusted to us by your General Meeting, we have audited the accompanying consolidated financial statements of ERAMET S.A. for the year ended 31 December 2017.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 December 2017 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

BASIS FOR OPINION

AUDIT FRAMEWORK

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

INDEPENDENCE

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 January 2017 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5-(1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

JUSTIFICATION OF ASSESSMENTS—KEY AUDIT MATTERS

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the current period consolidated financial statements, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

IMPAIRMENT TEST OF GOODWILL, TANGIBLE AND INTANGIBLE ASSETS AND INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

Risks identified

As indicated in Note 9 to the consolidated financial statements, the Group performs impairment tests for goodwill and indefinite life intangible assets systematically at least once a year during the year end closing process, or when there is an indication of impairment. For intangible assets and property, plant and equipment with finite lives, impairment tests are carried out when there are indications of impairment.

Cash-generating units (CGU) are homogeneous groups of assets whose continuous use generates independent cash flows. Impairment tests are performed for each CGU. All intangible assets, including goodwill, and all items of property, plant and equipment are allocated to CGUs.

These procedures are also used by the ERAMET group to assess the recoverable value of its share of the net assets of a CGU which is accounted for under the equity method, as is the case for the CGU Grande Côte, owned by Tizir which itself is accounted for under the equity method.

The ERAMET group management determines the relevant indicators the unfavourable development of which would constitute evidence of impairment. An impairment test is carried out on the CGUs concerned when these indicators show a negative development.

Impairment testing consists in comparing the carrying amount of assets with their recoverable amount, which is defined as the higher of the value in use (or recoverable amount through use) and the fair value (or recoverable amount through sale, costs to sell).

To determine the value in use, the ERAMET group mainly uses the method of discounted future cash flows generated from the use of the assets, or another method if the circumstances provide another way of determining the market value. The data used to calculate the discounted forecast cash flows is taken from the annual budgets and multiyear plans prepared by the Management of the concerned CGUs.

Impairment losses are calculated as the difference between the recoverable and net book value of an asset.

At 31 December 2017, goodwill, intangible and tangible assets and investments in joint ventures and associates totalled €2,388 million, or 39% of assets.

These impairment tests represent a key audit matter due to the significant importance of the value of these fixed assets in Group's consolidated financial statement and because the determination of their recoverable value, most often based on forecasts of discounted future cash flows, requires the use of assumptions, estimates or assessments.

Audit procedures implemented in response to identified risks

We examined the process of identifying the impairment indicators and the procedures for implementing these impairment tests, in particular for the CGUs of the following Mining Division: SLN, Gabon Grande Côte Manganese alloys, and for the Aubert & Duval CGU of the Alloys Division.

The Group describes its impairment testing methodology in Note 9 to the consolidated financial statements. We have assessed:

- the completeness of the components of the carrying value of the group of CGUs relating to the tested activities and the consistency of the determination of this value with the way in which the cash flow projections were determined for the value in use;
- the consistency of past and future cash flows, with management's most recent estimates as presented to the Board of Directors as part of the budget process;
- the consistency of the information taken into account in these models with regard to our knowledge of the sector and our knowledge of the activity gained while performing our duties, in particular the examination of the strategic plan and through interviews with management control;
- the consistency of the price parameters used by the Company with industry consensus for Nickel, the Company's internal analyses and the external sources used by the Company for Manganese;
- the appropriateness of discount rates applied to the estimated cash flows by analysing, in particular, that the different parameters of the weighted average cost of capital of each CGU make it possible to approximate the rate of return expected by market participants for similar activities;
- sensitivity analyses of value in use performed by management, taking into account a reasonably possible change in the key assumptions used;
- the mathematical accuracy of the calculations.

Lastly, we assessed the appropriateness of the information disclosed in the notes to the consolidated financial statements in this regard.

PROVISIONS FOR SITE DISMANTLING AND RESTORATION

Risks identified

As mentioned in Note 12 to the consolidated financial statements, the Group recognises provisions for site dismantling and restoration to cover its environmental obligations, mainly in New Caledonia. As at 31 December 2017, these provisions for the entire Group amounted to €390 million.

These provisions are estimated on the basis of forecast cash flows, classified by maturity and discounted by applying an inflation rate and a discount rate calculated using local economic parameters.

These provisions are recognised in relation to the immediate deterioration of an asset to be restored or dismantled and subsequent changes in assumptions will correct this value with a prospective effect.

These provisions are assessed at each closing or when new information becomes available. The final costs of site restoration and dismantling are therefore uncertain by their very nature. These uncertainties may lead to actual expenditure in the future which amount may differ from the current provision amount.

We identified this topic as a key audit matter given the significance of the amounts involved, the sometimes distant time horizons of the estimates, the sensitivity of the assumptions and the level of management judgement required to determine these provisions.

Audit procedures implemented in response to identified risks

As part of our audit of the consolidated financial statements, our work on this subject mainly consisted of:

- interviewing the persons in charge of environmental matters of the company Le Nickel-SLN (New Caledonia) and the Group in relation to its obligations, as well as in relation to communication with the authorities;
- examining the procedures implemented by the Group to identify and list all of its obligations;
- assessing the accounting framework and the permanence of the methods applied;
- examining the Group's analysis of the relevant documentation, including external consultations;
- assessing the reasonableness of the various parameters and assumptions used by management to estimate the amount of these provisions, including:
  - inventory of goods and facilities to be dismantled, areas to be restored,
  - cost of restoration, particularly with regard to external quotations obtained,
  - remaining period of use of the facilities and exploitation of the deposits in accordance with the technical analyses and the mining plan,
  - assumptions used in relation to inflation and discounting.

Lastly, we examined the appropriateness of information disclosed in the notes to the consolidated financial statements in this regard.

VERIFICATION OF THE INFORMATION PERTAINING TO THE GROUP PRESENTED IN THE MANAGEMENT REPORT

As required by law we have also verified in accordance with professional standards applicable in France the information pertaining to the Group presented in the management report of Board of Directors.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

APPOINTMENT OF THE STATUTORY AUDITORS

We were appointed as Statutory Auditors of ERAMET S.A. by General meeting: the annual general meeting held on 29 May 2015 (for KPMG Audit and Ernst & Young Audit).

As at 31 December 2017, KPMG Audit and Ernst & Young Audit were in the third year of total uninterrupted engagement.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

OBJECTIVES AND AUDIT APPROACH

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

REPORT TO THE AUDIT COMMITTEE

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters, that we are required to describe in this audit report.

We also provide the Audit Committee the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

The Statutory Auditors

Paris-La Défense, 20 February 2018	Paris-La Défense, 20 February 2018
KPMG Audit	Ernst & Young Audit
Division of KPMG S.A.	
Denis Marangé	Jean-Roch Varon
Partner	*Partner*

3.3 INDIVIDUAL FINANCIAL STATEMENTS FOR 2017

(€ MILLION)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Sales	634	585
Operating income	(71)	(45)
Financial income	18	(136)
Extraordinary income	33	6
Net income	(18)	(166)

3.3.1 GENERAL COMMENTS

Sales of metallurgical products were up 8.4% from 2016 due to the increase in average selling price from USD 4.35/lb in 2016 to USD 4.73/lb in 2017 in connection with the evolution of nickel prices.

Tonnages sold reached 58.5 thousand tonnes in 2017, an increase of 4.3% compared to 2016 (56.1 thousand tonnes).

Operating losses increased from -€45 million in 2016 to -€73 million in 2017. This increase, despite the upturn in sales, is mainly due to the negative effect of the Sandouville products business and the impact of the bonus share plan as a result of the significant increase in the value of the ERAMET share price.

The financial result is mainly composed of the reversal of the €24.5 million provision for Aubert and Duval equity securities offset by an increase in net financial expenses due to the drop in the rate of investment returns combined with the increase in gross debt following the bond issue.

The net foreign exchange result for 2017 is a net income of €7.5 million compared to a break-even situation in 2016, mainly due to the net revaluation of intercompany loans and debts in foreign currency.

The extraordinary result for 2017 essentially consists of net capital gains on the sale of the Group's offices in the Tour Montparnasse of €20.5 million, capital gains on ERAMET Sandouville's individual assets of €9.4 million, a reversal of exceptional depreciation resulting from disposals or contributions and charges related to the Lithium project amounting to €5.9 million.

After a net income tax expense for tax consolidation, the result is a loss of €18 million in 2017 compared to a loss of €166 million in 2016.

3.3.2 INCOME STATEMENT

(€ THOUSAND)	NOTES	FY2017	FY2016
Sale of goods and merchandise		581,169	530,513
Income from ancillary activities		52,950	54,576
Sales	**5.1**	**634,119**	**585,089**
Change in inventories of finished products and work in progress		(26,962)	(8,143)
Capitalised production		0	232
Operating subsidies		299	166
Reversals of provisions and amortisation, transfer of charges		43,092	35,129
Other income		8	12
Other income		**16,437**	**27,396**
Total operating income		650,556	612,485
Purchase of goods		507,279	470,962
Changes in inventories (goods)		219	(27,145)
Purchase of raw materials and other supplies		26,330	45,860
Changes in inventories (raw materials and supplies)		25,795	4,684
Purchases and external charges		65,985	71,486
Taxes, duties and other levies		2,351	3,580
Wages and salaries		26,717	32,361
Social charges		33,999	24,853
Depreciation and amortisation		7,184	7,989
Provisions for current assets		294	4,311
Provisions for liabilities and charges		22,620	15,314
Other expenses		3,144	3,395
Total operating expenses		721,917	657,649
Operating income		**(71,361)**	**(45,164)**
Financial income	**5.4**	**17,708**	**(135,544)**
Current income before taxes		**(53,653)**	**(180,709)**
Extraordinary income	5.5	32,530	6,333
Income taxes		3,393	8,821
Net income		(17,730)	(165,554)

3.3.3 BALANCE SHEET

ASSETS

(€ THOUSAND)	NOTES	GROSS AMOUNT	DEPRECIATION, AMORTISATION AND PROVISIONS	31/12/2017 NET VALUES	31/12/2016 NET VALUES
Patents, licences, rights and similar assets		17,817	17,032	785	2,404
Non-current assets under construction		18,788	18,555	233	2,627
Intangible assets		**36,605**	**35,587**	**1,018**	**5,031**
Land				0	1,131
Buildings				0	4,627
Technical installations, machinery and equipment				0	6,488
Other		1,620	1,530	90	1,588
Non-current assets under construction		524		524	7,849
Advances and down payments				0	7
Property, plant and equipment		**2,144**	**1,530**	**614**	**21,689**
Investments		2,059,775	1,033,794	1,025,981	1,004,556
Receivables from equity interests	4.2	2,005,789	106,910	1,898,879	2,019,350
Other capitalised investments		14,393	12,338	2,055	3,638
Other	4.2	14,805		14,805	10,945
Financial fixed assets		**4,094,762**	**1,153,042**	**2,941,720**	**3,038,489**
Non-current assets	**4.1**	**4,133,511**	**1,190,159**	**2,943,352**	**3,065,209**
Raw materials and other supplies				0	29,039
Production in progress				0	8,062
Intermediate and finished products		804	294	510	6,615
Goods		29,581	739	28,842	22,216
Inventories and work in progress	**4.7**	**30,385**	**1,033**	**29,352**	**65,932**
Advances and down payments paid on orders		**49**		**49**	**123**
Trade receivables		91,942		91,942	74,644
Other receivables		59,673	33,259	26,414	39,074
Operating receivables	**4.2 & 4.7**	**151,615**	**33,259**	**118,356**	**113,718**
Cash & cash equivalents	**4.3**	**60,213**		**60,213**	**54,410**
Prepaid expenses		5,356		5,356	3,135
Loan issue costs are written down		11,653		11,653	3,388
Adjustment accounts	**4.4**	**17,009**		**17,009**	**6,522**
Current Asset		**259,271**	**34,292**	**224,979**	**240,705**
Total assets		4,392,782	1,224,451	3,168,331	3,305,914

LIABILITIES

(€ THOUSAND)	NOTES	31/12/2017	31/12/2016
Capital		81,233	80,979
Issue, merger and contribution premiums		377,251	373,650
Legal reserve		8,096	8,096
Other reserves		253,839	253,839
Retained earnings		328,340	493,894
Income for the financial year		(17,730)	(165,554)
Net position	**4.5**	**1,031,029**	**1,044,903**
Regulated provisions	4.8	7,608	15,355
Shareholders' equity		**1,038,637**	**1,060,258**
Proceeds from equity issues		**95,810**	**99,665**
Conditional advances			
Other equity	**4.9**	**95,810**	**99,665**
Provisions for liabilities		30,491	20,042
Provisions for charges		7,121	20,468
Provisions for liabilities and charges	**4.8**	**37,612**	**40,511**
Bond issues		1,072,262	632,409
Borrowings and debt with credit institutions		665,437	1,219,288
Borrowings and other financial debts			
Inter-company current account liabilities		147,533	138,645
Financial debts	**4.10**	**1,885,232**	**1,990,341**
Advances and down payments received on orders in progress		**61**	**61**
Trade payables and related accounts		72,958	76,123
Tax and payroll payables		17,708	15,891
Operating payables	**4.10 & 4.11**	**90,666**	**92,015**
Payables on non-current assets and related accounts			26
Other debts		20,218	22,441
Miscellaneous debts	**4.10 & 4.11**	**20,218**	**22,467**
Adjustment accounts	**4.11**	**94**	**596**
Debts		**1,996,271**	**2,105,480**
Total liabilities		3,168,331	3,305,914

3.3.4 STATEMENT OF CHANGES IN NET DEBT

(€ THOUSAND)	FY2017	FY2016
Operating activities		
Net income	(17,730)	(165,554)
Elimination of income and expenses with no impact on cash flow or not related to operating activities	(45,665)	143,204
Cash flow from operations	**(63,395)**	**(22,350)**
Change in operating working capital requirement	22,848	(277)
Net cash generated by operating activities	**(40,547)**	**(22,626)**
Investing activities		
Net acquisition of financial fixed assets	(359,334)	(70,127)
Acquisition of intangible assets and property, plant & equipment	(685)	(11,585)
Disposal of non-current assets	49,687	285
Change in other receivables and debts	(3,578)	1,741
Net cash used in investing activities	**(313,910)**	**(79,686)**
Equity operations		
Dividends paid to shareholders of ERAMET SA	-	-
Share capital increases	3,855	335
Net cash used in financing activities	**3,855**	**335**
Increase (decrease) in net cash	(350,602)	(101,977)
Net cash (borrowings) at start of period	**435,562**	**537,539**
Net cash (borrowings) at period end	**84,960**	**435,562**

3.3.5 NOTES TO THE INDIVIDUAL FINANCIAL STATEMENTS

NOTE 1 - DESCRIPTION OF ACTIVITIES

The Group is one of the world's largest producers of:

- alloy metals, especially manganese and nickel, which are used to improve the properties of steel;
- high-performance special steels and alloys used by industries such as aeronautics, power generation and tooling.

The company ERAMET S.A., the parent company, has two main functions:

- a pure holding function called ERAMET Holding, bringing together the various support services including the Administrative and Financial Department, the Human Resources Department, the Communication and Sustainable Development Department, the Legal Department, the Purchasing Department, the Information Systems Department and the Strategy, Development and Innovation Department;
- the operational activity of the Nickel Division (excluding personnel costs).

The costs of these different services are billed to the three divisions through intermediary management fee contracts. Other operating costs relating to Nickel are directly allocated to the Nickel Division.

ERAMET also has directly held subsidiaries, acting on behalf of the various entities or for the parent company. These include:

- ERAMET NICKEL: a company which brings together the personnel of the support functions of the mining divisions (General Management, Sales and Industrial Management);
- ERAMET Services: a company which includes accounting functions, payroll and IT support for the Group's French companies;
- ERAMET Research: ERAMET's Research Centre, which includes research and development activities;
- ERAMET Engineering: a project and technology engineering company;
- ERAMET International: a company that brings together ERAMET's sales network for certain activities of the three divisions. ERAMET International has subsidiaries and branches throughout the world. The activity of ERAMET International is generally remunerated by agency commission contracts;
- Metal Securities: the Group's cash management company, which centralises cash surpluses and short-term requirements for the Group as a whole;
- Metal Currencies: the Group's foreign exchange management company, which carries out all foreign exchange hedging operations for the Group as a whole;
- ERAS: reinsurance company;
- Eramine: company in charge of developments in lithium;
- Sialeo: company responsible for developments in the recovery of metals from the seabed.

NOTE 2 - KEY EVENTS IN THE REPORTING PERIOD

SUBSIDIARISATION OF "NICKEL MATTE" BUSINESS: ERAMET SANDOUVILLE

The boards of directors of ERAMET and SLN decided in 2016 to end the integrated matte business, which consisted of supplying the Sandouville plant with matte from New Caledonia ore, with the aim of producing nickel metal and nickel salts.

This resulted, on the one hand, in the shutdown of the matte manufacturing workshops at the Doniambo plant in August 2016 and, on the other hand, in the signing of a long-term matte supply contract with a third-party European supplier for the Sandouville plant.

This change in supply required the adaptation of equipment at the Sandouville plant, which was completed on 19 June 2017. In the context of these changes in industrial flows, Sandouville's nickel metal and salt production business, which until that point had been an ERAMET SA establishment, was made a subsidiary on 1 January 2017 by the simple transfer of assets to ERAMET Sandouville SAS with capital of €30 million.

TRANSFER OF PERSONNEL TO ERAMET NICKEL

As part of the reorganisation of its mining activities, the ERAMET group created ERAMET Nickel SAS on 18 April 2017 with the aim of consolidating the corporate functions of the mining divisions. The creation of this company was accompanied on 1 July 2017 by the transfer of 32 ERAMET SA employees.

PARTIAL REPAYMENT AND TWO-YEAR EXTENSION TO REVOLVING CREDIT FACILITY MATURITY

On 16 January 2017, ERAMET signed a renegotiation agreement concerning its Revolving Credit Facility (RCF) of €981 million, extending its maturity by two years. The original instalments of €85 million in January 2017 and €898 million in January 2018 are now €85 million in January 2019 and €781 million in January 2020. On 24 May 2017, ERAMET made a partial repayment of €500 million. An additional repayment of €230 million was made on 18 July 2017.

BOND ISSUE OF €500 MILLION AND REDEMPTION OF EXISTING BONDS

In September 2017, ERAMET arranged a bond issue of €500 million maturing in February 2024. ERAMET also redeemed €64.9 million of existing bonds maturing in November 2020.

SIGNATURE OF A FRAMEWORK AGREEMENT FOR THE RECOVERY OF THE NICKEL DEPOSITS IN WEDA BAY, INDONESIA

ERAMET signed a framework agreement with the Chinese steel group Tsingshan with a view to determining the conditions for partnership to increase the value of the asset. The Tsingshan Group is the world's leading stainless steel producer.

This partnership would use a pyrometallurgical process to produce nickel ferroalloy, with a volume of about 30,000 tonnes of nickel content per year, from the ore mined from the Weda Bay deposit in Indonesia.

This partnership entails the Tsingshan Group acquiring an interest in Strand Minerals Pte Ltd. ERAMET will hold a 43% stake and the Tsingshan Group 57%.

The next steps in the implementation of this framework agreement are partly subject to government and environmental approval of the joint ERAMET/Tsingshan project. The transaction is expected to be finalised in 2018.

CAPITAL INCREASE FOLLOWING THE CONVERSION OF ODIRNAN BONDS (ISSUE OF NET SHARE SETTLED UNDATED BONDS CONVERTIBLE INTO CASH AND/OR NEW SHARES)

On 5 October 2016, the ERAMET group strengthened its capital by €100 million by issuing net share settled undated bonds convertible into cash and/or new shares by the Company (ODIRNAN).

The nominal value of the bonds, issued at par, was set at €46.33, which represents a conversion premium of 30% over ERAMET's reference share price. A total of 2,158,428 bonds were issued for a total nominal amount of €99,999,969.24.

At 31 December 2017, 90,442 bonds were subject to equity conversion (including 83,217 in 2017) and 1 bond was repaid in cash in 2017. The number of bonds in circulation is therefore 2,067,985 (31 December 2016: 2,151,203), a decrease of 83,218 bonds in 2017.

The total value of bonds at 31 December 2017 is €95.8 million (31 December 2016: €99.7 million).

SALE OF THE GROUP'S HEAD OFFICE IN THE TOUR MAINE-MONTPARNASSE

On 19 December 2017, ERAMET sold three floors of its head office in the Tour Maine-Montparnasse, generating a net capital gain of €20.5 million.

NOTE 3 - ACCOUNTING PRINCIPLES, RULES AND METHODS

The financial statements of ERAMET SA as of 31 December 2017 were approved by the Board of Directors on 20 February 2018.

REVIEW OF PRINCIPLES

The annual accounts for the year ended 31 December 2017 have been prepared in accordance with the French Accounting Standards Authority (ANC) Regulation No. 2015-06 of 23 November 2015 and No. 2016-7 amending Regulation No. 2014-03 of 5 June 2014 on the general chart of accounts. The Company also applies ANC Regulation No. 2015-05 on financial futures and hedging transactions.

The general accounting conventions have been applied in accordance with the principle of prudence, in conformity with the basic assumptions: continuity of operations, consistency of accounting methods, independence of financial years and according to the rules for drawing up and presenting the annual accounts.

The basic method used to value recorded items is the historical cost method.

CHANGE IN METHOD

There was no other change in method compared to 31 December 2016.

RULES AND METHODS APPLIED TO THE VARIOUS BALANCE SHEET AND INCOME STATEMENT ITEMS

1.1 NON-CURRENT INTANGIBLE ASSETS AND PROPERTY, PLANT & EQUIPMENT

The gross amount of assets is the amount at which the items were first recorded in the Company's ownership and includes any expenses required to bring them into working order.

Non-current assets not used or whose market value is lower than the carrying value are generally depreciated by extraordinary depreciation and amortisation expense and additions to provisions.

Economically justified amortisation is straight-line amortisation. This amortisation is calculated according to the estimated life of the assets.

The useful lives for the amortisation of property, plant & equipment are, except in exceptional cases, as follows:

- Buildings: between 20 and 30 years;
- Technical installations: between 12 and 20 years;
- Machinery and equipment: between 3 and 10 years;
- Installations, fixtures and fittings: between 5 and 10 years;
- Transportation equipment: between 5 and 8 years;
- Office equipment, computers and furniture: between 3 and 8 years.

The impact of the difference between straight-line amortisation and degressive amortisation is recognised through exceptional amortisation.

1.2 FINANCIAL ASSETS

Since 1 January 2006, the gross value of non-current financial assets has been increased by the purchase price excluding incidental expenses. Loans are stated at their nominal value. At the end of the financial year, the securities are valued at their value in use, which takes into account both the net asset value and profitability prospects. When the use value is less than the gross value, a provision for depreciation is the amount of the difference between the two values.

1.3 ONGOING DEVELOPMENT PROJECTS

The costs incurred on these projects are initially recognised either as assets or are expensed. If these development projects do not meet the economic criteria or are not successful, these costs are expensed, impaired or recognised as extraordinary losses. On completion of an acquisition, these costs are included in the value of the securities.

1.4 INVENTORIES

Inventories of nickel-bearing products are valued at cost price calculated on a "first-in, first-out" basis. When the value thus obtained is greater than the net realisable value (selling price less selling costs), a provision corresponding to this difference is made.

1.5 RECEIVABLES AND DEBTS

Foreign currency receivables and payables are re-measured at the rate prevailing at the period-end date.

The effects of foreign currency hedging transactions on foreign currency receivables and debts are recognised as foreign exchange gains or losses in the income statement. The offsetting transaction is recorded in the "Difference in hedging valuation" accounts.

Provisions for impairment of trade receivables are valued on a client-by-client basis according to the estimated risk.

1.6 INVESTMENT SECURITIES

They are valued at acquisition cost and are subject to provisions for impairment if their net asset value (closing price) is lower. Unrealised gains are not recognised.

1.7 PROVISIONS FOR RISKS AND EXPENSES

Provisions are made when the risk is estimated to be probable and the amount can be reliably estimated, to cover all liabilities arising from past events that are known at the reporting date and the settlement of which is likely to result in an outflow of resources representing the economic benefits necessary to settle the liability.

Personnel salaries and allowances

ERAMET offers its employees various long-term benefits such as end-of-career payments and other post-employment benefits, such as long-service awards.

Certain commitments are covered completely or partially by contracts with insurance companies.

In this case, commitments and hedging assets are valued independently. A provision is therefore made for the level of commitments and financial assets.

ERAMET's commitments are valued by independent actuaries. The actuarial assumptions used (ERAMET's probability of maintaining active staff, probability of mortality, retirement age, wage trends, etc.) vary according to the demographic and economic conditions prevailing in the country. The discount rates are based on the rate of government bonds or qualified companies of "Premium Quality" with a duration equivalent to the commitments at the valuation date.

The expected returns on assets over the long term have been determined taking into account the investment portfolio structure.

Bonus share plan for employees

The corresponding provision has been valued based on the value of the treasury shares and the share price on 31 December 2017.

The provision is spread over the vesting period (from two to four years according to the plan) for ERAMET SA employees. For other beneficiaries (excluding ERAMET SA), the provision is set as of the date of allocation of the plans.

1.8 SALES

Sales comprise:

- Sales of ferronickel (sales and purchases of SLN products);
- Nickel salts (buy/sell activity of the ERAMET Sandouville plant);
- Services and chargeback of shared costs.

Revenue is recognised as sales when the business has transferred to the buyer the risks and rewards of property ownership.

1.9 STATEMENT OF CHANGES IN NET DEBT

The statement of changes in net debt shows the changes in the following items in the balance sheet:

- Receivables from investments in associates (gross amount). *See Note 4.2;*
- Cash & cash equivalents. *See Note 4.3;*
- Other equity. *See Note 4.9;*
- Financial debts. *See Note 4.10.*

NOTE 4 - EXPLANATORY NOTES TO THE BALANCE SHEET

4.1 NON-CURRENT ASSETS & AMORTISATION

INTANGIBLE ASSETS

(€ THOUSAND)	ACQUISITION VALUES 31/12/2016	ACQUISITIONS	OUTGOINGS[1]	ACQUISITION VALUES 31/12/2017
Concessions, patents, licences, trademarks, processes, rights and similar assets	20,822	283	(3,289)	17,817
Non-current assets under construction	21,181	783	(3,176)	18,788
Total	42,003	1,067	(6,465)	36,605

(1) Disposals, decommissioning and regularisations

Following the subsidiarisation of the Sandouville plant, ERAMET Sandouville acquired intangible assets totalling a gross amount of €6.3 million or a net amount of €3.1 million.

(€ THOUSAND)	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2016	PROVISIONS	REVERSALS	OUTGOINGS(1)	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2017
Concessions, patents, licenses, trademarks, processes, rights and similar assets	18,418	1,884		(3,269)	17,033
Non-current assets under construction	18,555				18,555
Total	36,972	1,884	0	(3,269)	35,587

(1) Disposals, decommissioning and regularisations.

Depreciation and amortisation expenses mainly relate to the SAP software (ERP).

As a reminder, the non-current assets under construction relating to the development of hydro-metallurgical technology were fully depreciated in 2015 for an amount of €18.5 million following the decision to suspend the Weda Bay project in Indonesia.

PROPERTY, PLANT AND EQUIPMENT

(€ THOUSAND)	ACQUISITION VALUES 31/12/2016	ACQUISITIONS	OUTGOINGS(1)	ACQUISITION VALUES 31/12/2017
Land	1,131		(1,131)	(0)
Buildings	27,524		(27,524)	0
Technical installations, industrial machinery and equipment	73,332		(73,332)	0
Other	9,766	67	(8,212)	1,620
Non-current assets under construction	7,849	79	(7,404)	524
Advances and down payments	7		(7)	(0)
Total	119,609	146	(117,611)	2,144

(1) Disposals, decommissioning and regularisations.

Following the subsidiarisation of the Sandouville plant, ERAMET Sandouville acquired property, plant and equipment totalling a gross amount of €96.2 million or a net amount of €16.3 million.

The sale of the Tour Maine-Montparnasse offices resulted in the disposal of fixed assets totalling a gross amount of €14.6 million or a net amount of €3.8 million.

(€ THOUSAND)	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2016	PROVISIONS	REVERSALS	OUTGOINGS(1)	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2017
Land	0				0
Buildings	22,897	253		(23,151)	(0)
Technical facilities, equipment and equipment	66,844			(66,844)	0
Other	8,178	316		(6,964)	1,530
Non-current assets under construction	0				0
Advances and down payments	0				0
Total	97,919	570	0	(96,959)	1,530

(1) Disposals, decommissioning and regularisations.

FINANCIAL ASSETS

(€ THOUSAND)	ACQUISITION VALUES 31/12/2016	ACQUISITIONS	OUTGOINGS(1)	ACQUISITION VALUES 31/12/2017
Investments	1,709,308	380,467	(30,000)	2,059,775
Receivables from equity interests	2,471,158	193,786	(659,155)	2,005,790
Other capitalised investments	14,036	7,999	(7,643)	14,393
Other	10,945	4,315	(455)	14,805
Total	4,205,447	586,568	(697,253)	4,094,762

(1) Disposals, decommissioning and regularisations.

Changes in the "Investments in associates" item are mainly due to the capital increase of the Indonesian company, Strand, with a view to finalising the partnership with Tsingshan on the Weda Bay project. ERAMET converted €350 million of receivables into newly created shares to hold the entire share capital of Strand.

The other movements in this item are related to the subsidiarisation of the Sandouville facility. The ERAMET Sandouville shares thus created were then sold to ERAMET Holding Nickel.

Changes in "receivables from investments in associates" are mainly attributable to the loan granted to Eralloys Holding for €51 million, the loan granted to ERAMET Sandouville for €50 million, the increase in the loan granted to Erasteel for €22 million and the increase in the loan granted to Eramine for €9 million.

Decreases in "receivables from investments in associates" are mainly attributable to the capital increase of Strand amounting to €350 million, the decrease of €181 million in investments in Metal Securities through the partial repayment of the loan granted to COMILOG Far East Development for an amount of €49.3 million, the partial repayment of the loan granted to Aubert and Duval for an amount of €11.6 million, and the total repayment of the loan granted to Eco Titanium for €13.2 million.

The item "Other capitalised investments" relates to treasury shares. Movements in this item are attributable to share repurchases (145,000 shares) and redemptions, mainly due to the allocation to employees of French and foreign companies of selective bonus share plans for 2013 and 2014, and democratic bonus share plans for 2013 and 2015, amounting to €4.6 million, as well as the net balance of the liquidity contract.

The shares from the buyback mandates (balance of 124,495 shares as of 31 December 2017) are intended to be distributed as part of the bonus share plans.

(€ THOUSAND)	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2016	PROVISIONS	REVERSALS	RECLASSIFICATION[1]	DEPRECIATION, AMORTISATION AND PROVISIONS AS AT 31/12/2017
Investments	704,751	353,527	(24,484)		1,033,794
Receivables from equity interests	451,809	10,306	(355,204)		106,911
Other capitalised investments	10,398		(1,466)	3,406	12,338
Other					0
Total	1,166,958	363,833	(381,154)	3,406	1,153,042

(1) Reclassification of PAAG provision for liabilities.

Provisions for the depreciation of receivables from investments in associates were made on the Eramine loan for €9.4 million to reflect the financial situations of the company concerned.

Shares held as part of the market maker activities were subject to a provision reversal of €1.5 million mainly due to the allocation of bonus shares and the upward value of the ERAMET share as at 31 December 2017.

4.2 SCHEDULE OF RECEIVABLES

(€ THOUSAND)	GROSS AMOUNT 31/12/2017	MORE THAN ONE YEAR	REMINDER 31/12/2016
Receivables from investments[1]	2,005,789	738,339	2,471,158
Pension plan assets[2]	0	0	413
Other non-current financial fixed assets	14,805		10,532
Trade and accounts receivable	91,942	34	74,710
Other receivables[3]	59,673		66,341
Total	2,172,209	738,372	2,623,154

(1) Receivables from investments in associates: Loans to Group companies.
(2) Excess payment of contributions to the supplementary pension plan with defined benefits.
(3) Other receivables include, among other things, a €15.4 million net corporate tax receivable, as part of the tax consolidation, the Lithium project costs of €33.3 million fully provisioned (see note 4.7).

DETAIL OF RECEIVABLES FROM INVESTMENTS IN ASSOCIATES

(€ THOUSAND)	31/12/2017	31/12/2016
Strand Minerals Ltd/Weda Bay Minerals Singapore	156,158	488,252
Aubert & Duval	241,594	253,000
Erasteel SAS	152,003	130,000
CFED	53,222	106,345
Eramine SAS	25,002	15,641
Metal Securities	1,016,992	1,198,377
TiZir	100,863	107,838
EcoTitanium	0	10,092
SLN	161,613	161,613
Sandouville	50,969	0
Eralloys Holding	47,373	0
TOTAL	2,005,789	2,471,158

4.3 CASH & CASH EQUIVALENTS

Cash & cash equivalents consist of marketable securities for €55.5 million and bank accounts receivable for €4.8 million.

4.4 PREPAID EXPENSES AND ACCRUED INCOME

(€ THOUSAND)	31/12/2017	31/12/2016
Prepaid expenses(1)	5,356	3,135
Loan issue costs to be written down(2)	11,653	3,388
Total	17,009	6,522

(1) Prepaid insurance premiums amounted to €2.1 million (€1.5 million at 31 December 2016), rents and charges for the first quarter of 2018 amounted to €0.6 million, software maintenance was €0.6 million and interest on the mobilisation of the CIR and CICE tax credits with banks amounted to €0.7 million.
(2) Debt issue costs (revolving credit facility, bonds, Schuldschein, Borrowing Base) spread over the term of repayment of the loan. The increase between 31 December 2016 and 31 December 2017 is the result of the renegotiation of the revolving credit facility repayment schedule and the new bond issue.

4.5 NET POSITION

The share capital is broken down as follows:

	31/12/2017				31/12/2016			
	CAPITAL		VOTING RIGHTS		CAPITAL		VOTING RIGHTS	
	%	NUMBER OF SHARES	%	NUMBER OF SHARES	%	NUMBER OF SHARES	%	NUMBER OF SHARES
Registered shares								
SORAME and Compagnie d'Études Industrielles du Rouvray (CEIR)	36.93	9,835,834	43.94	19,671,668	37.05	9,835,834	44.02	19,671,668
FSI Equation (Bpifrance subsidiary)	25.57	6,810,317	30.43	13,620,634	25.65	6,810,317	30.48	13,620,634
S.T.C.P.I.	4.02	1,070,587	4.78	2,141,174	4.03	1,070,587	4.79	2,141,174
ERAMET S.A.	0.55	147,642	-	-	0.40	105,801	-	-
ERAMET S.A. share fund	0.20	52,273	0.23	104,746	0.20	52,373	0.23	104,746
Other	32.73	8,717,007	20.61	9,226,201	32.67	8,675,531	20.48	9,145,539
Total number of shares	100.00	26,633,660	100.00	44,764,423	100.00	26,550,443	100.00	44,683,761
of which registered shares	69.50	18,509,540	81.90	36,663,450	69.21	18,375,085	81.84	36,570,694
of which bearer shares	30.50	8,124,120	18.10	8,100,973	30.79	8,175,358	18.16	8,113,067

In accordance with the Shareholders' Agreement of 16 March 2012, which entered into force on 16 May 2012 and was renewed on 31 December 2016 for a period of one year expiring on 31 December 2017, subject to Decision and Notice No. 212C0647 of the *Autorité des marchés financiers* (AMF) at its conclusion as well as AMF Decision and Notice No. 216C1753 concerning changes to the concert with the acquisition by the *Agence de participations de l'État* (APE) of 100% of the share capital of FSI Equation, ERAMET is majority-owned by a group of shareholders declared to be acting in concert, including:

- a sub-concert between SORAME and CEIR, companies wholly owned by the Duval family, under a simultaneous shareholders' agreement of 19 July 1999, which entered into force on 21 July 1999 and was amended on 13 July 2009;
- the *Agence des participations de l'État* (APE), through its subsidiary FSI Equation.

The provisions of the Shareholders' Agreement mentioned above as well as those of the sub-concert are contained in key extracts of the AMF decision and notice texts numbered 216C1753, 212C0486 and 209C1013 (amended on 13 July 2009).

Since 1 January 2002, registered shares that meet the necessary conditions benefit from double voting rights.

ERAMET's distributable reserves amounted to €959 million as at 31 December 2017 (€1,121 million as at 31 December 2016).

Net equity is broken down as follows:

(€ THOUSAND)	NUMBER OF SHARES	CAPITAL	PREMIUMS, RESERVES AND RETAINED EARNINGS	RESULT FOR THE FINANCIAL YEAR	TOTAL
Net position as at 31 December 2015	**26,543,218**	**80,957**	**1,460,682**	**(331,516)**	**1,210,122**
Appropriation of 2015 result			(331,516)	331,516	0
Income for the 2016 financial year				(165,554)	(165,554)
Premium for conversion of bonds into shares as at 31 December 2016	7,225	22	313		335
Net position as at 31 December 2016	**26,550,443**	**80,979**	**1,129,478**	**(165,554)**	**1,044,903**
Appropriation of 2016 result			(165,554)	165,554	0
Income for the 2017 financial year				(17,730)	(17,730)
Premium for conversion of bonds into shares as at 31 December 2017	83,217	254	3,602		3,855
Net position as at 31 December 2017	26,633,660	81,233	967,526	(17,730)	1,031,029

The share capital of €81,232,663 (31 December 2016: €80,978,851.15) is composed of €26,633,660 fully paid-up shares (31 December 2016: 26,550,443 shares) with a nominal value of €3.05 each.

4.6 TREASURY SHARES

The table below summarises the treasury share transactions:

		MARKET MAKER[1]	ALLOCATIONS TO EMPLOYEES	TOTAL
Position at 1 January 2016		**123,219**	**95,057**	**218,276**
As a percentage of capital	*26,543,218*	*0.46%*	*0.36%*	*0.82%*
Final allocation of bonus shares			(51,547)	(51,547)
Purchases/sales		(60,928)		(60,928)
Position at 31 December 2016		**62,291**	**43,510**	**105,801**
As a percentage of capital	*26,550,443*	*0.23%*	*0.16%*	*0.40%*
Redemption mandate—March 2017			25,000	25,000
Redemption mandate—September 2017			120,000	120,000
Final allocation of bonus shares			(64,015)	(64,015)
Purchases/sales		(39,144)		(39,144)
Position at 31 December 2017		23,147	124,495	147,642
As a percentage of capital	*26,633,660*	*0.09%*	*0.47%*	*0.55%*

(1) Liquidity agreement signed with Exane BNP Paribas.

The balance of 147,642 shares corresponds to:

- the shares bought under a market maker contract signed with Exane BNP Paribas and not yet registered on the date of issue of the table;
- the shares to be allocated under the bonus share allocation plans.

4.7 PROVISIONS FOR IMPAIRMENT OF CURRENT ASSETS

(€ THOUSAND)	31/12/2016	PROVISIONS	REVERSALS	31/12/2017
Raw materials and goods(1)	8,737		(7,998)	739
Intermediate and finished products	0	294		294
Trade receivables	65		(65)	0
Other receivables(2)	27,267	5,992		33,259
Total	36,070	6,286	(8,063)	34,292

(1) Provision reversals mainly relate to the partial transfer of assets to ERAMET Sandouville.
(2) Provision additions are mainly noted in expenses recorded under "Other receivables" for the Lithium research and exploitation project.

4.8 PROVISIONS IN LIABILITIES

(€ THOUSAND)	31/12/2016	PROVISIONS	REVERSALS		CONTRIBUTION OF INDIVIDUAL ASSETS	RECLASSIFICATION	31/12/2017
			USED DURING THE FINANCIAL YEAR	NOT USED DURING THE FINANCIAL YEAR	ERAMET SANDOUVILLE		
Provisions for price increases	0						0
Special depreciation allowances	15,355	137	(7,884)				7,608
Total regulated provisions	**15,355**	**137**	**(7,884)**	**0**		**0**	**7,608**
Personnel(1)	20,468	6,611	(12,876)	(200)	(6,469)	(413)	7,121
Environment	0						0
Sectoral risks	0						0
Taxes	0						0
Other provisions for liabilities(2)	1,834	3,142					4,976
Other provisions for charges(3)	18,208	17,732	(7,020)			(3,406)	25,514
Total provisions for liabilities and charges	**40,511**	**27,485**	**(19,896)**	**(200)**	**(6,469)**	**(3,819)**	**37,612**
Provisions for liabilities	55,866	27,622	(27,780)	(200)	(6,469)	(3,819)	45,220

(1) ERAMET provides for retirement and similar commitments according to the actuarial valuation carried out by an independent firm. Detailed calculations have been made as at 31 December 2017. The corridor method is applied to the calculation of pension commitments.
As at 31 December 2017, the balance relating to pension and similar commitments amounted to €6.4 million. Furthermore, this balance includes a provision for severance payments of €0.7 million.
(2) The provision for financial contingencies corresponds to the potential loss on the Metal Securities bond portfolio guaranteed by ERAMET.
(3) Reversals and reclassifications relate to the bonus share allocation plans.

EMPLOYEE-RELATED LIABILITIES

(€ THOUSAND)	ACTUARIAL VALUE OF BONDS	FAIR VALUE OF PLAN ASSETS	FINANCIAL POSITION SURPLUS/(DEFICIT)
Retirement package	89,965	(60,314)	29,651
End of career benefits	3,699	(1,435)	2,264
Long service awards	2,488	-	2,488
Total	96,152	(61,749)	34,403

(€ THOUSAND)	UNRECOGNISED ACTUARIAL (GAINS)/LOSSES	UNRECOGNISED PAST SERVICES	BALANCE SHEET PROVISION (ASSETS/ LIABILITIES)
Retirement package	(20,368)	(5,390)	3,893
End of career benefits	(2,028)	(216)	20
Long service awards	-	-	2,488
Total	(22,396)	(5,606)	6,401
Personnel provisions			6,401
Plan assets (other non-current financial fixed assets)			-

DETAILS OF PENSION FUND INVESTMENTS

(€ THOUSAND)	INSURANCE CONTRACT	OTHER INVESTMENTS	TOTAL
Amounts	61,749		61,749
Percentage	100.00%		100.00%

CHANGE IN PENSION LIABILITIES

(€ THOUSAND)		FINANCIAL YEAR 2017
At beginning of period		**18,144**
Expenses recognised		4,608
• service cost	2,531	
• amortisation of actuarial gains (losses) and past service cost	2,388	
• interest expenses	1,454	
• return on plan assets	(1,765)	
Contributions and benefits paid		(9,212)
Partial asset contribution ERAMET Sandouville		(6,439)
Transfer of employees to ERAMET Nickel		(700)
At period close		6,401

THE ACTUARIAL ASSUMPTIONS USED FOR THE VALUATIONS ARE AS FOLLOWS:

	2017	2016
Discount rate	1.50%	1.50%
Inflation rate	1.80%	1.80%
Rate of salary increases	3.00%	3.00%
Rate of return on plan financial assets	1.50%	3.25%

4.9 PROCEEDS FROM EQUITY ISSUES

(€ THOUSAND)	31/12/2017	31/12/2016
ODIRNAN	95,810	99,665
Total	95,810	99,665

ERAMET SA issued an ODIRNAN (net share settled undated bonds convertible into cash and/or new shares) on 5 October 2016

At 31 December 2017, 90,442 bonds were subject to equity conversion (83,217 in 2017) and 1 bond was repaid in cash in 2017. The number of bonds in circulation is therefore 2,067,985 (31 December 2016: 2,151,203), a decrease of 83,218 bonds in 2017.

The total value of bonds at 31 December 2017 is €95.8 million (31 December 2016: €99.7 million).

ODIRNAN is a perpetual bond with no maturity date. Holders do not have the option to redeem the instrument for cash in hand. The instrument can be redeemed in the event of liquidation of the Company with the payment of accrued and deferred coupons, as applicable. The organisation of the coupon payments is left up to the Company and may be delayed as long as it has not decided on a dividend distribution since the penultimate interest payment date (or since the issue date for the first two payment dates). In case of non-payment of coupons, they will remain due and will constitute arrears which will bear interest at the applicable rate for bond coupons.

The coupon is fixed at an annual rate of 4% until October 2022. It will then switch to a variable rate from 5 October 2022, calculated at the 6-month EURIBOR rate plus a margin of 1,000 basis points ("step-up" clause). In the event of a change of control of ERAMET SA, the annual interest rate will be increased by 500 basis points unless the Company opts for early redemption within 45 days of the change of control.

Bond holders will receive an equity conversion right. The issuer may choose to deliver one of the following to bondholders exercising their right to receive shares:

- cash only;
- new shares only;
- or a combination of new shares and cash.

4.10 BREAKDOWN OF LIABILITIES AND MATURITY SCHEDULE

NET AMOUNT (€ THOUSAND)	31/12/2017	1 YEAR OR LESS	MORE THAN ONE YEAR UP TO FIVE YEARS OR LESS	MORE THAN FIVE YEARS	31/12/2016
Other bond issues(1)	1,072,262	12,167	560,100	499,995	632,409
Borrowings and debts with credit institutions(2)	665,437	461,215	156,556	47,666	1,219,288
Borrowings and other financial debts(3)	147,533	147,533			138,645
Suppliers and related accounts(4)	72,958	72,958			76,123
Tax and payroll payables	17,708	17,708			15,891
Payables on non-current assets and related accounts	0				26
Other miscellaneous debts(5)	20,218	20,218			22,441
Total	1,996,116	731,799	716,656	547,661	2,104,823

(1) This item comprises several bond issues:
– 2013 issue for €460.1 million (initial issue of €525 million partly reimbursed for €64.9 million at the end of September 2017);
– 2014 issue for €100 million;
– issue for €500 million in September 2017.
(2) Borrowings from credit institutions include a new "revolving credit facility" for €250 million, the Borrowing Base for €52 million, tax credits for €5.5 million, a Schuldschein loan for €60 million, two loans from the European Investment Bank for a total of €101.1 million and commercial paper for €194.2 million (repayable in less than one year).
(3) ERAMET is financed by Metal Securities, an 87.92% subsidiary of ERAMET. The amount as at 31 December 2017 is €143.9 million, compared to €134.6 million as at 31 December 2016.
(4) The Company has a supplier debt more than 60 days from the invoice date of €237 thousand.
(5) This item includes a net amount of tax consolidation liabilities of €16.6 million.

BREAKDOWN OF BORROWINGS AND OTHER FINANCIAL DEBTS

NET AMOUNT (€ THOUSAND)	31/12/2017	31/12/2016
Current accounts with Metal Securities	143,883	134,594
Borrowing from Weda Bay Minerals, Inc.	1,804	1,912
Deposits received	130	130
Revolving credit facility utilisation/non-utilisation fee	716	1,008
Interest from ODIRNAN	1,000	1,000
Total	147,533	138,645

4.11 BREAKDOWN OF LIABILITIES AND ACCRUED EXPENSES

GROSS AMOUNT (€ THOUSAND)	31/12/2017	31/12/2016
Trade payables and related accounts	72,958	76,123
Tax and payroll payables	17,708	15,891
Debts on non-current assets and related accounts	0	26
Other various debts	20,218	22,441
Deferred income	94	596
Total	110,978	115,077

4.12 INFORMATION ON RELATED COMPANIES

BALANCE SHEET

(€ THOUSAND)	31/12/2017	31/12/2016
Investments	2,059,775	1,709,308
Financial claims	1,904,925	2,341,063
Trade and accounts receivable	18,665	9,921
Other receivables	339	64
Borrowings and other financial debts	(145,687)	(136,507)
Trade payables and related accounts	(62,275)	(62,277)
Other debts	(19,334)	(21,577)

INCOME STATEMENT

(€ THOUSAND)	31/12/2017	31/12/2016
Operating income	52,761	59,008
Operating expenses	(555,423)	(493,632)
Financial income	50,088	51,679
Financial expenses	(5,504)	(2,369)

NOTE 5 - EXPLANATORY NOTES TO THE INCOME STATEMENT

5.1 SALES

(€ THOUSAND)	TOTAL	FRANCE	ABROAD
Sale of products and goods[1]	581,169	10,624	570,545
Income from ancillary activities	52,950	34,903	18,047
Sales	634,119	45,527	588,592

(1) Sales include a negative currency difference of €9.4 million, mainly due to hedges in USD.

5.2 INCREASES AND REDUCTIONS IN FUTURE TAX LIABILITIES

(€ THOUSAND)	31/12/2017	31/12/2016
Increase in taxable base		
• Regulated provisions	7,608	15,355
• Translation adjustment losses at close		
• Deferred expenses		
Reduction in taxable base		
• Non-deductible provisions in the accounting year	(6,741)	(19,340)
• Accrued charges	(271)	(339)
• Translation adjustment gains at close of the fiscal year		
• Unrealised financial income		
• Tax loss carryforwards	(477,198)	(410,779)
Net reduction in taxable base	**(476,602)**	**(415,103)**
Increase in future taxation	(164,094)	(142,920)
	34.43%	34.43%

BREAKDOWN OF INCOME TAX

(€ THOUSAND)	GROSS AMOUNT	TAX OWED	31/12/2017 Net income
Current income	(53,653)		(53,653)
Extraordinary income	32,530		32,530
Employee participation and profit sharing	0		0
Impact of tax consolidation and research tax credit		3,393	3,393
Total	(21,123)	3,393	(17,730)

CORPORATE TAXES

The tax consolidation agreement signed between ERAMET and its subsidiaries respects the principle of neutrality and places the subsidiaries in the situation that would have been theirs in the absence of consolidation. Each subsidiary determines its tax as if it were not part of the consolidated tax group and pays its corporate tax contribution to ERAMET as the Group leader. The subsidiaries keep their deficits to determine the amount of the corporate tax contribution they have to pay ERAMET.

As a result of the tax consolidation, the corporate income tax account can be broken down as follows:

- +€7.5 million in tax income of the tax-integrated group (of which +€6.3 million in 2017 tax credits and +€1.2 million in the adjustment of Group tax credits for previous years);
- +€3.4 million in tax consolidation income (including +€4.5 million in 2017 corporate tax of the consolidated subsidiaries, -€3 million in 2016 corporate tax of the consolidated subsidiaries and €1.9 million in retrocession of the tax adjustment expense resulting from the tax audit of EHM);
- -€6.8 million of tax consolidation expenses (including tax credits returned to subsidiaries: -€0.9 million in 2016 adjustment and -€5.9 million of 2017 tax credit);
- -€0.7 million in tax adjustments resulting from tax audits for 2013, 2014 and 2015.

5.3 TAX CONSOLIDATION

All of the French subsidiaries that are at least 95% owned are consolidated for tax purposes, ERAMET being the Group's parent company. The scope of tax consolidation in France includes the following companies:

TAX-CONSOLIDATED COMPANIES	31/12/2017	31/12/2016	31/12/2015	31/12/2014	31/12/2013
Consolidated companies					
Airforge					x
Aubert & Duval (AD)	x	x	x	x	x
Brown Europe(1)	x				
ERAMET	x	x	x	x	x
ERAMET Alloys(2)		x	x	x	x
ERAMET Holding Alloys (formerly SIMA)	x	x	x	x	x
ERAMET Holding Manganese (EHM)	x	x	x	x	x
ERAMET Holding Nickel (EHN)	x	x	x	x	x
ERAMET Engineering (formerly TEC)	x	x			
ERAMET Nickel(3)					
ERAMET Research (formerly CRT)	x	x			
ERAMET Sandouville(4)	x				
ERAMET Services	x	x			
Eramine	x	x	x	x	x
Erasteel	x	x	x	x	x
Erasteel Champagnole	x	x	x	x	x
Eurotungstène Powders(5)		x	x	x	x
Metal Securities	x	x	x	x	x
Valdi	x	x	x	x	x
Non-consolidated companies					
AD TAF	x	x	x	x	x
Brown Europe(1)		x	x	x	x
Campus ERAMET	x	x	x	x	x
ERAMET Engineering (formerly TEC)			x	x	x
ERAMET International	x	x	x	x	x
ERAMET Research (formerly CRT)			x	x	x
ERAMET Sandouville(4)		x			
ERAMET Services			x	x	x
Forges de Monplaisir	x	x	x	x	x
Supa	x	x	x	x	x

(1) Brown Europe consolidated from 1 January 2017.
(2) All of the assets of ERAMET Alloys were transferred to ERAMET Holding Alloys on 23 November 2017.
(3) ERAMET Nickel consolidated from 25 April 2017.
(4) ERAMET Sandouville consolidated from 1 January 2017.
(5) Eurotungstène Powders sold on 3 April 2017.

5.4 FINANCIAL INCOME

(€ THOUSAND)	31/12/2017	31/12/2016
Investments—Dividends(1)	7,102	0
Investments—Interest(2)	49,391	61,448
Other dividends and interest	733	1,598
Reversals of provisions(3)	378,220	34,774
Exchange differences(4)	26,690	7,228
Net proceeds from the sale of marketable securities	394	242
Financial income	**462,530**	**105,290**
Amortisation expenses and provisions(5)	(363,729)	(173,063)
Interest and similar expenses(6)	(61,900)	(60,797)
Exchange differences(4)	(19,190)	(6,974)
Net expenses on the sale of marketable securities	(3)	(0)
Financial expenses	**(444,822)**	**(240,834)**
Financial income	17,708	(135,544)

(1) Dividends paid by ERAMET Research (€7 million).
(2) Interest income on current account loans of the Group (€49.4 million).
(3) Following the conversion of the Strand loan into shares, reversal of the entire provision for loan impairment (€350.5 million). A provision reversal of €24.5 million was recorded in order to adjust the value of shares in the consolidated shareholders' equity of EHA/Aubert and Duval.
(4) Net foreign exchange gain of €7.5 million mainly due to the revaluation of Group foreign currency loans and borrowings.
(5) Impairment of newly created Strand shares equalling the amount of impairment reversals recorded for the loan (€350.5 million). Additional impairment of Erasteel shares (€2.7 million), and loans to Eramine (€9.4 million) and CFED (€0.9 million). Provision for financial contingencies corresponds to the potential loss on the Metal Securities bond portfolio guaranteed by ERAMET for €3.1 million.
(6) Interest expense on financial debt (revolving credit facility, Metal Securities, bonds, Schuldschein, ODIRNAN).

5.5 EXTRAORDINARY RESULT

(€ THOUSAND)	31/12/2017	31/12/2016
Income from management operations		
Income from capital transactions(1)	62,277	285
Reversal of provisions and expense transfer(2)	16,786	29,413
Extraordinary income	**79,063**	**29,699**
Charges on management operations(3)	(1,683)	(6,043)
Charges on capital transactions(4)	(37,053)	(7,564)
Exceptional depreciation, amortisation and provisions(5)	(7,797)	(9,758)
Extraordinary charges	**(46,533)**	**(23,365)**
Extraordinary income	32,530	6,334

(1) Contribution of individual assets to ERAMET Sandouville (€36.9 million including €9.4 million in capital gains), and revenue from the sale of the offices in the Tour Maine-Montparnasse (€20.5 million in capital gains).
(2) Reversal of depreciation and amortisation that were no longer relevant as part of the subsidiarisation of the Sandouville facility (€6.5 million) and following the sale of the offices of the Maine-Montparnasse tower (€1.3 million), reversal of the provision for the bonus share allocation plan (€4.6 million), reversal of the provision for the departure plan in line with the expenses incurred (€1.9 million) and reversal of the provision for the dismantling of the Maboumine pilot project (€2.4 million).
(3) Recognition as an exceptional expense of the costs of the 2017 departure plan for (€1.7) million.
(4) Net book value of non-current assets contributed to ERAMET Sandouville (€28.4 million), and from the sale of the offices of the Maine-Montparnasse tower (€3.8 million), and the result of the transfer of bonus shares under the plan awarded in 2016 for (€4.6) million.
(5) Provisions for various receivables from the Lithium research and exploitation project (€5.9 million), provisions for end-of-career and departure benefits (€0.9 million).

5.6 WORKFORCE

	FY2017	FY2016
Management	107	149
Administrative, Technical and Supervisory staff	29	148
Workers	0	39
Workforce at end of period	136	336
Average no. of employees	149	355

165 employees were involved in the partial transfer of assets to ERAMET Sandouville, and 32 employees were transferred to ERAMET Nickel.

NOTE 6 - OFF-BALANCE-SHEET COMMITMENTS

(€ THOUSAND)	31/12/2017	31/12/2016
Commitments made:		
Securities, endorsements and guarantees	86,642	100,643
Commitments received:		
Internal USD exchange contracts (MCUR)	121,566	473,987
Multi-currency revolving credit facility	731,000	1,000
Credit facilities	13,000	0
Reciprocal commitments:		
Currency hedge via Metal Currencies	0	0

The table above does not include current orders for the business or commitments on non-current asset orders related to investment projects.

NOTE 7 - RISK MANAGEMENT

7.1 EXCHANGE RISKS

ERAMET is exposed to exchange risk on two levels:

- by way of its Nickel business, ERAMET receives its income mainly in US dollars, while its costs are mainly denominated in Euros (Sandouville fees and nickel purchases at SLN). Hedging transactions are therefore carried out on the basis of multi-annual budgets and forecasts, with a maximum horizon of 36 months. As part of the technical assistance between ERAMET and its subsidiary SLN, all commercial hedges are made on behalf of SLN and billed back directly to SLN under the marketing agreement;
- by way of its Holding business, ERAMET puts in place loans in foreign currencies for the benefit of Group companies and may make foreign exchange hedges. As at 31 December 2017, there is no currency hedging on long-term loans.

7.2 RISKS ON RAW MATERIALS

ERAMET is exposed to the volatility of commodity prices at the level of its sales. ERAMET may be required to set up term hedges on a limited portion of nickel sales.

These hedges are made on behalf of SLN, a producer of ferronickel. As part of the technical assistance contract, the result of these hedges is charged to SLN's monthly bills. As at 31 December 2017, 350 tonnes were hedged with a fair value of +€776 thousand (31 December 2016: 338 tonnes for a fair value of +€83 thousand).

7.3 CREDIT OR COUNTERPARTY RISK

The counterparty risks of ERAMET relate mainly to its commercial operations and, by extension, to trade receivable. Thus, ERAMET may be exposed to credit risk in the event of a counterparty default. To limit this risk of which the maximum exposure is equal to the net receivables recognised in the balance sheet, ERAMET uses different tools: gathering information ahead of financial transactions (from rating agencies, published financial statements, etc.), credit insurance and the establishment of letters of credit and documentary credits in order to prevent certain specific risks inherent to, for example, the geographical situation of clients.

Furthermore, ERAMET's client portfolio consists mainly of large international groups in the fields of metallurgy whose insolvency risks are more limited.

7.4 RATE RISK

As at 31 December 2017, a hedge of €60 million at a fixed rate of 1.67% vs EURIBOR 6 months is in place to fix the variable rate of the *Schuldschein* loan of €60 million until its maturity.

7.5 LIQUIDITY RISK

ERAMET must ensure that it maintains a sufficient level of liquidity to meet its contractual obligations, including servicing its bank and bond debt.

In this context, ERAMET anticipates the regular renewal of its current financing (credit facilities, bonds, leases, etc.) and establishes new modes of financing (ODIRNAN in 2016) according to the opportunities available.

ERAMET also aims to diversify its sources of funding, particularly between the bond and banking markets.

REVOLVING CREDIT FACILITY

On 16 January 2017, ERAMET signed a renegotiation agreement concerning its Revolving Credit Facility (RCF) of €981 million, extending its maturity by two years. The original instalments of €85 million in January 2017 and €896 million in January 2018 are now €115 million in January 2018, €85 million in January 2019 and €781 million in January 2020. This facility has a single financial covenant (gearing), subject to cross-default.

The facility was partially repaid in 2017, with an outstanding amount of €250 million as at 31 December 2017.

FINANCIAL LIABILITIES ARE SUBJECT TO BANK COVENANTS DESCRIBED BELOW:

TYPE OF CREDIT FACILITY		RATIO	AMOUNT
• Revolving credit facility	• Net debt decreased by the SLN loan from the French State/ shareholders' equity	<1	-€981 million
• Deutsche Bank *(Schuldschein)* loan	• Restated net debt/shareholders' equity—Group share	<1	-€60 million
• Borrowing Base	• Net debt/shareholder's equity	<1	-€65 million
• European Investment Bank	• Net debt/shareholder's equity	<1	-€80 million
• European Investment Bank	• Net debt/shareholder's equity	<1	-€30 million

ERAMET's covenants are determined on the basis of the published consolidated accounts. At 31 December 2017, the covenants showed no circumstances of accelerated maturity. Moreover, at 31 December 2017, no cases of cross-default likely to impact funding at ERAMET level were recorded.

NOTE 8 • FEES PAID TO THE STATUTORY AUDITORS

Statutory Auditors' fees relating to the certification of accounts invoiced for the year 2017 amounted to €424,000 (of which €205,000 for EY and €219,000 for KPMG) and fees related to other services amounted to €54,000 (of which €12,000 for EY and €42,000 for KPMG).

NOTE 9 • CONSOLIDATION OF THE FINANCIAL STATEMENTS OF THE COMPANY

ERAMET SA is consolidated in the ERAMET group, of which it is the parent company.

NOTE 10 • EMPLOYEE CHARGES AND BENEFITS

GROSS COMPENSATION AND BENEFITS TO DIRECTORS AND MEMBERS OF THE EXECUTIVE COMMITTEE

(€ THOUSAND)	FINANCIAL YEAR 2017	FINANCIAL YEAR 2016
Short-term benefits		
Fixed compensation	3,291	2,415
Variable compensation	2,573	1,913
Attendance fees	749	700
Other benefits		
Post-employment benefits	3,692	673
Total	10,305	5,701

BONUS SHARE PLANS

Three new bonus share plans were granted on 23 February 2017 and 23 May 2017:

- one plan for all employees on 23 February 2017 for an initial total of 23,626 shares;
- one plan open to certain employees and corporate officers on 23 February 2017, of which:
  - part of the shares are subject to two performance conditions—an internal condition with two indicators (current operating income/sales and cash flow from operating activities) for two thirds and an external condition for one third—for an initial total of 92,009 shares, and
  - part of the shares are not subject to performance conditions, for an initial total of 50,137 shares;
- a share plan for Christel Bories, in her role as Chairman and Chief Executive Officer with effect from 23 May 2017, amounting to a total of 12,500 performance shares, the characteristics and conditions of which are identical to those of the performance share plan granted to certain employees and corporate officers as described above.

The criteria for share awards and the assessment of the accounting expense are the same as those described above.

The characteristics of the three new bonus share award plans for 2017 are as follows:

		NUMBER OF SHARES	EXERCISE PRICE (€)	MATURITY (YEARS)(1)	RISK FREE RATE	AVERAGE DIVIDEND RATE	FAIR VALUE OF OPTION (€)(2)
Plan open to all employees	France/Italy	10,076	free	2 + 2	-0.37%	1.00%	49.29
	World	13,550	free	4 + 0	-0.07%	1.00%	50.23
Plan open to certain employees and corporate officers	France/Italy	104,291	free	3 + 2	-0.22%	1.00%	50.74 / 28.33
	France	12,500	free	3 + 2	-0.30%	1.00%	41.86 / 22.84
	World	37,855	free	4 + 0	-0.07%	1.00%	50.23 / 28.73

(1) Maturity = vesting period + lock-in period.
(2) Bonus share award plans whose share awards are subject to two performance conditions have two fair values: the first being the intrinsic condition and the second being the external condition

The change in the number of bonus share awards in the 2016 and 2017 reporting periods was as follows:

NUMBER OF BONUS SHARES	31/12/2017	31/12/2016
At beginning of period	**413,709**	**441,191**
New plans 2017/2016	178,272	159,233
Definitive allocations	(64,015)	(51,547)
Prescribed shares	(25,775)	(7,879)
Obsolete stock	(43,671)	(127,289)
At period close	458,520	413,709
Distribution by year of allocation		
2017	-	98,453
2018	114,591	129,279
2019	145,608	143,351
2020	148,987	42,626
2021	49,334	-

NOTE 11 - EVENTS AFTER THE REPORTING DATE

REPAYMENT AND RENEWAL OF REVOLVING CREDIT FACILITY

The balance of €250 million of the Revolving Credit Facility (RCF) was repaid in full on 18 January 2018. This same facility was extended on 13 February 2018 for an amount of €981 million and for a five-year term, with a new maturity in January 2023. The amount available under this revolving credit facility is maintained at €981 million.

To the best of the Company's knowledge, there are no other events occurring after the reporting date.

NOTE 12 · TABLE OF SUBSIDIARIES AND INVESTMENTS IN ASSOCIATES

AT 31 DECEMBER 2017

		CAPITAL	SHAREHOLDERS' EQUITY OTHER THAN CAPITAL	SHARE OF CAPITAL HELD	GROSS CARRYING AMOUNT OF SHARES HELD	NET CARRYING AMOUNT OF SHARES HELD	LOANS AND ADVANCES MADE AND NOT REIMBURSED	SECURITIES AND GUARANTEES GIVEN	DIVIDENDS RECEIVED IN THE PERIOD	TOTAL SALES OF PAST FINANCIAL YEAR	PROFIT (LOSS) IN LAST COMPLETED FINANCIAL YEAR
(IN THOUSANDS OF EUROS OR OTHER CURRENCY, EXCEPT XAF IN MILLIONS)		CURRENCY	CURRENCY	%	EUR	EUR	EUR	EUR	EUR	CURRENCY	CURRENCY
I. — Detailed information on each share (gross value greater than 1% of the capital of the Company)											
Subsidiaries (at least 50% of share capital owned)											
Eras	EUR	2,000	9	100	1,986	1,986				0	2
ERAMET Engineering	EUR	525	2,630	100	838	838				8,293	181
ERAMET Research	EUR	1,410	6,459	100	1,161	1,161			7,000	7,359	(3,486)
ERAMET International	EUR	160	3,507	100	892	892				7,687	627
ERAMET Holding Nickel	EUR	227,104	11,934	100	229,652	229,652				0	(298)
Weda Bay Mineral Inc	USD	35,505	682	100	3,616	0				0	0
Strand Minerals Pte Ltd	USD	87,720	14,413	100	421,186	0	156,158			0	(148,454)
Weda Bay Mineral Singapore Ltd	USD	347,743	(347,762)	20	52,570	0				0	45
ERAMET Holding Manganese	EUR	310,156	125,576	100	310,156	310,156				0	23,718
Eralloys Holding	NOK	12,800	551,846	100	419,445	96,501	47,373			320	36,438
ERAMET Holding Alloys (formerly SIMA)	EUR	148,000	32,278	100	329,584	329,584				5,020	5,987
Erasteel	EUR	75,661	(64,684)	100	223,169	0	152,003			162,235	(28,152)
					1,994,255	**970,771**					
Investments in associates (between 10% and 50% owned)											
COMILOG	XAF	40,812	483,040	23	53,407	53,407				634,589	106,353
					53,407	**53,407**					
II. — General information on other securities (gross value at most equal to 1% of the capital of the Company)											
• French subsidiaries	EUR				11,657	1,607	1,041,993				
• Foreign subsidiaries	EUR										
• Investments	EUR				456	196	161,613	17,356	102		
Total					2,059,775	1,025,981	1,559,140	17,356	7,102		

	SIREN NO.	HEAD OFFICE ADDRESS
I. — Detailed information on each share (gross value greater than 1% of the capital of the Company)		
Subsidiaries (at least 50% of share capital owned)		
Eras	N/A	6B, route de Trèves L—2633 Senningerberg R. C. Luxembourg B 35.721
ERAMET Engineering	301,570,214	1, avenue Albert-Einstein, 78190 Trappes
ERAMET Research	301,608,634	1, avenue Albert-Einstein, BP120, 78193 Trappes
ERAMET International	398,932,939	Tour Maine-Montparnasse, 33, avenue du Maine 75755 Paris Cedex 15 France
ERAMET Holding Nickel	335,120,515	Tour Maine-Montparnasse, 33, avenue du Maine 75755 Paris Cedex 15 France
Weda Bay Mineral Inc	N/A	14th Floor, 220 Bay Street Toronto Ontario, M5J2W4 Canada
Strand Minerals Pte Ltd	N/A	8 Marina Boulevard #05-02—Marina Bay Financial Centre—Singapore 018981
Weda Bay Mineral Singapore Ltd	N/A	8 Marina Boulevard #05-02—Marina Bay Financial Centre—Singapore 018981
ERAMET Holding Manganese	414,947,275	Tour Maine Montparnasse, 33, avenue du Maine 75755 Paris Cedex 15 France
Eralloys Holding	N/A	Eralloys Holding AS Strandv 50 1366 Lysaker Norway
ERAMET Holding Alloys (formerly SIMA)	562,013,995	Tour Maine-Montparnasse, 33, avenue du Maine 75755 Paris Cedex 15 France
Erasteel	352,849,137	Tour Maine-Montparnasse, 33, avenue du Maine 75755 Paris Cedex 15 France
Investments in associates (between 10% and 50% owned)		
COMILOG	N/A	Compagnie Minière de l'Ogooué Z.I. in Moanda BP 27-28 Gabon

3.3.6 AUDITORS' REPORT ON THE ANNUAL ACCOUNTS

FOR THE YEAR ENDED 31 DECEMBER 2017

This is a translation into English of the Statutory Auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This Statutory Auditors' report includes information required by European regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General meeting

OPINION

In compliance with the engagement entrusted to us by your general meeting, we have audited the accompanying financial statements of ERAMET S.A. for the year ended 31 December 2017.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at 31 December 2017 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

BASIS FOR OPINION

AUDIT FRAMEWORK

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Financial Statements section of our report.

INDEPENDENCE

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 January 2017 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5-(1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

JUSTIFICATION OF ASSESSMENTS—KEY AUDIT MATTERS

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

IMPAIRMENT TEST OF INVESTMENTS IN SUBSIDIARIES AND RECEIVABLES ON INVESTMENTS IN SUBSIDIARIES

Risks identified

Investments in subsidiaries and related receivables are included in the balance sheet at 31 December 2017 for a net amount of €2,924,860 thousand.

They are recognised at their purchase price at the date of acquisition and amortised on the basis of their value in use according to the methods described in note 3.2 to the appendix to the individual financial statements accounts. At the end of the financial year, the investments in subsidiaries are valued at their value in use. Value in use is generally estimated by management on the basis of net asset value and profitability perspectives. If the value in use is lower than the gross amount, an impairment loss is recognised for the difference.

The estimation of the value in use of these investments in subsidiaries requires judgement by management in choosing the elements to be considered depending on the related investments in subsidiaries or related investiment receivables.

Such elements can be:

- historical data (for example, the shareholders' equity of the subsidiary concerned),
- forecasts (when the method of discounted future cash flows generated from the use of the underlying operating or mining assets is the method used to estimate value in use).

The Data used to calculate the discounted future cash flows are derived from the annual budgets and multi-year plans prepared by Management of the relevant businesses owned by investments in subsidiaries and relating to the underlying operating or mining assets.

These impairment tests represent a key audit matter due to the significant importance of the value of these fixed assets in the company's accounts and because the determination of their recoverable value, when based on forecasts of discounted future cash flows, requires the use of assumptions, estimates or assessments.

Audit procedures implemented in response to identified risks

For impairment tests based on historical elements, our work consisted mainly of:

- reconciling retained shareholders' equity with the entities accounts that have been audited or subject to other procedures, as appropriate;
- assessing whether adjustments made, if any, to shareholders' equity are documented on the basis of an appropriate justifying documentation

For impairment tests based on forecasts, our work consisted mainly of:

- obtaining cash flow forecasts for the activities of the entities concerned established by their operating management and assessing their consistency with forecast data from the latest strategic plans prepared by senior management for each of the activities;
- assessing the consistency of assumptions used, using our knowledge of the economic environment at reporting date;
- comparing forecasts retained for previous periods with actuals in order to assess achievement of past objectives.

Our work also consisted of assessing the recoverability of the investments related receivables considering analyses performed on investments in subsidiaries.

VERIFICATION OF THE MANAGEMENT REPORT AND OF THE OTHER DOCUMENTS PROVIDED TO SHAREHOLDERS

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

INFORMATION GIVEN IN THE MANAGEMENT REPORT AND OTHER DOCUMENTS ADDRESSED TO SHAREHOLDERS ON THE FINANCIAL POSITION AND THE ANNUAL ACCOUNTS

We have no observations to make regarding the fair presentation and consistency with the financial statements of the information given in the management report of the Board of Directors and other documents addressed to shareholders on the financial position and the financial statements.

INFORMATION RELATING TO CORPORATE GOVERNANCE

We confirm the existence of the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code in the section on corporate governance in the management report of the Board of Directors.

With regard to the information provided pursuant to the provisions of Article L. 225-37-3 of the French Commercial Code on remuneration and benefits paid to corporate officers and the commitments made in their favour, we verified its consistency with the financial statements or with the data used to prepare the statements and, where applicable, with the information collected by your Company from companies that control or are controlled by your Company. On the basis of this work, we certify the accuracy and sincerity of this information.

OTHER INFORMATION

In accordance with the law, we have ensured that the various information relating to the acquisition of equity interests and control and the identity of the holders of the capital or voting rights have been communicated to you in the management report.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

APPOINTMENT OF THE STATUTORY AUDITORS

We were appointed as Statutory Auditors of ERAMET S.A. by General meeting: the annual general meeting held on 29 May 2015 (for KPMG Audit and Ernst & Young Audit).

As at 31 December 2017, KPMG Audit and Ernst & Young Audit were in the third year of total uninterrupted engagement.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

OBJECTIVES AND AUDIT APPROACH

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to

cease to continue as a going concern. If the Statutory Auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;

- evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

REPORT TO THE AUDIT COMMITTEE

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee the declaration provided for in Article 6 of Regulation (EU) No. 537-2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Défense, 20 February 2018
The Statutory Auditors

KPMG Audit	Ernst & Young Audit
Division of KPMG S.A.	
Denis Marangé	Jean-Roch Varon
Partner	*Partner*

3.3.7 SPECIAL AUDITORS' REPORT ON THE REGULATED AGREEMENTS AND COMMITMENTS

FOR THE YEAR ENDED 31 DECEMBER 2017

General Shareholders' Meeting called to approve the financial statements for the financial year ended 31 December 2017

This is a translation into English of the Statutory Auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This Statutory Auditors' report includes information required by European regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company, we hereby present our report on regulated agreements and commitments.

It is our duty to inform you, based on the information provided to us, of the essential terms and conditions and the justification of the importance for the Company of agreements and commitments brought to our attention or which we may have discovered during the course of our engagement, without expressing an opinion on their usefulness or merit, or identifying the existence of any other agreements and commitments. It is your responsibility, pursuant to Article R. 225-31 of the French Commercial Code, to assess the interest for the Company of concluding these agreements with a view to their approval.

Furthermore, we are required to provide you with the information stipulated in Article R. 225-31 of the French Commercial Code relating to the execution, during the past financial year, of any agreements and commitments previously approved by the General Shareholders' Meeting.

We have implemented the procedures we considered necessary in accordance with the professional standards of the national auditing body *(Compagnie national des commissaires aux comptes)* relating to this engagement. These procedures consisted of checking that the information given to us was consistent with the basic documents from which it derives

AGREEMENTS AND COMMITMENTS SUBMITTED FOR THE APPROVAL OF THE GENERAL SHAREHOLDERS' MEETING

In accordance with Article L. 225-40 of the French Commercial Code, we were informed of the following agreements and commitments that were previously authorised by your Board of Directors.

1. WITH SOCIÉTÉ LE NICKEL-SLN

Persons concerned

Édouard Duval and Christel Bories.

Nature and purpose

A new amendment, authorised by the Board of Directors on 26 July 2017, to the marketing agreement concluded between your Company and Le Nickel-SLN in 1985 under which your Company provides support for the marketing of Demag slag outside the territory of New Caledonia.

Terms

In accordance with this amendment, your Company markets Demag slag as an agent of Le Nickel-SLN, under conditions identical to those provided for the marketing of low or intermediate grade ores or washery by-products (subjects of amendment No. 10), namely a commission of 1.5% on sales of Demag slag.

No commission was collected by your Company for the 2017 reporting period.

Justification of the importance of the agreement for the Company

Your board has given the following reasons for this agreement:

This amendment allows Le Nickel-SLN to use the expertise of the sales teams and the international network of your Company to develop Demag slag sales and thus allow Le Nickel-SLN to obtain an additional financial benefit after deducting the agent commission of 1.5% paid to your corporation in accordance with market practice for this type of service.

2. WITH CHRISTEL BORIES, DEPUTY CEO FROM 23 FEBRUARY TO 23 MAY 2017, THEN CHAIRMAN AND CEO FROM 23 MAY 2017

a) Membership of the supplementary insurance scheme and healthcare plan

Nature, purpose and terms

Christel Bories joined the supplementary healthcare plan and the supplementary disability and life insurance scheme applicable to all employees of your Company, authorised by the Board of Directors on 23 February 2017.

Justification of the importance of this commitment for the Company

Your board has determined that these provisions are in line with the corporate interest of your Company, in that it allows the executive corporate officer to benefit from the same benefits as those applicable to the employees of your Company.

b) Conclusion of an insurance contract indirectly concerning Christel Bories

Nature, purpose and terms

As part of the award to Christel Bories of additional remuneration, your Company has taken out a life insurance contract under Article 82 of the General Tax Code with an authorised insurer, approved by the Board of Directors on 26 July 2017.

Justification of the importance of this commitment for the Company

Your board has determined that the purchase of this life insurance policy is in line with the corporate interest of your Company as well as with market practice, and it allows for the implementation of an executive remuneration policy that is in the interest of the Company.

c) Compensation related to leaving a post

Nature, purpose and terms

In case of dismissal (except for gross misconduct) or forced resignation, particularly following a change of control of the Company or substantial imposed changes to the scope of responsibility, severance pay equal to one year of gross fixed and variable remuneration will be paid for departure up until 1 January 2019, and two years as from 1 January 2019.

This benefit is subject to the condition that the sum of gross variable remuneration received over the last three complete years of her term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period. In the event that the number of full years is less than three, the performance will be assessed based on the actual duration of the term of office, at the discretion of the Board of Directors on the proposal from the Remuneration Committee. The decision of the Board of Directors of your Company determining the method for calculating the allowances or the advantages due or likely to be due to Christel Bories, in the event of the termination or change of her duties, will be subject to the approval of the General Shareholders' Meeting under the conditions provided for by law.

This arrangement authorised by the Board of Directors on 23 February 2017 is subject to the approval of the General Shareholders' Meeting in a separate resolution, in accordance with the provisions of Article L. 225-42-1 of the French Commercial Code.

Justification of the importance of the agreement for the Company
Your Board has determined that the provisions are in line with the corporate interest of your Company, as they are in line with market practices and allow the implementation of an executive remuneration policy that is in the interest of the Company.

AGREEMENTS AND COMMITMENTS ALREADY APPROVED BY THE GENERAL SHAREHOLDERS' MEETING

Pursuant to Article R. 225-30 of the French Commercial Code, we have been informed that the execution of the following agreements and commitments, which were already approved by the General Shareholders' Meeting in previous financial years, were continued during the past financial year.

1. WITH THE CHAIRMAN AND CEO

Person concerned
Patrick Buffet (until 23 May 2017).

a) Membership of the supplementary insurance scheme and healthcare plan

Nature, purpose and terms
Membership of executive corporate officers of your Company of the supplementary healthcare plan and the supplementary disability and life insurance scheme of the ERAMET group. This arrangement was authorised by the Board of Directors on 17 February 2010, approved by the General Shareholders' Meeting of 20 May 2010 (third resolution) and executed in the 2017 reporting period.

b) Pension plan

Nature, purpose and terms
Defined benefit pension plan. This plan is applicable to the executive corporate officers of the ERAMET group. The supplementary pension benefit likely to be paid to Patrick Buffet is capped with reference to the annual social security ceiling (ASSC) and his age at the date of retirement, from 31.5% (63 years) to 33.25% (64 years) of 25 times the ASSC, or a gross annual annuity of between €308,920 and €326,082. The calculation made for Patrick Buffet based on the reference remuneration (fixed plus average of variable remuneration for the last three years), allowed the definition of an annual gross annuity of €317,501.60 as of 1 June 2017; this corresponds to 19.94% of his total gross remuneration (fixed gross annual remuneration + average gross annual variable remuneration for the last three years, including the year 2016).

A reduction (from 35% to 32.375%) was applied for the early draw down of pension benefits as of 1 June 2017 at 63 years and six months.

This arrangement was authorised by the Board of Directors on 30 July 2008 and approved by the General Shareholders' Meeting of 13 May 2009 (third resolution), on the recommendation of the Remuneration Committee, to take into account the regulatory changes relating to defined benefit pension plans ("Article 39").

c) Compensation related to leaving a post

Nature, purpose and terms
Pursuant to the provisions of Article L. 225-42-1 of the French Commercial Code, this arrangement, which is described in the report of the Chairman of the Board of Directors, was authorised by the Board of Directors on 20 February 2008 and approved by the General Shareholders' Meeting of 16 April 2008 (fourth resolution), then as part of the renewal of the term of office, it was authorised by the Board of Directors on 27 July 2011 and approved by the General Shareholders' Meeting of 15 May 2012 (fourth resolution).

Following the reappointment of the Chairman and CEO to that role, decided by the Board of Directors on 29 May 2015, and on the recommendation of the Remuneration Committee, on 29 May 2015 the Board of Directors, with the Chairman and CEO abstaining, voted unanimously to retain all elements of the remuneration of the Chairman and CEO and all the provisions of his corporate officer contract dated 20 February 2008 (incorporating all the amendments decided since by the Company's Board of Directors at the recommendation of the Remuneration Committee).

However, two changes were made to the severance pay falling due to the Chairman and CEO in the event of his departure from the Company (as a result of forced resignation, cancellation or non-renewal of his term of office or modification of the conditions under which he originally joined the ERAMET group):

- The amount of severance pay which may fall due is equal to twice (instead of three times, as it was previously) the last gross annual fixed remuneration plus twice (instead of three times) the average gross annual variable remuneration received in the last three complete years prior to his departure.
- The severance pay benefit specified in his corporate officer contract is conditional upon the fulfilment of performance conditions: the total gross variable remuneration amount (itself subject to specific performance conditions) received over the final three full financial years of his term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period—instead of 20% as it was previously. Consequently, these arrangements rule out the payment of such a benefit should the Chairman and CEO fail to achieve his targets.

  In accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, these modified arrangements were approved by the General Shareholders' Meeting of 29 May 2016 (fifth resolution).

Severance pay of €2,991,860 is equal to twice the last gross annual fixed remuneration plus twice the average gross annual variable remuneration received in the last three complete years prior to his departure. This indemnity, in accordance with the ceiling provided for in Article 24.5.1 of the AFEP-MEDEF Code, was authorised by the Board of Directors on 29 May 2015 and approved by the General Shareholders' Meeting on 27 May 2016. Based on the report of the Remuneration Committee, the Board of Directors noted that P. Buffet had met the conditions for granting and performance of this benefit, of which it therefore authorised the deferred payment as of 24 May 2017. This commitment was executed during the 2017 reporting period.

2. WITH SOCIÉTÉ LE NICKEL-SLN

Persons concerned

Patrick Buffet (until 23 May 2017), Édouard Duval and Christel Bories (since 23 May 2017).

a) Technical support agreement

Nature and purpose

As part of the technical support agreement signed in 1999, your Company provides Société Le Nickel-SLN with general support in strategic, industrial, financial, tax and human resources management. This agreement was amended with retroactive effect from 1 January 2010.

Terms

Benefits are paid based on the actual costs incurred by your Company for these services, plus a margin of 8%. The amount charged in this respect amounted to €7,852,206.74 in 2017 compared to €7,021,000.05 in 2016.

b) Marketing agreement

Nature and purpose

The marketing agreement between your Company and Société Le Nickel-SLN in 1985, under which your Company provides marketing of Société Le Nickel-SLN's products (excluding ores), was also amended with retroactive effect from 1 January 2010.

Terms

Pursuant to this agreement, your Company purchased nickel matte and ferronickel from Société Le Nickel-SLN based on a purchase price that allowed your Company to achieve a profit margin of 3% plus a bonus whose calculation method and the price trigger threshold were redefined. The total amount of purchases invoiced by Société Le Nickel-SLN to your Company amounted to €514,020,022.18 in 2017 compared to €483,127,234.53 in 2016.

As part of that agreement, ERAMET invoiced Société Le Nickel-SLN for a contribution to other costs as a substitute for the standard fee, covering the fixed costs of nickel matte processing incurred by your Company in preparation for the marketing of finished products. No amount was invoiced to Le Nickel-SLN for the 2017 financial year, compared to €18,000,000 in 2016.

Under the terms of this agreement and its amendment with effect from 1 January 2015, your Company invoiced Le Nickel-SLN a commission of 1.5% of the sales of low or intermediate grade ores or washery by-products as an agent of Le Nickel-SLN. The amount invoiced in this respect amounted to €445,007.53 in 2017 compared to €319,172.70 in 2016. This amendment allows Le Nickel-SLN to use the expertise of the sales teams and the international network of your Company to optimise and enhance its sales of ores and thus obtain an additional financial benefit after deducting the agent commission of 1.5% paid to your corporation in accordance with market practice for this type of service.

By an amendment effective 9 May 2016, and in accordance with the conditions of one of the financing agreements ("Borrowing base") of your Company, the advance, partial or total payment conditions were fixed on the fourth business day of the month, subject to remuneration at a rate of 1-month EURIBOR plus 2.10%.

c) Intercompany loan agreements

Nature and purpose

Intercompany loan agreement entered into on 23 December 2015 (authorised by the Board of Directors on 22 December 2015 and approved by the Shareholders' Meeting of 27 May 2016) for an initial amount of €120 million and amended as follows:

- amendment No. 1 of 22 February 2016 (authorised by the Board of Directors on 17 February 2016 and approved by the Shareholders' Meeting of 27 May 2016), increasing the loan to €150 million;
- amendment No. 2 of 27 May 2016 (authorised by the Board of Directors on 9 May 2016), increasing the loan to €190 million with a maturity of 31 December 2016;
- amendment No. 3 of 27 July 2016 (authorised by the Board of Directors on 27 July 2016), increasing the loan to €325 million and with a maturity of 30 June 2024. In addition, the interest rate was raised to 4% as well as the performance participation rate based on the EBITDA of Le Nickel-SLN.

Terms

As at 31 December 2017, €160 million was drawn on your Company's loan. Interest was calculated on the basis of a rate of 4%. It should be noted that the performance participation rate is zero for the period. The interest amount invoiced in this respect amounted to €6,399,999.98 for 2017, compared to €6,217,397.26 for the 2016 reporting period.

Paris-La Défense, 20 February 2018
The Statutory Auditors

KPMG Audit	Ernst & Young Audit
Division of KPMG S.A.	
Denis Marangé	Jean-Roch Varon
Partner	*Partner*

3.3.8 TABLE OF THE FINANCIAL RESULTS OF THE COMPANY OVER THE PAST FIVE FINANCIAL YEARS

(IN EUROS)	2013	2014	2015	2016	2017
Share capital at financial year end					
a) Share capital (€)	80,956,815	80,956,815	80,956,815	80,978,851	81,232,663
b) Number of shares issued	26,543,218	26,543,218	26,543,218	26,550,443	26,633,660
Transactions and income for the financial year (€ thousand)					
a) Sales excluding tax	707,732	779,892	626,232	585,089	634,119
b) Income before tax, employee profit-sharing, depreciation, amortisation and provisions	243,083	(40,061)	(43,866)	(44,605)	(30,193)
c) Income tax	9,594	2,897	(659)	8,821	3,393
d) Employee profit-sharing	0	0	0	0	0
e) Income after tax, employee profit-sharing, depreciation, amortisation and provisions	(133,006)	(70,550)	(331,516)	(165,554)	(17,730)
f) Proposed dividend amount	0	0	0	0	0
Earnings per share (€)					
a) Income after tax, employee profit-sharing, but before depreciation, amortisation and provisions	8.80	-1.62	-1.63	-2.01	-1.26
b) Income after tax, employee profit-sharing, depreciation, amortisation and provisions	(5.01)	(2.66)	(12.49)	(6.24)	(0.67)
c) Proposed dividend per share	0	0	0	0	0
Personnel					
a) Average number of employees	439	418	388	355	149
b) Total wage bill (€ thousand)	34,373	33,141	32,600	32,361	26,717
c) Amount paid out in employee benefits (€ thousand)	23,716	25,177	11,054	24,853	33,999

3.3.9 SUPPLIER PAYMENT TERMS

The Company has a supplier debt more than 60 days from the invoice date of €1,435 thousand.

PAST DUE UNPAID RECEIVABLE AND PAYABLE INVOICES AT PERIOD END (TABLE PROVIDED FOR IN I OF ARTICLE D. 441-4)

	ARTICLE D. 441.-I°: PAST DUE UNPAID PAYABLE INVOICES AT PERIOD END						ARTICLE D. 441.-I°: PAST DUE UNPAID RECEIVABLE INVOICES AT PERIOD END					
(€ THOUSAND)	0 DAY (INDICATIVE)	1-30 DAYS	31-60 DAYS	61-90 DAYS	91 DAYS OR OVER	TOTAL (1 DAY OR OVER)	0 DAY (INDICATIVE)	1-30 DAYS	31-60 DAYS	61-90 DAYS	91 DAYS OR OVER	TOTAL (1 DAY OR OVER)
(A) Late payment brackets												
Number of invoices concerned	4					279	2					87
Total amount of invoices concerned incl. tax	10	3,369	-44	-36	143	3,432	1,719	9,727	633	1,155	581	12,096
Percentage of the total purchase amount for the period incl. tax		0.5				0.5						
Percentage of sales for the period incl. tax							0.2	1.4	0.1	0.2	0.1	1.8
(B) Invoices excluded from (A) relating to disputed and unrecorded debts and receivables												
Number of invoices excluded	0						0					
Total amount of invoices excluded incl. tax	0						0					
(C) Reference payment terms used (contractual or statutory period—Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Payment terms used to calculate late payments	■ Contractual terms: (specify)						■ Contractual terms: (specify)					
	☐ Legal terms: (specify)						☐ Legal terms: (specify)					

3.3.10 REINCORPORATION OF GENERAL COSTS AND SUMPTUARY EXPENSES

Not applicable.

3.4 CONSOLIDATED FINANCIAL STATEMENTS FOR THE FINANCIAL YEARS 2016 AND 2015

Pursuant to Article 28 of the Commission Regulation (EC) No. 809/2004, the following information is included for reference in this Registration Document:

a) the 2015 consolidated financial statements, the corresponding audit report and the summary of the articles appearing respectively in paragraphs 6.1, 6.1.3 and 2 of the 2015 Registration Document filed with the AMF on 7 April 2016;

b) the 2016 consolidated financial statements, the corresponding audit report and the summary of the articles appearing respectively in paragraphs 6.1, 6.1.3 and 2 of the 2016 Registration Document filed with the AMF on 24 March 2017.

The parts not included from the 2015 and 2016 Registration Documents are either not applicable to the investor or covered by another part of this Registration Document.

The two Registration Documents mentioned above are available on the Company website (www.eramet.com) and the AMF website (www.amf-france.org).

3.5 DIVIDEND DISTRIBUTION POLICY

3.5.1 TERMS OF PAYMENT OF DIVIDENDS

The payment of dividends shall be made annually at the time and place fixed by the General Shareholders' Meeting or, failing that, by the Board of Directors within a maximum period of nine months from the end of the financial year. Dividends regularly received may not be subject to repayment.

An interim dividend payment may be made with respect to the payment of the dividend before the date of the Shareholders' Meeting by fixing the amount, following a decision by the Board of Directors under the conditions set out in Article L. 232-12, paragraph 2, of the Commercial Code.

It may be proposed to the shareholder, in whole or in part, to opt for payment in new Company shares, under the conditions of Article L. 232-18, paragraph 1, of the Commercial Code.

In accordance with the provisions in force in France, the limitation period for unclaimed dividends is five years from their date of payment. Unclaimed sums shall be paid to the French State, in accordance with the applicable provisions.

3.5.2 ALLOCATION AND DISTRIBUTION OF RESULTS (ARTICLE 24 OF THE ARTICLES OF ASSOCIATION)

"From the net profits, as defined by law, less any previous losses, 5% shall be deducted to constitute the reserve fund provided for by law until the fund reaches a tenth of the share capital.

The distributable income consists of the net profit for the financial year, less the previous losses and the deduction envisaged above and increased by profits carried forward. From the distributable profit, the Ordinary General Meeting may withdraw any amount it deems appropriate, either to be carried forward again to the following financial year or to be transferred to one or more general or special reserve funds for which it determines the allocation or use.

The surplus, if any, shall be distributed uniformly among all shares.

The General Meeting has the right to grant each shareholder, for all or part of the distributed dividend, an option consisting of the payment of the dividend in shares under legal conditions or in cash."

3.5.3 2017 INCOME ALLOCATION TABLE

The proposed allocation for the 2017 result is included in the second resolution proposed at the next Meeting in Chapter 9 of this document.

3.5.4 DIVIDEND DISTRIBUTION POLICY

3.5.4.1 TERMS OF PAYMENT

The Company does not normally distribute an interim dividend; dividends are paid annually after the Meeting called to approve the management and accounts for the previous financial year. At the option of the shareholder, it may be possible to offer mixed distribution, in cash and in shares.

3.5.4.2 AMOUNT OF THE DIVIDEND

The Company endeavours to pay a regular and significant dividend.

DIVIDENDS PAID OVER THE LAST THREE YEARS

	2017	2016	2015	2014
Number of paid shares	26,633,660	26,550,443	26,543,218	26,543,218
Net income—Group share	€203 million	(€179 million)	(€714 million)	(€159 million)
Dividends per share	€2.30	€0	€0	€0
Total distribution	€61.3 million	€0 million	€0 million	€0 million

3.6 FEES PAID TO THE STATUTORY AUDITORS

The complete inventory of fees for the last two years by type of benefits paid to the various firms is included in the notes to the consolidated accounts.

4

CORPORATE GOVERNANCE

REPORT BY THE BOARD OF DIRECTORS ON CORPORATE GOVERNANCE

This report, provided for in the last paragraph of Article L. 225-37 of the French Commercial Code, covers the points provided for in Article L. 225-37-4 of the French Commercial Code.

4.1 BOARD OF DIRECTORS

4.1.1 COMPOSITION

In accordance with the Shareholders' Agreement of 16 March 2012 (amended on 21 March 2013, subject to Decision and Notice No. 212C0647 of the *Autorité des marchés financiers* (AMF) at its conclusion as well as AMF Decision and Notice No. 216C1753 concerning changes to the concert with the acquisition by the *Agence de participations de l'État* (APE) of 100% of the share capital of FSI Equation on 29 August 2016), between SORAME and CEIR, on one hand, and FSI Equation (a subsidiary of APE, acting for the State), on the other, the Board of Directors is comprised as follows:

- five directors put forward by the SORAME-CEIR concert party;
- three directors put forward by the *Agence des participations de l État* (APE);
- two directors put forward by STCPI;
- one director put forward by mutual agreement between SORAME-CEIR and APE;
- five "qualified persons", three put forward by the SORAME-CEIR concert and two by the APE, selected in view of their expertise and their independence with respect to the nominating party and the Company itself, in line with the AFEP/MEDEF corporate governance code for listed companies;
- one director called on to chair the Board of Directors.

Furthermore, in accordance with the law of 14 June 2013 related to job security (Article L. 225-27-1 of the French Commercial Code) and Article 10.9 of the Articles of Association, two directors representing employees were designated, one by the Company Works Council and the other by the European Works Council, and took up their duties in 2014. Their term of office is four years from their appointment.

Under Article 10 of the Articles of Association, directors may not be over seventy years of age at the time of their appointment and are appointed for a four-year term of office. The Chairman and a majority of members of the Board of Directors (including legal entities and their permanent representatives) must be nationals of a member state of the European Union. In accordance with the Articles of Association, each director should hold at least one share in the Company and, at its meeting of 11 May 2011 the Board of Directors indicated that, in addition, each director should hold one hundred shares within eighteen months of joining the Board.

For historical reasons associated with the Company's shareholding structure and the existence of a Shareholders' Agreement since 1999, the terms of office of the 17 Board members appointed by the General Shareholders' Meeting are as follows: nine terms of office will come to an end at the General Shareholders' Meeting called to approve the financial statements for the year ended 31 December 2018, three other mandates will end at the General Shareholders' Meeting called to approve the financial statements for the year ended 31 December 2019, and five mandates will end at the General Shareholder's meeting called to approve the financial statement for the year ended 31 December 2020.

Other participant at Board meetings: Jean-Philippe Letellier (delegate of the Works Council since 1 February 2017).

4.1.2 DETAIL OF TERMS OF OFFICE

Full details of the composition of the Board of Directors and terms of office of its members at the time of this report can be found in the table set out in the Appendix to this report.

4.1.3 COMPOSITION OF COMMITTEES

The internal rules specifying the composition, operating rules and duties of each Committee were revised by the Board in 2017 and are available on the Company's website.

The Audit, Risks and Ethics Committee currently comprises six directors: Christine Coignard (independent director), Marie-Axelle Gautier (director representing employees), Miriam Maes (independent director), Sonia Sikorav (independent director), Antoine Treuille (Chairman of the Committee) and Bruno Vincent.

The Remuneration and Governance Committee currently comprises six directors: Marie-Axelle Gautier (director representing employees), Manoelle Lepoutre (independent director), Miriam Maes (independent director), Claude Tendil (Chairman of the Committee—independent director), Antoine Treuille and Bruno Vincent.

The Appointments Committee currently comprises four directors: Cyrille Duval, Édouard Duval, Bruno Vincent and Claude Tendil (Chairman of the Committee, Chairman of the Remuneration and Governance Committee, independent director).

The Strategic and CSR Committee currently comprises ten directors: Christel Bories (Chairman and CEO, Chairman of the Committee), Cyrille Duval, Édouard Duval, Georges Duval, Jean-Yves Gilet, Bruno Vincent, Christine Coignard (independent director), Manoelle Lepoutre (independent director), Pia Olders (director representing employees) and Sonia Sikorav (independent director).

4.1.4 COMPLY OR EXPLAIN

4.1.4.1 CORPORATE GOVERNANCE CODE

In accordance with the decision of the Board of Directors taken on 9 December 2008, ERAMET refers to the AFEP/MEDEF corporate governance code for listed companies ("the AFEP/MEDEF code") as its reference framework; the code is available on the AFEP and MEDEF websites.

The Company considers that its practices are compliant with AFEP/MEDEF code recommendations. In some cases, certain adjustments have been made to the recommendations for reasons detailed in the table set out in the Appendix to this report.

4.1.4.2 FEMINISATION OF THE BOARD OF DIRECTORS

At the time of this report, the Board of Directors of ERAMET consists of 17 members, including seven women (excluding from the calculation the members of the Board representing employees, in accordance with the wording of Article L. 225-18-1 effective 1 January 2017). The proportion of women on the Board is 41%, in accordance with the 40% threshold defined in the first paragraph of Article L. 225-18-1.

4.1.4.3 INDEPENDENCE

The AFEP/MEDEF code considers a director to be independent "when he/she has no relationship of any kind whatsoever with the Company, its Group or its management that could compromise his/her freedom of judgement. Therefore, an independent director means any non-executive corporate officer of the Company or its Group who does not have any special ties (significant shareholder, employee, other) with the Company, its Group or its management." The AFEP/MEDEF code also identifies a number of criteria that the Board must consider to determine whether a director can be classified as independent:

- "not being or not having been in the preceding five years:
  - a salaried employee or executive corporate officer of the Company,
  - a salaried employee, executive corporate officer or director of a company consolidated by the Company,
  - a salaried employee, executive corporate officer or director of the parent company or of a company consolidated by the latter.";
- "not being an executive corporate officer of a company in which the Company directly or indirectly holds a directorship or in which a directorship is held by a salaried employee designated as such or by an executive corporate officer (current or former within the past five years), of the Company";
- "not being a customer, supplier, merchant banker or commercial banker:
  - classified as significant vis-a-vis the Company or its Group,
  - or for which the Company or its Group represents a significant percentage of its business activity.

  The assessment of the significance of the relationship with the Company or its Group is debated by the board and the quantitative and qualitative criteria leading to this assessment (continuity, economic dependency, exclusivity, etc.) are explained in the annual report.";
- "not having close family ties with a corporate officer";
- "not having been a Statutory Auditor of the Company in the past five years";
- "not having been a director of the Company for more than twelve years. A director is no longer considered as independent after twelve years".

At the time of this report, based on annual examination by the Board of the criteria set out above, the Board contained six independent directors out of a total of 17 Board members (the two directors representing employees not being counted in accordance with AFEP/MEDEF code provisions), therefore, more than one third of Board members are independent, in accordance with recommendation 8.3 of the AFEP/MEDEF code in respect of controlled companies.

It is noted that at the annual review of the independent status of directors, the Board performed an appraisal of business relationships existing between the ERAMET group and the group in which certain independent directors hold a corporate office. ERAMET's mining and metallurgical business generates business flows with a limited number of customers that have no other business relationships with ERAMET directors. To carry out its business, ERAMET uses a number of suppliers of raw materials, goods and services. Among these, there are two groups in which two directors in particular (Ms Lepoutre for petroleum products and Mr Tendil for insurance) work in a professional capacity. This appraisal enabled the Board to verify that there were no significant business relationships in that regard, either in terms of the nature of goods or services provided, or in terms of their corresponding value or the conditions of their negotiation or provision.

With regard to the independence of directors where the duration of their duties extends beyond 12 years, at its meeting of 23 February 2017, the Board of Directors reasoned that Mr Treuille, first appointed as a director of the Company in July 1999, could no longer continue to be considered independent at the close of the General Shareholders' Meeting of May 2017, given the duration of his term of office. The Board nevertheless decided that Mr Treuille should continue to serve as Chairman of the Audit Committee for the 2017 financial year until the 2018 General Shareholders' Meeting.

4.1.5 WORK OF THE BOARD AND ITS COMMITTEES DURING THE 2017 FINANCIAL YEAR

4.1.5.1 BOARD OF DIRECTORS

The Board of Directors met seven times in 2017.

In addition to examining recurring items relating to the Group's business, Board meetings were concerned, in particular, with:

- approval of the Group and Company financial statements for 2016 and the convening of the annual General Shareholders' Meeting;
- review of the 2017 interim financial statements;
- review of the key events affecting the Group and its business divisions;
- the productivity improvement programmes and investment projects of the three divisions;
- the financing of the Group and its main subsidiaries;
- review of the report required by Article L. 225-102-3 of the French Commercial Code on payments made to the authorities of countries where the Group operates mining activities;
- group-wide safety at work.

Individual participation at meetings of the Board of Directors and the Committees in 2017 is shown in the table below.

	BOARD OF DIRECTORS	AUDIT, RISK AND ETHICS COMMITTEE	REMUNERATION AND GOVERNANCE COMMITTEE	STRATEGIC AND CSR COMMITTEE	APPOINTMENTS COMMITTEE
Michel Antsélévé	100%	-	-	-	-
Christel Bories(1)	100%	-	-	100%	-
Patrick Buffet(2)	100%	-	-	100%	100%
Christine Coignard(1)	80%	100%	-	100%	-
Cyrille Duval (SORAME)	100%	-	-	100%	100%
Édouard Duval	100%	-	-	100%	100%
Georges Duval	100%	-	-	100%	-
Nathalie de La Fournière (CEIR)	86%	-	-	-	-
Marie-Axelle Gautier	100%	100%	100%	-	-
Jean-Yves Gilet	100%	-	-	66%	-
Philippe Gomès	71%	-	-	-	-
Manoelle Lepoutre	86%	-	100%	100%	-
Miriam Maes	57%	75%	-	-	-
Pia Olders	86%	-	-	66%	-
Ferdinand Poaouteta	14%	-	-	-	-
Catherine Ronge	71%	50%	-	-	-
Sonia Sikorav	100%	100%	-	100%	-
Claude Tendil	100%	-	100%	-	100%
Frédéric Tona(3)	100%	100%	100%	-	-
Antoine Treuille	100%	100%	100%	-	-
Bruno Vincent (FSI Equation)	100%	100%	100%	100%	100%-
Average attendance	87%	91%	94%	93%	100%

(1) Appointed to the Board as of 23 May 2017.
(2) Resigned as of 23 May 2017.
(3) Term of office expired on 23 May 2017.

4.1.5.2 AUDIT, RISKS AND ETHICS COMMITTEE

The Company refers to the AMF working group's report on Audit Committees when organising the Committee's work (AMF recommendation of 22 July 2010).

The Committee meetings are attended, in particular, by the Chief Financial Officer, the Statutory Auditors, the Group's Internal Audit Director, the Director of Accounting, Tax and Consolidation, the Director of Planning and Management Control, the Financing and Treasury Director and the Group Director of Risk Management and Insurance.

The Committee met four times in 2017.

In addition to presenting the financial statements for the previous year in February and examining the interim financial statements in July, each year the Committee reviews internal audit reports for the year as well as the internal audit programme for the following year. The examination of the financial statements by the Committee is accompanied by a presentation by the Statutory Auditors describing the findings of their work and the main issues involved.

In 2017, the Committee examined the following points in particular:

- reports to shareholders on internal control;

- the work of the Internal Audit Department in 2017 and its draft work plan for 2018;
- the monitoring of changes to the Group's working capital requirement and that of its main subsidiaries;
- the Group's financing activities;
- the Group's risk management monitoring procedures;
- the Group's currency, fuel and nickel risk hedging policy;
- corporate governance and the investment and risk allocation policy of the Group's financing company, Metal Securities;
- the procedure for monitoring the Group's off-balance-sheet commitments;
- the Group's ethics compliance programme;
- cybersecurity risk.

4.1.5.3 REMUNERATION AND GOVERNANCE COMMITTEE

The Committee met eight times in 2017.

During the year, besides the proposed remuneration elements for executive corporate officers (detailed in the section "Remuneration of the Management and Administration Bodies"), the Committee also proposed to the Board of Directors, which the latter approved, as part of the annual performance share award plan for corporate officers and senior executives of the Company and its subsidiaries, a 2017 EraShare worldwide bonus share plan, allowing the allocation of two bonus shares to all employees of the Company and its subsidiaries, in addition to a selective performance share and bonus share plan for 2017. The Committee also proposed to the Board new rules for allocating directors' fees.

4.1.5.4 APPOINTMENTS COMMITTEE

The Committee met three times in 2017 to review the nominations of new directors and succession planning for key Group management personnel.

4.1.5.5 STRATEGIC AND CSR COMMITTEE

The Committee met three times in 2017. At these meetings, the Strategic Committee examined developments taking place in the markets in which the Group's three Divisions operate and their competitiveness. On a case by case basis, the Committee examined the productivity improvement programmes carried out, as well as certain investment or disinvestment projects.

4.1.6 ASSESSMENT OF THE BOARD'S WORK

The Board provides for an annual self-assessment of its work, alternating with an assessment of the Board by an expert third party every three years.

At its meeting on 9 November 2016, in accordance with the AFEP-MEDEF Code, the Board decided to undertake a formal assessment of its operations and that of its specialised committees. It decided to entrust the task to an *Ad Hoc* Committee established among its members, calling on the support of an external consultant appointed by the Remuneration Committee. At its meeting on 23 May 2017, the conclusions of the assessment were presented to the Board, debated and deliberated on as to how to implement the resulting recommendations. On this basis, the Board meeting of 26 July 2017 validated the recasting of the internal rules and operations of the Board and its Committees.

A new assessment for 2017 was discussed at the Board meeting on 22 March 2018.

4.2 INTERNAL RULES OF THE BOARD AND ITS COMMITTEES, DIRECTORS' CHARTER, AND SECURITIES TRADING CODE OF CONDUCT

The internal rules were updated in 2017 to reinforce the Board's role in the Group's governance and the orientation of the work of the committees and General Management, in particular by adapting the duties of the Board, of its committees and to favour more collective information sharing, in line with the rights and duties of the directors.

The internal rules, which can be consulted on the Company's website, specify the composition, organisation and functioning of the Board and its committees, the roles and powers of the Chairman of the Board and the Chief Executive Officer and the rights and duties of the directors. The internal rules are binding on all directors, as well as on any other person who may attend meetings of the Board or its committees in any capacity whatsoever.

In addition to its general powers defined by law and the rules, the Board reviews and approves all decisions relating to the Group's major strategic directions and ensures that they are effectively implemented by General Management.

Board members and Committee members may, in the performance of their respective duties and having first informed the executive corporate offices, confer with members of the Group's management. They report on the information obtained and advice received.

The Board meets as often as the interests of the Company require on dates that are adapted to legal obligations. Convening notices are sent by any means and in sufficient time to allow the administrators to examine the files with the appropriate advance notice. If specified in the convening notice, Board meetings may be held by videoconference or telecommunications on subjects authorised by the Company's Articles of Association or by law.

The Chairman is responsible for circulating to each director in advance of the meeting a file containing all the documents and information required for consideration of the items of the agenda.

The Secretary of the Board draws up the minutes of each Board meeting, which the Chairman submits to directors for approval at the subsequent Board meeting, the draft minutes being sent to each participant (directors and Group Works Council member) together with the convening notice and agenda approximately one week before the scheduled meeting date.

In the interest of good corporate governance, the Board has incorporated the Directors' Charter into its internal rules, which sets out the rights and duties of the directors and to which every director is accountable. Directors must adhere to the charter by signing it when they are appointed. This charter notes in particular that:

- Directors must, under all circumstances, act in the corporate interest of the Company and are committed to defending and promoting the Company's values.
- Directors must ensure that the board is fully informed in advance of any actual, potential or perceived conflict of interest. He/she must abstain from taking part in the vote on the related resolution.
- Directors must maintain their personal independence of analysis, judgement, decision and action, and reject any direct or indirect pressure that may be exerted on them, which may emanate from any third party or functions they perform elsewhere.
- Directors contribute to the collective responsibility and efficiency of the work of the board and the committees, acting in good faith, with loyalty and with duty of confidentiality.
- Directors must dedicate the necessary time and attention to their duties and, where possible, attend all meetings of the Board and the committees of which they are a member, take the necessary time to prepare the work carried out therein and obtain all relevant information for such purpose. He/she attends the General Shareholders' Meetings.
- Directors must seek the approval of the Board before committing themselves personally to a competitor of the Group.
- Directors must treat all the files submitted to them for the performance of their mandate in the strictest confidence, as well as the debates and information to which they have access as part of the board and the committees and, as such, shall not disclose them to anyone in any way.
- Directors must ensure that they receive in a timely manner all documents and information required for the fulfilment of their duties. It is their responsibility to request from the Chairman all documents they deem necessary for such purposes. Any director who believes that the information provided in advance is not sufficient may request the Chairman or the Board to postpone ruling on this issue;

If a director is no longer in a position to perform his or her duties, either by his/her own decision or for any other reason, he/she must inform the Chairman of the Board of Directors, seek solutions to remedy the situation and, failing this, draw the personal conclusions with regard to the exercise of his/her mandate.

The securities trading code of conduct, established in accordance with the European "market abuse" regulation, aims at preventing insider trading offences and infringements and establishes a period of abstention from any transaction involving ERAMET securities prior to publication of the Company's annual and interim financial statements and its quarterly financial results. Directors must respect the Group's securities trading code of conduct.

4.3 GENERAL MANAGEMENT

4.3.1 COMPANY MANAGEMENT METHOD

Since the deliberations of the Board meeting of 26 March 2003, the Company's Chief Executive Officer is also Chairman of the Board of Directors, given that the Board considered this arrangement best suited to the Company's organisation and shareholding structure, with 63% of the share capital controlled by two shareholder groups in concert. Regular dialogue between the two main shareholders that are party to the shareholders' agreement and General Management is thus facilitated through a single point of contact combining the duties of Chairman of the Board of Directors and CEO. This governance method is by far the most common among French companies whose securities are listed on a regulated market. The amalgamation of the functions of Chairman and Chief Executive Officer is in compliance with balanced corporate governance rules, based on:

- a Board structure comprising at least one third independent directors;
- prior examination by the Strategic Committee followed by Board approval are required for major strategic lines of action.

In accordance with Article 16 of the Articles of Association, the Board may, at the recommendation of the head of the Company's General Management, appoint up to five Deputy CEOs. The Company's CEO and the Deputy CEOs must be nationals of a member state of the European Union and may not hold the position beyond the age of 70.

4.3.2 ROLE OF GENERAL MANAGEMENT

The Executive Committee consists of the Chairman and CEO, two deputy CEOs responsible for the Nickel and Manganese Mining Divisions and the Alloys Division respectively, the Human Resources, Health, Safety and Security Director, the Chief Financial Officer, the Communications and Sustainable Development Director, the Strategy and Investor Relations Directors and the Group Legal Director. The fact that the heads of Corporate support departments (Human Resources, Health, Safety and Security Department, Administration and Finance Department, Communication and Sustainable Development Department and Strategy and Investor Relations Department) are members of the Executive Committee strengthens the effectiveness and consistency of their actions.

All Executive Committee members, the Department of Industrial Affairs, the Director of Internal Audit and the Ethics Officer report directly to the Chairman and Chief Executive Officer.

The Chief Financial Officer also supervises the Information Systems, Management Control, Treasury, Risk Management and Insurance, Financing, Accounting and Taxation.

4.3.3 LIMITATIONS TO THE POWERS OF THE CHIEF EXECUTIVE OFFICER

At its meeting of 23 May 2017, the Board of Directors granted Ms Bories all powers conferred by French law to a Chairman and CEO of a public limited company.

The Chairman and CEO exercises full authority pursuant to the law and within the scope of the Company's corporate purpose, subject to the proviso that, "no decision relating to the Company's major strategic, economic, financial or technological direction may be taken without first being discussed by the Board", as specified in Article 13, Sub-section 2 of the Articles of Association.

However, in accordance with the Board's Internal Rules, the following operations are subject to prior authorisation by the Board: all strategic investments, as well as any significant transaction, particularly acquisitions or disposals, exceeding €50 million or that may significantly affect the Group's results, the structure of its balance sheet or its risk profile. Projects and transactions of between €20 million and €50 million that are not significant in scope are submitted to the Board for information purposes.

In line with Article 13, sub-section 4 of the Articles of Association, "acts concerning the Company are signed either by the CEO, the Deputy CEO or by any specially authorised person."

4.4 COMPANY POLICY ON GENDER EQUALITY IN THE WORKPLACE

These elements are included in the “CSR/Human resources” section of the management report

4.5 INFORMATION ON THE REMUNERATION AND COMPENSATION OF THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER

These elements are included in the section “Remuneration of the Management and Administration Bodies” of the management report

4.6 INFORMATION ON SHARE OWNERSHIP, SHAREHOLDERS’ AGREEMENTS AND INVESTMENTS IN ASSOCIATES

These elements are included in the “ERAMET and its shareholders” section of the management report

4.7 MISCELLANEOUS PROVISIONS

4.7.1 DESCRIPTION OF RELATED-PARTY AGREEMENTS

The description of related-party agreements can be found in the special report of the Statutory Auditors, in the “Financial Statements” section.

4.7.2 POWERS GIVEN BY THE GENERAL SHAREHOLDERS’ MEETING TO THE BOARD OF DIRECTORS RELATING TO CAPITAL INCREASES AND THE STATUS OF THEIR USE

The table summarising the powers granted by the General Shareholders’ Meeting to the Board of Directors is included in the “ERAMET and its shareholders” section of the management report.

4.7.3 MEANS OF SHAREHOLDER PARTICIPATION AT GENERAL SHAREHOLDERS’ MEETINGS

The means by which shareholders may participate at General Shareholders’ Meetings are set out in Articles 8, 20, 21 and 22 of the Articles of Association.

Board of Directors

4.8 LIST OF DIRECTORS AND THEIR POSITIONS

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
BORIES CHRISTEL **Director**[5] **Chairman and CEO** Born 20 May 1964 (53 years) **French national** Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris	Director and Chairman and CEO: General Shareholders' Meeting of 23 May 2017	Expiry date: General Shareholders' Meeting called to approve the 2020 financial statements	**In Group companies** • Director of COMILOG S.A. • Director of Le Nickel SLN **In non-Group companies** • Director of Legrand and Smurfit Kappa (listed companies) **Offices held and completed during the past five years** • Director of Natixis (from 2011 to 2014) • Member of the Board of Directors of the *Cercle de l'Industrie* from 2011 to 2013
ANTSÉLÉVÉ MICHEL **Director** Born 19 February 1965 (52 years) Gabonese national **Business address:** Présidence de la République Libreville Gabon Mr Antsélévé is Special Advisor to the President of the Gabonese Republic.	General Shareholders' Meeting of 15 May 2013	Reappointment: General Shareholders' Meeting of 23 May 2017, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2020 financial statements	**In non-Group companies** • Director representing the State of Gabon on the Board of Directors of Total Gabon (since March 2017) **Offices held and completed during the past five years** • Director representing the Gabonese Republic on the Board of Directors of Compagnie de Navigation Intérieure (Gabon) (until 2013) • Director representing the Presidency of the Gabonese Republic on the Boards of Directors of Société de Développement des Ports (Gabon) (until 2016) • Director representing the Presidency of the Gabonese Republic on the Boards of Directors of Compagnie Minière de Belinga (Gabon) and Société Nationale de Gestion et de Construction du Logement Social (Gabon) (until the start of 2017)
COIGNARD CHRISTINE **Director**[1][4][5] Born 5 February 1964 (53 years) French and Canadian national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Ms Coignard is managing director and founding partner of Coignard & Haas GmbH, a strategy and development consulting firm.	General Shareholders' Meeting of 23 May 2017	Expiry date: General Shareholders' Meeting called to approve the 2020 financial statements	**In non-Group companies** • Director of Polymetal International plc (listed company—United Kingdom) • Managing director and founding partner of Coignard & Haas GmbH (Germany) **Offices held and completed during the past five years** • Managing Director of Hatch International Advisers Ltd (United Kingdom) • Director of Tenetopera Ltd (United Kingdom)

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
DUVAL GEORGES **Director(5)** Born 3 May 1946 (71 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Brother of Édouard Duval, cousin of Cyrille Duval and Nathalie de La Fournière. Mr Duval is CEO of SORAME and CEIR.	General Shareholders' Meeting of 21 July 1999	Reappointment: General Shareholders' Meetings of 21 May 2003, 25 April 2007, 11 May 2011 and 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In Group companies** • Director of Squad (India) • Member of the Executive Committee of UKAD **In non-Group companies (unlisted companies)** • CEO of SORAME SAS • CEO of CEIR SAS **Offices held and completed during the past five years** • Deputy CEO of ERAMET (until April 2016) • Chairman of UKAD, Aubert & Duval (SAS) (until 2016); ERAMET Holding Alliages (SAS) (until 2016), Erasteel (SAS) (until 2016), ERAMET Alloys (until November 2017) • Member of the Supervisory Board of EcoTitanium (until November 2017)
DUVAL ÉDOUARD **Director(3)(5)** Born 2 December 1944 (73 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Brother of Georges Duval, cousin of Cyrille Duval and Nathalie de La Fournière. Mr Duval is Chairman of SORAME and CEO of CEIR.	General Shareholders' Meeting of 21 July 1999	Reappointments: General Shareholders' Meetings of 21 May 2003, 25 April 2007, 11 May 2011 and 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In Group companies** • Director of Le Nickel-SLN **In non-Group companies (unlisted companies)** • Chairman of SORAME SAS • CEO of CEIR **Offices held and completed during the past five years** • Chairman of ERAMET International (SAS) (until 2015) • Deputy CEO of ERAMET Holding Alliages. (SAS) (until 2015)
SORAME **Director(3)(5) represented by** **DUVAL CYRILLE** Permanent representative of SORAME on the Board of Directors Born 18 July 1948 (69 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Uncle of Nathalie de La Fournière, cousin of Georges and Édouard Duval Mr Duval is CEO of SORAME and Chairman of CEIR.	General Shareholders' Meeting of 11 May 2011	Reappointment: General Shareholders' Meeting of 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In Group companies** • Director of COMILOG SA and Metal Securities **In non-Group companies** • Director of Nexans (listed company) *(unlisted companies)* • Chairman of CEIR • CEO of SORAME **Offices held and completed during the past five years (Group companies)** • Manager of Transmet (until April 2014) • Manager of SCI Grande Plaine (until 2016) • Chairman of Forges de Montplaisir (until 2016) • Chairman of Brown Europe (until February 2017) • Deputy CEO of ERAMET Holding Alliages (until October 2017)

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
CEIR **Director represented by** **DE LA FOURNIÈRE NATHALIE** Permanent representative of CEIR on the Board of Directors Born 1 October 1967 (50 years) French national **Address:** c/o ERAMET Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Niece of Cyrille Duval, cousin of Georges and Édouard Duval Ms de La Fournière is Finance and Administration Director of the *Agence d'urbanisme et d'aménagement Toulouse Aire Métropolitaine*.	General Shareholders' Meeting of 11 May 2011	Reappointment: General Shareholders' Meetings of 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies** None **Offices held and completed during the past five years** None
GAUTIER MARIE-AXELLE[(1)(2)] **Director representing employees** Born 22 July 1974 (43 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Ms Gautier is in charge of the public law/mining law unit of the Legal Affairs Department.	Appointed by the European Works Council on 12 November 2014 in accordance with Article 10.9 of the Articles of Association	Expiry date: 11 November 2018	**In Group companies** None **In non-Group companies** None **Offices held and completed during the past five years** • Director of ArcelorMittal Geo Lorraine (until June 2011)
FSI EQUATION **Director**[(1)(2)(3)(5)] **represented by** **VINCENT BRUNO** Born 6 March 1982 (35 years) French national **Business address:** Agence des participations de l'État (APE) 139, rue de Bercy Teledoc 229 75012 Paris Mr Vincent is Director of Energy Shareholdings at the *Agence des participations de l'État* (APE).	Co-opted by the Board on 25 May 2012 (ratified by the General Shareholders' Meeting of 15 May 2013)	Reappointment: General Shareholders' Meeting of 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies** • Director of New Areva Holding and AREVA SA **Offices held and completed during the past five years** • Director of *Monnaie de Paris* (from 2013 to 2014), *Imprimerie nationale* (from 2013 to 2014), the Grand Port Maritime of La Rochelle (from 2013 to 2014), the Grand Port Maritime of Marseille (from 2014 to 2017), SNCF Réseau (from 2015 to 2017), Aéroports de Lyon (from 2015 to 2016) and Aéroports de la Côte d'Azur (from 2014 to 2016)
JEAN YVES GILET **Director**[(5)] Born 9 May 1956 (61 years) French national **Business address:** 16, rue de Saint-Simon 75007 Paris Mr Gilet is Chairman of Gilet Trust Invest.	Co-opted by the Board on 23 September 2016	Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies** • Chairman of Gilet Trust Invest **Offices held and completed during the past five years** • CEO of Fonds Stratégique d'Investissement (2010-2013) • Executive Director of Bpifrance Participations (2013-2016) • Director of CGG Veritas (2014-2015) • Member of the Board of Directors of Eiffage (until May 2017) • Director of Orange (until January 2017)

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
GOMÈS PHILIPPE **Director** Born 27 October 1958 (59 years) French national **Business address:** General Shareholders' Meeting 126, rue de l'Université 75355 Paris 07 SP Mr Gomès is member of parliament of the second constituency of New Caledonia.	Co-opted by the Board on 10 December 2014	Reappointment: General Shareholders' Meeting of 23 May 2017, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2020 financial statements	**In non-Group companies** • Deputy Chairman of STCPI **Offices held and completed during the past five years** • Deputy CEO of STCPI (from 2004 to 2009) • Chairman of the *Agence pour la desserte aérienne de la Nouvelle-Calédonie* (ADANC) (from 2009 to 2011) • Chairman of Société Immobilière Calédonienne (SIC) (from 2004 to 2009) • Chairman of Société de Participation Minière du Sud Calédonien (SPMSC) (from 2005 to 2009 and in 2014) • Chairman of the Board of Directors of ENERCAL (until July 2017) • Chairman of Nouvelle-Calédonie Énergie (until July 2017)
LEPOUTRE MANOELLE **Director(2)(4)(5)** Born 8 May 1959 (58 years) French national **Business address:** TOTAL 2, place Jean-Millier La Défense 6 92078 Paris La Défense Cedex Ms Lepoutre is Director of Civil Society Engagement	General Shareholders' Meeting of 11 May 2011	Reappointment: General Shareholders' Meeting of 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies (unlisted companies)** • Director of *Fondation Villette-Entreprises* • Director of the Nancy School of Geology • *Académie des Technologies* **Offices held and completed during the past five years** • Director of Ifremer (until 2011)
MAES MIRIAM **Director(1)(2)(4)** Born 8 May 1956 (61 years) Dutch national **Business address:** 3-4 Bramham Gardens London, SW5 0JQ. Ms Maes is Chair of Foresee based in London, a consulting company that provides sustainable development and energy management advice to companies.	Appointed by the General Shareholders' Meeting of 27 May 2016	Expiry date: General Shareholders' Meeting called to approve the 2019 financial statements	**In non-Group companies** • Director of Assystem SA (France) (listed company), Naturex (France) (listed company) and Vilmorin & Cie (France) (listed company) • Member of the Supervisory Board of the Port of Rotterdam (Netherlands) and Urenco and UCN (Netherlands) • Chair of Foresee (United Kingdom) **Offices held and completed during the past five years** • Chair of the Board of Directors of Elia Asset BV and Elia System Operator BV (Belgium) (listed company) (until May 2017) • Chair of Sabien Technology Group Ltd (United Kingdom) (until 2015) • Director of Kiwi Power Ltd (United Kingdom) (until 2014)
OLDERS PIA **Director representing employees(5)** Born 3 May 1971 (46 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Ms Olders is Deputy Risk Manager in the Insurance and Risk Management Department.	Appointed by the Central Works Council on 23 June 2014 in accordance with Article 10.9 of the Articles of Association	Expiry date: 22 June 2018	**In Group companies** None **In non-Group companies** None **Offices held and completed during the past five years** None

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
POAOUTETA FERDINAND **Director** Born 14 June 1960 (57 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Mr Poaouteta is Special Advisor to the President of the North Province of New Caledonia, in charge of mining issues	Appointed by the General Shareholders' Meeting of 27 May 2016	Expiry date: General Shareholders' Meeting called to approve the 2019 financial statements	**In Group companies** • Observer—Le Nickel-SLN **In non-Group companies** • Substitute for Paul Neaoutyne, Director and Chairman of the *Institut calédonien de participation* (ICAP) **Offices held and completed during the past five years** None
RONGE CATHERINE **Director[4]** Born 13 April 1961 (56 years) French national **Business address:** WEAVE AIR 37-41, rue du Rocher 75008 Paris Ms Ronge is Chair of Weave Air, a strategy consultancy firm.	Co-opted by the Board on 17 February 2016	Reappointment: General Shareholders' Meeting of 23 May 2017, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2020 financial statements	**In non-Group companies** • Director of Colas, Paprec and Innortex (start-up) **Offices held and completed during the past five years** • Director of Innoveox
SIKORAV SONIA **Director[1][4][5]** Born 8 May 1957 (60 years) French national **Business address:** Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris Ms Sikorav is an independent director and has held executive management, strategy management and procurement management positions in different industrial groups.	Appointed by the General Shareholders' Meeting of 27 May 2016	Expiry date: General Shareholders' Meeting called to approve the 2019 financial statements	**In non-Group companies** • Director of NSC Groupe and PSB (listed companies) (France) **Offices held and completed during the past five years** • Director of Eolane (France) (2009-2017) • Director of ENSCP—*École nationale de chimie de Paris* (until 2014)

SURNAME, FIRST NAME OR COMPANY NAME POSITION FAMILY CONNECTION EXPERTISE	DATE OF FIRST APPOINTMENT	DATE OF LAST REAPPOINTMENT, AND END DATE OF TERM OF OFFICE	OTHER POSITIONS HELD
TENDIL CLAUDE **Director(2)(3)(4)** Born 25 July 1945 (72 years) French national **Business address:** GENERALI France 2, rue Pillet-Will 75009 Paris Mr Tendil is Chairman of the Board of GENERALI IARD.	Co-opted by the Board on 25 May 2012 (ratified by the General Shareholders' Meeting of 15 May 2013)	Reappointment: General Shareholders' Meeting of 29 May 2015, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies** • Chairman of the Board of GENERALI IARD • Director of GENERALI France • Director of GENERALI VIE • Director of Europ Assistance Holding • Director of SCOR SE • Chairman of RVS (association) • Member of the Executive Committee of MEDEF • Chairman of the *Institut pour l'innovation économique et sociale* (2IES) **Offices held and completed during the past five years** • Chairman and CEO of GENERALI France, GENERALI Vie, GENERALI Iard (until October 2013) • Chairman of the Board of Europ Assistance Holding (until 2015) and Europ Assistance Italy (until April 2015) • Director of Assicurazioni GENERALI SpA • Member of the Supervisory Board of GENERALI Investments SpA • Permanent representative of Europ Assistance Holding on the Board of Europ Assistance Spain (until 2014) • Chairman of the Board of Directors of GENERALI France, GENERALI France Assurances and GENERALI Vie (until 2016)
TREUILLE ANTOINE **Director(1)(2)** Born 7 October 1948 (69 years) **Business address:** Charter Pacific Corporation 3239, 47 Street Astoria, NY 11103 USA Mr Treuille is Chairman of Charter Pacific Corporation (United States).	General Shareholders' Meeting of 21 July 1999	Reappointment: General Shareholders' Meetings of 21 May 2003, 25 April 2007, 11 May 2011 and 29 May 2015 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2018 financial statements	**In non-Group companies (unlisted companies)** • Chairman of Charter Pacific Corporation (United States), • Director: French American Foundation (United States) and *Fondation Franco-Américaine Foch* (France) **Offices held and completed during the past five years** • Chairman of: Altamont Capital Partners, LLC (United States) (until 2014), Mercantile Capital Partners LLC (United States) (until 2014) and Partex Corporation (until 2013) • Director of BIC SA (France) (until 2013), Harris Interactive (until 2013), Partex Corporation (until 2013) and Imperial Headwear Inc. (United States) (until 2013).

(1) Audit, Risks and Ethics Committee.
(2) Remuneration and Governance Committee.
(3) Appointments Committee.
(4) Independent Director.
(5) Strategic and CSR Committee.

As provided by paragraph 14.1 of Appendix 1 of EC Regulation No. 809/2004, the Company states that, to its knowledge and at the time of writing this report:

- no conviction of fraud has been handed down in the last five years against any member of the Board of Directors or of General Management;
- in the last five years, no member of the Board of Directors or of General Management has been associated with a bankruptcy, receivership or liquidation in their capacity as member of an administrative, management or supervisory body, or as CEO of a company;
- no criminal charge and/or official public penalty has been handed down in the last five years against any member of the Board of Directors or of General Management by the statutory or regulatory authorities (including the relevant professional bodies); and
- no director or member of General Management has in the last five years been barred by a court from acting as a member of an administrative, management or supervisory body or from participating in the management or business affairs of a listed company.

No director is subject to a conflict of interest within the meaning of Section 14.2 of Appendix 1 of EC Regulation No. 809/2004 or has entered into a service contract with ERAMET.

4.9 IMPLEMENTATION OF THE "COMPLY OR EXPLAIN" RULE

AFEP-MEDEF CODE RECOMMENDATION	ERAMET CORPORATE GOVERNANCE
Recommendation 16.1 on the composition of the Appointments Committee: "It must comprise a majority of independent directors."	The Appointments Committee comprises one independent director out of its four members—the Chairman of the Remuneration and Governance Committee, who is also Chairman of the Appointments Committee. This is due to the specific rules of the Shareholders' Agreement designed to structure the relationship between the Company's main shareholders.
Recommendation 16.2.1 on the powers of the Appointments Committee: "with regard to the selection of new directors" "this Committee is responsible for making proposals to the Board after reviewing in detail all the elements to be taken into account as part of its deliberations, particularly in view of the composition and the changes in the Company's shareholding structure, to achieve a balanced composition of the Board: representation of women and men, nationality, international experience, expertise, etc. In particular, the Committee organises a procedure for selecting future independent directors and conducts its own reviews of potential candidates before approaching any of these."	The Appointments Committee leads the process of proposing the appointment of new directors to the Board. With regard to the consideration of proposals for the appointment of new directors, the Appointments Committee ensures that no legal incompatibility or conflict of interest exists. With regard to the consideration of proposals for the appointment of new independent directors, the Appointments Committee is responsible for reviewing the extent to which potential candidates meet the requirements of competence, knowledge, experience and availability required for the position and satisfy the independence criteria proposed by the Remuneration and Governance Committee, and informing the Board of the outcome of this review.
Recommendation 25.1 ongoing provision of information to shareholders on remuneration of corporate officers "All components of executive corporate officers' remuneration, whether potential or vested, are publicly disclosed immediately after the Board meeting at which they are approved."	There is no communication after Board meetings held to review remuneration. The components are communicated in the Registration Document.

4.10 SUMMARY OF CHANGES TO THE COMPOSITION OF THE BOARD OF DIRECTORS DURING THE 2017 FINANCIAL YEAR AND UP TO THE DATE OF FILING OF THIS REGISTRATION DOCUMENT

Co-options	None
Appointment of new permanent representatives representing legal entity Directors	On 27 June 2017, Bruno Vincent replaced Alexis Zajdenweber as permanent representative of FSI Equation.
Appointments by the General Shareholders' Meeting	On 23 May 2017, the General Shareholders' Meeting appointed Christel Bories as a Director, replacing Patrick Buffet who resigned. On 23 May 2017, the General Shareholders' Meeting appointed Christine Coignard as a Director, replacing Frédéric Tona whose term of office expired at the same meeting.
Resignations	Patrick Buffet resigned from his position with effect from 23 May 2017.

5

RISK MANAGEMENT 2017

The Group operates in a constantly changing economic and regulatory environment with increasingly volatile cycles. It is therefore exposed to risks whose occurrence could negatively impact its activities, results, financial position, image and outlook. This chapter presents the risk management system implemented by General Management and all of the ERAMET teams to prevent and control the significant risks to which ERAMET considers the Group is exposed: strategic risks, business-specific operational risks, legal risks and financial risks.

The purpose of the risk management system is to identify significant risks, qualify them and reduce their probability of occurrence and potential impact on the Group. Other risks that the Group is not aware of to date, or that it does not consider significant as of the date of this Registration Document, could also affect its business activities.

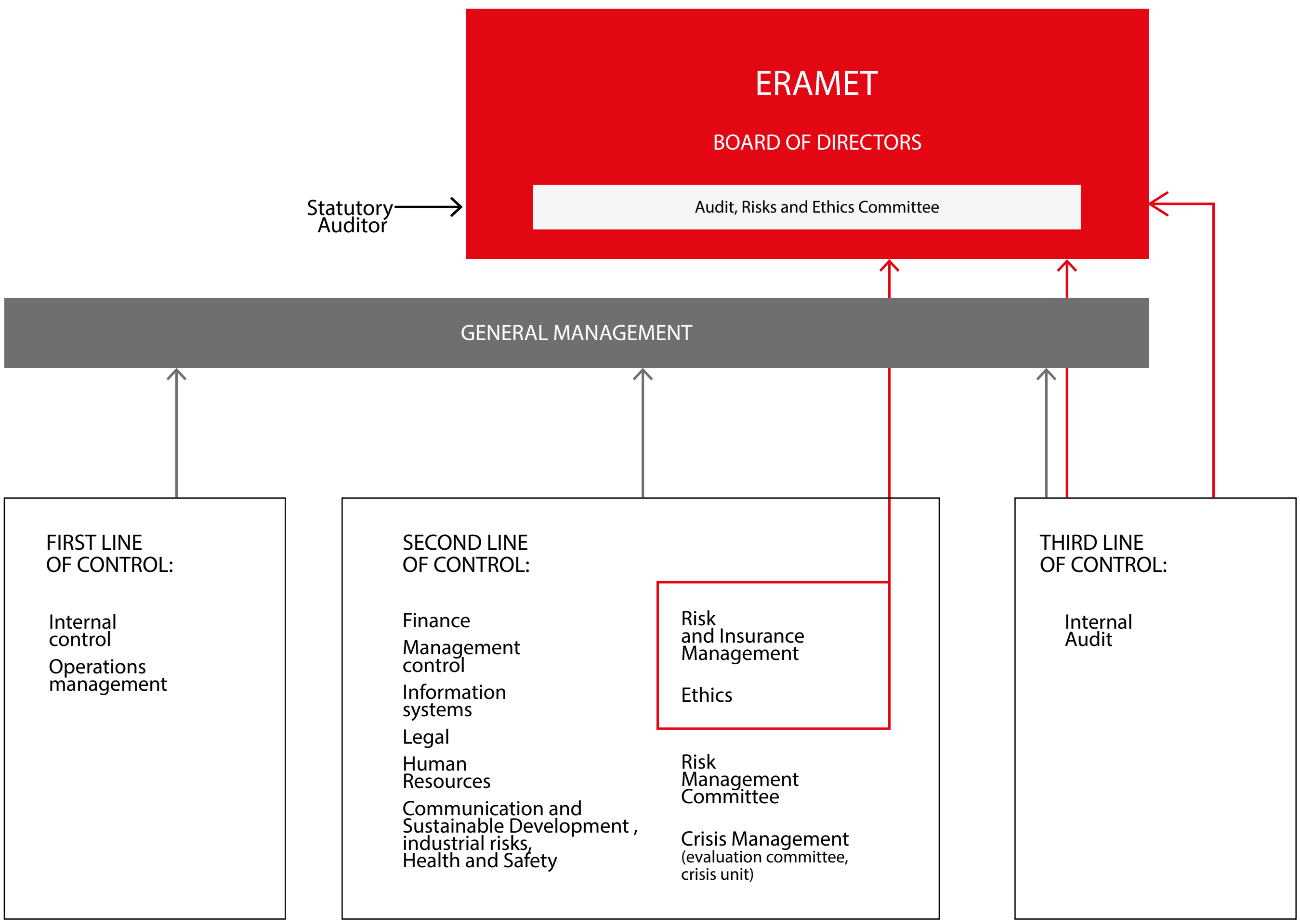
ERAMET cannot provide an absolute guarantee that the risk management objectives will be met or that the risks will be completely eliminated.

5.1 RISK MANAGEMENT

The ERAMET group recognises, as for any organisation, that risk-taking is vital and inherent to business development, therefore it is committed to a risk management approach that provides a better understanding of its risks, and engages in calculated risk-taking to increase its performance and enable it to take better advantage of opportunities.

In this respect, risk management is considered by the ERAMET Executive Committee to be a key component of the Group's governance system. The Director of Internal Audit reports directly to the Group Chief Executive Officer. The Group Risk and Insurance Management Director reports to the Chief Financial Officer and the Chairman of the Audit, Risks and Ethics Committee and has direct access to the Group Chief Executive Officer. They also have a reporting line to the Audit, Risks and Ethics Committee of ERAMET's Board of Directors.

In 2011, the ERAMET group launched an Integrated Risk Management approach aligned with the organisation's objectives and the Group's strategy and in accordance with the 2010 AMF recommendations, creating a Risk Management department and coordinating three lines of control: Internal Control, Risk Management and Internal Audit, presented below.



The first line of control corresponds to controls performed by management.

The second line of control is provided by the various functions set up by management to monitor risk control and compliance.

The third line of control is based on the independent assurance provided by Internal Audit.

The coordination of the three lines of control that make up the risk management system is provided in particular by a Risk Management Committee composed of ten permanent members: the Group and Division Risk Managers, the Internal Audit Director, the Environment, Industrial Risks and Products Director, the Industrial Risk Coordinator, the Security Director, the Safety Director, the Group Insurance Manager, and a representative of the Group Legal Department. This Risk Management Committee is chaired by the Group Risk and Insurance Management Director. Its purpose is to inform the organisation and raise awareness about weak signals and emerging risks, to issue recommendations or notify the management of the entities and support functions of the risks and the priorities for addressing them, and to notify General Management or the Executive Committee, as necessary, of any major or unacceptable risks and issues with regard to the strategy set out for the Group.

Finally, the risk management system includes a Crisis Management system (see main risks/operational risks/risks related to security below), and an Ethics Committee (see 6.3.3 Responsible Governance).

The Group's risk management system can be summarised according to the standard model of three lines of control, as follows:

5.1.1 INTERNAL CONTROL SYSTEM

The internal control system contributes to the management of the Group's activities and the efficiency of its operations. It incorporates procedures and controls to provide reasonable assurance regarding the control of risks related to the Group's activities, and is implemented by the Group's operational management.

Risk ownership and responsibility for risk management are assigned at the most appropriate level (subsidiarity principle). Each operations manager is therefore directly involved in the implementation of internal controls and is responsible for assessing and reducing the risks related to the processes and activities for which he or she is responsible.

5.1.1.1 THE COMPANY'S INTERNAL CONTROL OBJECTIVES

In accordance with the AMF reference framework, updated in July 2010, the internal control procedures in force at ERAMET are designed to:

- ensure that transaction execution or management activities and the behaviour of personnel comply with the policies laid down by the Company's governing bodies and those set out in applicable legislation and regulations and that they adhere to the Company's values, standards and internal rules;
- check that the accounting, financial and management information provided to the Company's governing bodies faithfully reflects the Company's business activities and position;
- ensure that insurance procedures and/or programmes are put in place to protect the Company's assets against risks of loss resulting from theft, fire, improper or illegal actions and natural hazards;
- prevent and control risks of error or fraud, in particular in the areas of accounting and finance.

However, as with any control system, it cannot provide an absolute guarantee that these risks are totally eliminated.

5.1.1.2 OVERVIEW OF THE AUDIT PROCEDURES IN PLACE

A) INTERNAL CONTROL PLAYERS

ERAMET, because of its diverse activities, is organised into two Divisions, each with all the departments required to operate (management, production, sales, purchasing, finance, etc.). In addition to its general management function, the head office provides support and carries out the control work required for the Group's overall cohesion. The following are the main internal control players:

- the Executive Committee, whose composition is set out in the "General Management" section (see Chapter 4 "Corporate governance"), meets on a monthly basis;
- the Internal Audit Department, which reports to the Group Chief Executive Officer with a functional reporting line to the Chief Financial Officer and the Audit, Risks and Ethics Committee. See 5.1.3 below;
- the Group Planning and Management Control Department, reporting to the Chief Financial Officer, which sets out the structure of the management control of ERAMET group entities to ensure consistency with the Group's objectives;
- the Legal Department, which reports to the Chairman and CEO. The Legal Department provides the entire Group with legal support on all matters within its area of expertise, and in particular provides support for major contract negotiations or in the event of disputes;
- the Finance and Treasury Department, reporting to the Chief Financial Officer, which manages, in liaison with the specialist committees of the main subsidiaries, the hedging of foreign currency exposure and commodity risk, particularly with regard to nickel and fuel oil, and is in charge of financial resource management (investments and borrowings) for the whole Group;

- the Group Risk and Insurance Management Department, reporting directly to the Chief Financial Officer and with a functional reporting line to the Audit, Risks and Ethics Committee. See 5.1.2 below;
- the Tax Department, which is part of the Accounting, Tax and Consolidation Department, reporting to the Chief Financial Officer. As a service centre, it assists the Group's various subsidiaries with their respective tax obligations and fulfils those of the parent company;
- the Communication and Sustainable Development Department assists the various Divisions to manage and reduce the Group's environmental and societal impact and control their industrial risks. It contributes to the sustainability of the Group's activities, products and markets in light of regulatory, political and societal changes in line with the requirements of stakeholders;
- the Group's Human Resources, Health, Safety & Security Department, which manages the Company's human resources and ensures that HR policies are consistent across the Group's various entities. It coordinates the Safety and Security policies and formalises the "health" dimension within the Group via a network of internal and external contacts in conjunction with the competent authorities responsible for social control of the occupational health service;
- more generally, every management level in the Company is responsible within its field of expertise for defining, implementing and managing internal control, under the supervision of the relevant Director and Executive Committee member.

B) SUMMARY OF THE INTERNAL CONTROL PROCEDURES IMPLEMENTED IN THE GROUP

- The charters and the resulting procedures, which set out the operating rules of the various committees or departments and formalise relationships with other parties.
- Delegation of signing authority and powers.
- Information systems: the role of the Group IT Department is to make IT systems more harmonised across the Group and support the various subsidiaries. Concerning business applications, a number of projects are underway to modernise our main ERP platforms developed around the SAP solution with the aim of providing a more harmonised solution in the long-term for the Group as a whole.

C) INTERNAL CONTROL SYSTEM FOR THE PREPARATION OF FINANCIAL AND ACCOUNTING INFORMATION

- Organisation of the accounting function within the Group: the Accounting Units of the parent company and its subsidiaries record daily transactions (purchases, sales, cash flow, etc.) and ensure that the accounting methods comply with the Group's established procedures. These operations are performed in a shared service centre (SSC) based in Clermont-Ferrand which contains almost all of the accounts departments of the Group's French companies. The Accounting, Tax and Consolidation Department, within the Group Administration and Finance Department, keeps the accounts of the parent company and its French subsidiaries, files tax returns and complies with the obligations relating to tax consolidation, and publishes ERAMET's individual and consolidated financial statements. The necessary coordination with subsidiaries is provided by the Accounting/Management Committee through monthly meetings attended by the administrative and financial directors, accountants and management controllers of the main Divisions and Subsidiaries.
- Procedures for the preparation of the consolidated financial statements: the consolidation returns are input into the SAP Financial Consolidation software (ex-Magnitude) by each subsidiary, and consolidation at Division and Group level is carried out by the central consolidation department. Consolidation is monthly with annual items (taxes, provisions, etc.) estimated at various times during the year.
- Accounting manual: the consolidation manual is distributed to all subsidiaries and contains the accounting rules which are common to the whole Group and which apply to financial statements drawn up in compliance with IFRS. It sets out the measurement methods used by the Group and specifies the rules to be followed when preparing the financial statements.
- Budget and management control: The five-year operational plan, including the budget in the first year for the following year, is calculated at year-end and the budget forecast for the current year will be updated at least three times during the course of the year. These budgets and forecast updates, as well as the related action plans, are formally approved by Division management, the Group Executive Committee and, subsequently, by the Chairman and CEO of ERAMET. An analysis of discrepancies between budgeted and actual figures is carried out on a monthly basis, firstly at Division level and subsequently at Group level. As a supplement to the financial statements, the Management Control Department prepares analyses of the Group's performance for the period.
- Cash and Financing control: in addition to its pivotal role in managing foreign currency and commodity risk, the Group Administration and Finance Department sets up financing for the Group's main subsidiaries and carries out financial investments together with the managers of those subsidiaries. It centralises cash forecasting for the main companies, in conjunction with Group management control, and assists them in establishing payment methods for at-risk countries. At the end of 2004, the Group set up a cash pooling company, Metal Securities, to serve as a central cash hub for all Group companies. At the end of 2006, an "exchange rate guarantee" company, Metal Currencies, was established to centralise foreign exchange transactions, which had in the past been recognised in the financial statements of each Group entity. Both Metal Securities and Metal Currencies are subject to corporate governance established in full collaboration with the managers of the relevant subsidiaries.
- Work of the Audit, Risks and Ethics Committee of the Board of Directors: the Audit, Risks and Ethics Committee reviews the interim and annual financial statements, monitors major disputes and ensures compliance with currency and commodity risk management policy procedures, as well as hedging policies. It reviews the internal audit plan and the actions decided upon based on the audits carried out.
- Liaison with the Statutory Auditors: the Auditors carry out half-yearly reviews of the financial statements, which are approved at meetings held with the Divisional and Group Finance Departments, the Division Heads, the Group CFO and, subsequently, with the Chairman and CEO of ERAMET.

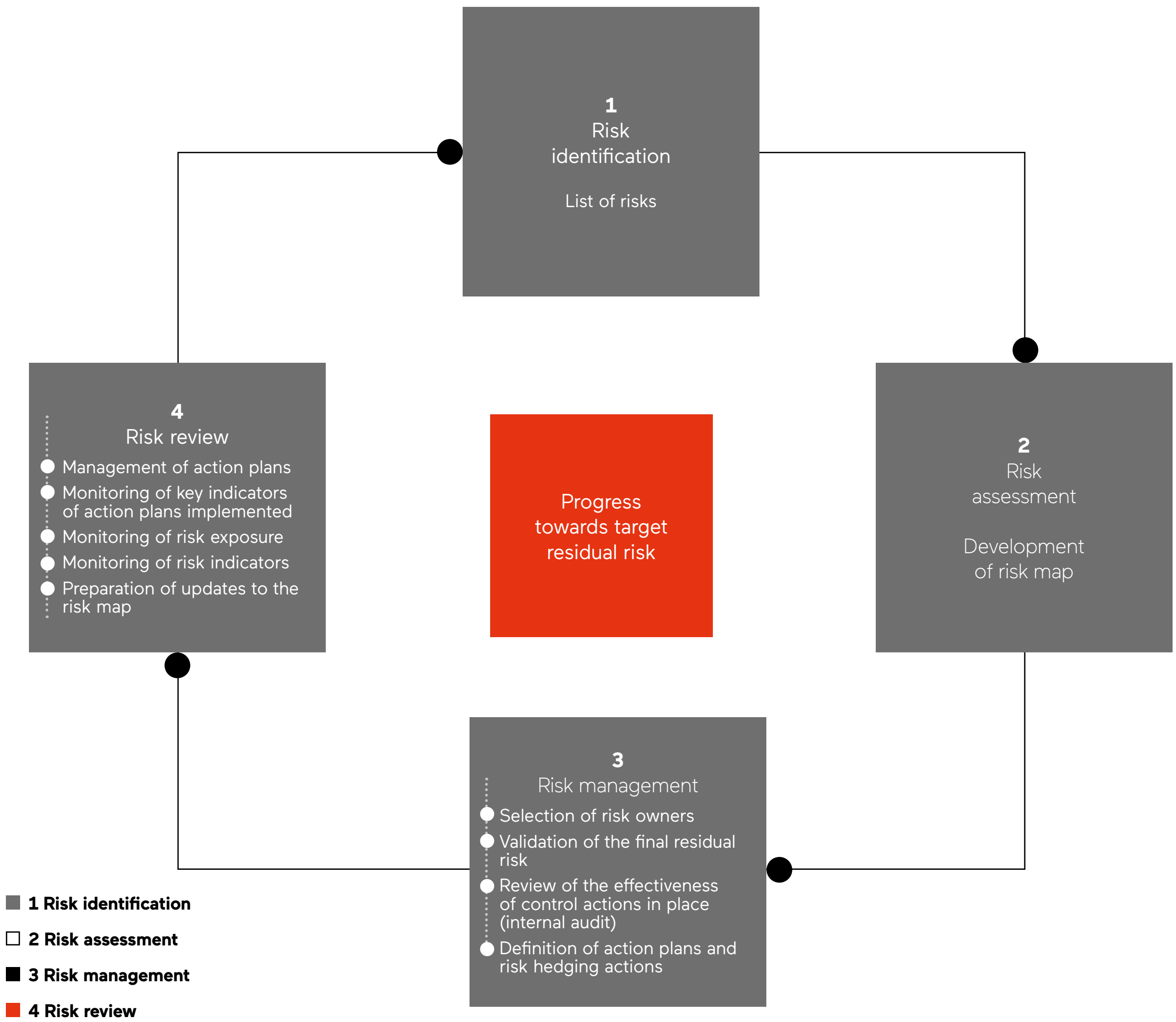
5.1.2 GROUP RISK MANAGEMENT SYSTEM

The Risk Management system aims to identify, assess, manage and control the occurrence of potential risks (defined as an event, an action, or a lack of action) that could alter the Group's ability to deploy its strategy and achieve its objectives. It consists of a Risk Management Charter, supplemented by a Group procedure addressed to all Group employees, which sets out the specific Risk Management process and organisation deployed within the Group. Leveraging the Group's management, this system contributes in particular to achieving the following objectives:

- protect our main human and financial resources, and our corporate image;
- safeguard value creation;
- promote the definition and level of risk appetite;
- comply with legal and regulatory obligations, and with the values promoted by the Group;
- identify value-creating opportunities for the Group (e.g. new markets, new customers, etc.).

This system aims to identify the strategic, operational, financial and regulatory risks facing the Group over a time horizon of three to five years, to address them by defining action plans to mitigate the risks, to establish or optimise the necessary internal control processes to control the Group's activities and operations and, where appropriate and relevant, to define the residual risk financing transfer programmes and thus monitor the Group's exposure to the specific risk universe associated with its business model.

The end-to-end process is managed by the Group Risk Management Department. It is based on an iterative approach of identifying, assessing, addressing and monitoring risks in four steps.



The implementation of this process led to the mapping in 2017 of the Group's major risks, which was presented to the Audit, Risks and Ethics Committee of the ERAMET Board of Directors in December 2017. The main risks identified (listed in section 5.2 below) lead to the definition of control areas that are then deployed in operational action plans aimed at strengthening existing control mechanisms.

For operational risks, the monitoring of changes to the risks identified and the implementation of the control systems are ensured by the managers of the Divisions in coordination with:

- the Group's Communication and Sustainable Development Department for industrial and environmental risks;
- the Group Human Resources Department for risks related to health, safety and security;
- the Risk Managers of the Divisions and their potential delegates for other risks within the various entities of the Division.

For Group financial risks, the monitoring of changes to the risks identified and the implementation of the related control systems are ensured by the Finance and Treasury Department for the entire Group, in conjunction with the managers of the Group's subsidiaries.

The Executive Committee is responsible for addressing and managing the Group's strategic and/or major and ethical risks, with the assistance of the Group Risk Management Department.

Finally, the Group Risk and Insurance Management Department defines and implements the Group's residual risk transfer policy, following approval by the Executive Committee. These main operational risk assurance programmes are described in section 5.4 below.

5.1.3 INTERNAL AUDIT

Internal Audit is the third line of control, which assesses the way in which the Group identifies and controls its risks. The results of the risk mapping exercise are included in the Group's internal audit plan to ensure that the existing control process functions properly, and that the defined action plans are actually implemented. Internal Audit also assesses the existence, the proper application and the efficiency of the internal control system deployed in each of the Group's entities.

The duties of the Internal Audit Department are to:

- check that the risks relating to the achievement of ERAMET's strategic objectives are identified and managed appropriately;
- ensure the conformity of the actions of managers and executives across all Group entities and the effective control of their impact on the Group's performance;
- check also whether the processes implemented by the Group ensure the reliability and integrity of the information communicated to General Management;
- evaluate whether resources and assets are acquired at the best cost, used efficiently and adequately protected;
- based on an Audit Plan proposed by Internal Audit and approved on an annual basis by the Executive Committee and the Audit, Risks and Ethics Committee, perform the tasks defined in the Plan within the various Group units, in complete independence, based on a framework defined by international professional standards;
- follow up on the recommendations made to the entities audited on a quarterly basis until a satisfactory level is reached.

The Internal Audit Department provides the Audit, Risks and Ethics Committee with regular updates on its work and findings, as well as the degree of completion of action plans within the audited entities. In 2017, a total of 18 Internal Audits were performed.

5.2 MAIN RISKS

The main risks (described below) to which the Group is exposed due to its business model and the activities it performs are identified in the Group's 2017 risk map, which was presented to the Audit, Risks and Ethics Committee in December 2017.

RISKS	MAJOR	OTHER
Strategic	• Risk of loss of competitiveness of certain assets • Risks related to insufficient value of the portfolio and a business model that is not adapted to new market cycles and the competitive environment • Geopolitical risks • Risks of social and environmental acceptability	
Operational	• Health and safety risks of human resources • Risks related to attracting and retaining talent, and industrial relations • Risk of failure of information systems, protection of information and cyber attacks • Risks related to security • Risks related to industrial and environmental safety • Risks inherent in production reliability and the development of new metallurgical products	• Transport risks
Legal	• Risk of non-compliance with regulations • Risk of the strengthening of legislative and regulatory requirements	• Significant disputes
Financial		• Liquidity risk • Market risk • Counterparty risk

5.2.1 STRATEGIC RISKS

5.2.1.1 RISK OF LOSS OF COMPETITIVENESS OF THE GROUP'S ASSETS

The Group is exposed to the cycles of the Chinese economy, the aerospace market cycle, and the volatility of the commodities market and the US dollar, whose impact on the Group's results can be measured as follows:

Impact of changes in USD/oil/Nickel/Manganese on current operating income:

- **Nickel**: €110 million for a variation in LME nickel price of USD 1/lb (USD/EUR exchange rate of 1.175);
- **Manganese Ore** for a nominal ore production of €95 million for a variation of USD 1/dmtu (at EUR/USD exchange rate of 1.175);
- **Manganese Alloys** for a nominal alloy production of €73 million for a variation of USD 100/t of alloys (exchange rate of 1.175);
- **Oil**: difference of USD 10/bbl = impact of €20 million on current operating income at USD/EUR exchange rate of 1.175;
- **USD**: difference of ±10 cents = impact of €65 million on current operating income.

The Group's turnover and profitability are therefore directly dependent on these exogenous and highly volatile factors. The Group must constantly improve the performance of its assets in order to withstand the cyclical lows. A delay in these various progress plans would impact its profitability.

The risk of loss of competitiveness of the assets is also dependent on access to electricity, in particular the construction and commissioning of the new electricity generation plant in New Caledonia—which will take over from the current power station that is reaching end-of-life, the investment scheme for which is described in section 2.2.5—and the optimisation of the distribution methods of this energy.

The competitiveness of some of the Group's assets is also dependent on the valuation of mining reserves and resources that evolve over time, particularly with changes to the technical and economic assumptions made for their exploitation (geological data, mining cost factors, mining technology). It should be noted that, since they are capital-intensive and take up a considerable amount of time, studies for the launch of new mining operations or for the renovation of existing operations are investment decisions which require prior technical feasibility studies with financing assumptions and profitability calculations, which are themselves directly influenced by the relevant commodity prices and currency rates, the cost of credit and the type of financing chosen. In periods of slower demand, some of these decisions may be delayed, which may have an impact on a mining operation's profitability.

RISK MANAGEMENT

In order to address this risk, a number of productivity and operational performance improvement plans were launched and continued their accelerated deployment in 2017 in the entities of each of the Group's Divisions as well as in the Holding company. Their objectives have been readjusted to optimise the results.

In 2017, the Group launched a cross-functional transformation project called NeWays, based in particular on an initial management component aimed at deploying managerial and operational excellence at all levels of the organisation in order to improve performance and facilitate the Group's strategic ambitions.

The Group revises its resource and reserve estimates each year, both quantitatively and qualitatively Details of the estimates and assumptions used for this purpose are given in Chapter 2, section "Reserves and resources" in this document.

Lastly, according to market trends, ERAMET may implement a hedging policy with a horizon of one to four years depending on the commodities and on the basis of the budget. Only a portion of planned consumption or production is hedged when the criteria in the hedging policy are met. The Group uses various instruments to hedge and limit its exposure while profiting from favourable price fluctuations (futures and options). It should be noted, however, that manganese and coke exposures are not hedged since there is no organised market for these commodities.

At 31 December 2017, the value of hedges set up was not significant.

5.2.1.2 RISKS RELATED TO INSUFFICIENT VALUE CREATION OF THE PORTFOLIO AND A BUSINESS MODEL THAT IS EXPOSED TO CONSTRAINTS OF NEW MARKET CYCLES AND AN EVOLVING AND COMPETITIVE ENVIRONMENT

In a particularly difficult market environment in 2015 and 2016, with nickel and manganese prices dropping to historic lows over the previous fifteen years, the Group's priority was the preservation of cash flow. Today, it is engaged in a new balanced strategy of profitable growth through a selective allocation of resources combining return on capital and long-term growth. A delay in the implementation of the new strategy could affect the Group's financial position and degrade its competitive positioning, affecting the ability of its business model to create value over the long term.

RISK MANAGEMENT

The NeWays programme launched in 2017 is deployed throughout all Group entities and is regularly reviewed by the ERAMET Executive Committee. To strengthen its role and the decision-making process, General Management expanded the ERAMET Executive Committee in 2017 by appointing the Group Legal Director and the Strategy Director as permanent members. In addition, General Management set up a new management and reporting method by means of regular Business Reviews, review of the budget process and development of a five-year plan.

NeWays has two components—a managerial component, mentioned above (see risk of loss of competitiveness of certain assets), and a strategic component, made possible by the first component. The strategic component is centred around three priority areas, described in Chapter 1 Presentation of the Group.

As part of the strategy transformation being rolled out, in order to consolidate the review and execution of strategic operations, a new M&A structure was set up in 2017 to strengthen the ERAMET portfolio by expanding it into attractive markets in which the Group is already an industrial or commercial leader or has strong assets, to allow redeployment enabling the Group to diversify its geographical and financial asset base.

The NeWays programme is also based on Group-wide digital transformation across all businesses. This digital transformation is a major element of value creation and business model transformation for ERAMET, as outlined in the strategic orientation presented in Chapter 1 Presentation of the Group. The digital transformation approach is based on two cross-functional pillars of Group Management—the Information Systems Department and the Human Resources Department.

Finally, to strengthen risk management and operations throughout the organisation, General Management has reinforced the duties and resources of Internal Audit.

5.2.1.3 GEOPOLITICAL RISKS

The Group's political risk is intrinsically linked to the extraction, processing and/or marketing of the Group's products in countries outside the OECD area, where the political situation and business environment are not stable. An adverse change in the political, socio-economic and regulatory environment of the countries in which the assets are located could affect the Group's financial position, profitability and prospects, as well as operations in the event of terrorist activities, war, blockage of public services, logistics or transport services, or health crisis.

The Group's profitability and sustainability can also be impacted by specific taxes (fees, taxes or duties) to which the business is subject locally.

RISK MANAGEMENT

To support its various activities and projects, the Group's policy is to develop and maintain firm, sustainable and complementary partnerships with national partners and local firms. These partnerships may take the form of a stake in Group subsidiaries, with a number of special covenants to take account of the existing shareholder balance. The Group is also keen to develop and maintain working relations and consultation with the public authorities and all stakeholders regarding the impact of changes in the business environment on local operations and the Group's performance.

(a) Strong and lasting partnerships

Relationship with STCPI and New Caledonia—Le Nickel-SLN shareholders' agreement

Le Nickel-SLN, a subsidiary with 56% of its shares held by ERAMET and 10% by Nisshin Steel, also has a 34% stake held by Société Territoriale Calédonienne de Participation Industrielle—STCPI.

STCPI is a "SAS" (simplified joint-stock corporation), the sole purpose of which is to hold this interest in Le Nickel-SLN and an interest of around 4% in the capital of ERAMET (where two directors represent it out of the seventeen on the ERAMET Board). The interest in the share capital of Le Nickel-SLN, initially 30%, was raised to 34% in a share-swap transaction on 23 July 2007, and then sold by the French government when ERAMET was privatised. Its political, financial and strategic value lies in the association of local public interests with the Group's mining and industrial interests in New Caledonia. STCPI represents the three New Caledonian Provinces: the Southern Province, and the Northern and Island Provinces. The Board members and observer are selected to guarantee a balanced representation between the Northern and Island Provinces and the Southern Province.

The Le Nickel-SLN shareholders' agreement of 13 September 2000 followed on from the agreement of 17 July 2000 between the government, the Provinces of New Caledonia and representatives of the island's main political parties. In 2010, the shareholders' agreement was extended for a first additional term until 31 December 2011. Since 2010 it has been extended annually for periods of one year. Its terms include the following:

- distribution of the directorships on the following basis, at present: eight for ERAMET (including the representative of Nisshin Steel), and four for STCPI, which is also entitled to appoint an observer;
- a reciprocal right of pre-emption for each party;
- a reciprocal call option on the shares held by the party that falls under the control of a company, "whose main activity, or the main activity of the Group to which it belongs competes with that of Le Nickel-SLN";
- a non-dilution clause whereby, in the event of the sale of shares to another shareholder or a share capital increase, each party will retain the same interest in the share capital or voting rights they had previously held, either through the retrocession of shares or joint exercise of the subscription rights in a share capital increase.

Following an STCPI press release on 27 June 2008 offering to open discussions regarding the size of its stake in Le Nickel-SLN, an ERAMET Board meeting on 11 July 2008 resolved that there was no reason to change the shareholding structure of Le Nickel-SLN, which represents a satisfactory balance.

Following a meeting of its Board of Directors on 19 November 2009, Le Nickel-SLN announced that it was instituting new modern corporate governance measures to further involve New Caledonia, with the creation of a Strategy Committee, an Audit Committee and a Remuneration Committee. STCPI has significant representation on all three committees, and chairs the Audit Committee.

On 13 July 2010, STCPI and ERAMET agreed to hold discussions aimed at adjusting the agreement. Its guiding principles would remain unchanged, but the adjustments would take account of the full array of industrial, commercial and technological changes both within Le Nickel-SLN and in its environment since the original agreement. The extensions of that agreement in 2011, 2012, 2013, 2014, 2015, 2016 and 2017 until 31 December 2018 allow these discussions to continue.

Relationship with Nisshin Steel, shareholder of SLN and ERAMET group client

The ERAMET group and Nisshin Steel have had a ferronickel supply agreement in place since 1991. Nisshin Steel is a Japanese producer of stainless steel with a 10% interest in Le Nickel-SLN. Nisshin-Steel is a major customer, accounting for 10% of sales in the Nickel Division. This agreement was renewed in 2001 and 2007 and is designed to guarantee ferronickel deliveries for several years and iron out any fluctuations in nickel prices.

Relationship with Pt Antam and Indonesia (Weda Bay project)

The Indonesian company, Pt Weda Bay Nickel, is the project and exploration company created to develop the nickel deposit in Weda Bay, situated on the island of Halmahera in Indonesia. 90% of its capital is held by Strand Minerals (Indonesia), and the remaining 10% is held by the nickel-producing Indonesian public limited corporation Pt Antam Tbk (Antam), a company specialising in exploration, mining operations, refining and distribution of mining products. Antam is represented by a director on the Board of Pt Weda Bay Nickel (out of a total of five directors, of whom three represent ERAMET) and it also holds an option to increase its shareholding to 25%.

Pt Weda Bay Nickel's exploration and mining are carried out under a Contract of Work with the Indonesian government, the annual renewal of which is under discussion with the authorities.

It should be noted that in 2017, ERAMET signed a framework agreement with the Chinese steel group Tsingshan (see Chapter on Group Business Activities), which defined the conditions of participation of the Tsingshan group in Strand Minerals Pte Ltd. The percentages of equity interest assigned under this agreement are 43% to ERAMET and 57% to Tsingshan.

Relationship with the government of Gabon

COMILOG has a special relationship with the government of Gabon, which is represented by four members on the Board of Directors. In 2014, Société Équatoriale des Mines, a fully state-owned company, became a shareholder of COMILOG, replacing the government of Gabon, which had been a shareholder since 1973. From the outset, the State has supported COMILOG, both through tax measures (a mining agreement and special tax agreement to finance the sintering complex) and industrial measures (as COMILOG's partner in building the Owendo Port, of which its subsidiary, Port Minéralier d'Owendo, holds the concession), and more recently by granting a railway concession to SETRAG, in which COMILOG is the leading partner, and by granting a mining exploration licence for the Mabounié polymetallic deposit (Maboumine project). This relationship, based on trust and the recognition of mutual interests, makes it possible to work together on a constructive basis and to plan for the development of new industrial projects.

For the purposes of its project to build two silicomanganese and metallic-manganese metallurgical units at Moanda in the Upper Ogooué (known as the Moanda Metallurgy Complex), COMILOG signed two agreements with the Gabonese authorities on 7 January 2010 in Libreville. Among other items, the first agreement laid down the specific legal, tax and customs framework for the project, while the second specified the conditions for securing the future energy supply to the complex. To implement the project, a special financing facility was set up, with guarantees provided by ERAMET and the Gabonese Republic. The new Moanda Metallurgy Complex was inaugurated in 2015 at a ceremony attended by the Gabonese President and the ERAMET CEO.

On 20 October 2010, ERAMET and the Gabonese Republic concluded an agreement to step up the Gabonese Republic's interest in the capital of COMILOG. Under its terms, from 2010 to 2015 ERAMET was to transfer to the Gabonese Republic in stages a further stake of up to 10% of COMILOG S.A.'s capital, which would increase the Gabonese Republic's shareholding in COMILOG S.A. to 35.4%. The first transfer stage (2010-2011) involved 3.54% of the share capital; 2.17% of the capital was transferred on 17 December 2010, and the remaining 1.37% for this stage was transferred on 14 June 2011. At 31 December 2017, the equity interest in COMILOG held by Société Équatoriale des Mines (SEM, a Gabonese company) and the *Caisse des dépôts du Gabon* on the one hand, and by ERAMET on the other, represented 28.94% and 63.71% respectively.

In addition, a candidate proposed by the Gabonese State was appointed director by the ERAMET General Meeting of Shareholders on 15 May 2013.

TiZir partnership with Mineral Deposits Limited

On 25 October 2011, ERAMET and Mineral Deposits Ltd created a 50/50 joint venture to take up a 100% stake in TiZir Titanium and Iron (TTI) (Norway) and 90% of the Grande Côte mineral sands deposit in Senegal. Grande Côte provides TTI with a supply of good-quality ilmenite for its titanium dioxide slag production, and TiZir with a strong position in the zircon market. The respective financial commitments of both partners are detailed in the notes to the consolidated financial statements presented in Chapter 3, note 14 of this document.

(b) Monitoring of specific regulatory developments in sensitive areas

Mining operations are subject to specific regulations, depending on extraction locations and activities. These regulations chiefly relate to:

- mining permit and concession regimes;
- obligations specific to mining operations;
- environmental protection and biodiversity limits and controls;
- site restoration after depletion.

These regulations may change, with a possible impact on operations and results. This is currently the case in Gabon, following the introduction of the Mining Code with the enactment of Law 017/2014 of 30 January 2015, although the decrees for its application have not been published yet.

In addition to actual mining activity, industrial operations are also subject to specific regulations, depending on the industrial site. These regulations mainly cover:

- the regimes governing mining permits and authorisations;
- compliance with limitations on waste discharge into the natural environment during site operation, taking due account of the major industrial risks and health impacts associated with operations, and the management and elimination of industrial waste;
- the obligations entailed in restoring the site after cessation of operations, factoring in the risks relating to polluted sites, ground pollution and waste.

These regulations may change, with a possible impact on operations, particularly where additional capital expenditure is required to factor in environmental concerns in response to changes in regulations.

(c) Monitoring specific tax concerns

As ERAMET is the parent company of a tax consolidation group comprising 20 companies as at 31 December 2017, the Group's activities are subject to tax regulations that are specific to their geographical location.

Its companies and units in mainland France are liable for tax at the standard French rate. The current corporate income tax rate is 33.33%, excluding an additional welfare contribution of 3.3%.

The following notes apply to subsidiaries outside mainland France:

- Le Nickel-SLN is liable for the 35% mining and metallurgical corporation tax in New Caledonia.

  In 2014, New Caledonia introduced a reform of its tax system. On 31 December 2014, a number of laws were published in the New Caledonia Official Journal, and they came into force on 1 January 2015. SLN's distributions to ERAMET will henceforth be subject to an additional income tax contribution of 3% (for any distribution in excess of 30 million Pacific francs, or €251,400). In addition, the tax withholding on dividend payments in New Caledonia was raised from 5% to 10% as a result of the introduction of a solidarity contribution of 5%. As an extension to this reform, a new law was published on 29 December 2015 creating an upper limit to the deductibility of overheads of 5% of the amount of external services.
- The Weda Bay project is governed by a contract of work defining, among other things, the tax regime applicable to production activity at the start of the site's operations. Tax matters currently under discussion with the Indonesian Government concern issues relating to State revenue (royalties, tax incentives, VAT). The outcome of these discussions will be decisive for the project's continuity and profitability.
- The COMILOG subsidiary is liable for income tax at 35% and export duty and mining royalties representing approximately 6% of the pithead value of the products mined (close to FOB value), and also a 15% tax on dividends (10% on the fiscal scheme for corporate groups). This tax regime is fixed until 2032 as part of a mining agreement signed in October 2004 and ratified by the Gabonese Parliament in 2005. The double taxation convention between Gabon and France signed in Libreville on 20 September 1995 took effect on 1 March 2008, replacing the earlier convention of 21 April 1966. The current convention was published in the Official Journal of the Republic of Gabon of 24-31 July 2011.

  A new Mining Code was introduced in Gabon in 2015. The new regulations do not entail any major changes for companies already engaged in mining, but they do contain some favourable provisions for holders of mining exploration licences and companies commencing operations.
- China is currently in the process of tightening controls on foreign companies where cross-border flows are involved. This creates more stringent reporting require-

ments, a tightening of transfer pricing rules and the adoption of anti-abuse tax rules.

China has also issued a reform programme to improve the organisation of tax services and the tax collection system.

Finally, China has implemented tax legislation in the area of environmental protection and provisions to attract foreign business investment in China.

- Under an Agreement signed with the Senegalese government in 2004 and Amendment 1 to the agreement signed in 2007, Grande Côte Opérations (GCO) benefits from a mining concession regime for 25 years in accordance with Ministerial Decree No. 2007-1326 of 2 November 2007. Under the provisions of the mining code, it enjoys full exemption for 15 years (exemption from VAT, customs duties, corporate tax, patenting and property tax), not including the investment period (construction).

  Moreover, in the case of mining royalties, by way of exemption from the Mining Code, which sets these royalties at 3% of the pithead value, GCO agreed in 2007 to raise these royalties to 5% and to apply production sharing at 10% on the basis of net margin on certain costs.
- Generally, subsidiaries based abroad are liable for standard-rate local taxation and benefit from the double-taxation conventions in force. Tax is not withheld on dividends paid to the parent company by subsidiaries in Norway, Sweden, the United States, China and Belgium. On the other hand, tax is withheld on dividends paid by COMILOG (Gabon) and SLN (New Caledonia) at a rate of 15% (10% as part of the fiscal scheme for corporate groups) and 10% respectively.

(d) Contingent tax liabilities

Aubert & Duval was subject to a tax audit for the years 2009 to 2016, focusing on the assumption of the existence of a permanent establishment in Italy.

The tax audit was completed in 2017 with a settlement of €1.7 million in favour of the Italian tax authorities.

In 2017, COMILOG continued discussions with the customs tax administration as part of its audit. It is not possible to comment on the outcome of the review at this stage in proceedings.

5.2.1.4 RISKS RELATED TO SOCIAL AND ENVIRONMENTAL ACCEPTABILITY

The Group is exposed to the risk of a change in the perception of its mining and industrial activities by the market and by civil society, which could impact the Group's reputation and generate difficulties or obstacles to operating and marketing its products.

RISK MANAGEMENT

In addition to the efforts made by mining and industrial sites in their areas of operation, the Communication and Sustainable Development Department (DC2D) coordinates efforts to reduce and control risks related to social and environmental acceptability. The organisation, means and methods for controlling these risks are detailed in Chapter 6 CSR (Corporate Social Responsibility).

5.2.2 OPERATIONAL RISKS

5.2.2.1 THE RISK OF HEALTH AND SAFETY OF PERSONS

The Group uses processes and industrial equipment that are a potential hazard for users. Molten metal, industrial machinery, heavy machinery, chemicals, noise and vibrations are all examples of dangers intrinsic to the Group's activities. These hazards generate risks of potentially serious accidents and damage to the health of ERAMET employees, external contractors, and, in some cases, local residents. In addition, the subsidiary COMILOG is exposed to the risk of an acute health crisis in the context of the Marcel Abeke Hospital, which it manages. On a general level, poor enforcement of safety rules and the behaviour of staff could damage the integrity of stakeholders (employees, temporary staff and subcontractors) throughout the Group companies.

RISK MANAGEMENT

Within the Group's Human Resources Department, the Medical Advisor and the Safety and Prevention Director coordinate measures aimed at reducing and managing the risks to the health and safety of individuals. The organisation, means and methods for controlling these risks are detailed in section 6.6 Safety, Hygiene and Health of this Registration Document.

5.2.2.2 RISKS RELATED TO ATTRACTING AND RETAINING TALENT, AND INDUSTRIAL RELATIONS

The Group's activities and their development require the recruitment and employment of a large number of operators, technicians and highly qualified managers. The operational performance of our activities, and the Group's deployment, both internally and externally, depend, in part, on its ability to recruit and develop new skills, including in geographical areas where the employment base is smaller, and maintain a level of high-quality, responsible social dialogue.

RISK MANAGEMENT

Identifying and promoting its talents is a crucial issue for the Group, in a competitive environment subject to constant technological change. For this reason, ERAMET has developed a Human Resources strategy, the first pillar of which is to identify, attract, retain and develop the talent and expertise necessary for its business activities and to achieve sustainable growth (see Chapter 6 on CSR). The Human Resources policy also includes meaningful and dynamic social dialogue to deal with deep organisational changes (see Chapter 6 on CSR).

5.2.2.3 RISKS RELATED TO SECURITY

The risk of intentional attack affects all organisations. The ERAMET group is particularly exposed because of its presence in 21 countries, some of which are more exposed to terrorist threat, or in countries considered politically and economically unstable that could experience social violence. ERAMET is therefore exposed to risks of an attack on the security of persons and property in the countries where the Group operates and/or at its industrial sites, resulting in human and financial losses.

RISK MANAGEMENT

The Group's safety policy is centred around protection of the people, facilities and information that support the development and economic efficiency of the Group. Three objectives are pursued:

- a strategic objective that assesses the nature of threats and measures the risks to the Group's people and assets;
- an operational objective that puts in place the resources and means necessary to prevent and protect;
- an educational objective that informs and raises awareness among ERAMET group employees about the reality of the risks, the means implemented to address them, and the behaviours to adopt.

The protection measures put in place by the Security department are the result of analysis and monitoring of the security situation and the assessment of the threat. They also depend on the nature of the activities carried out by the Group's units in the region and the effectiveness of the public institutions in the countries concerned.

The Group has also implemented a Group-wide crisis prevention and management policy through procedures that focus on three situations:

- crisis prevention: applicable standards, identification and implementation of operational measures to counter weak signals, crisis simulation exercises so that each person knows their role and to continually improve emergency planning (in conjunction with the industrial risk matrix, which was updated in 2016);
- serious incident management: definition of a serious incident, Group reporting, feedback;
- crisis management: as the sites already have their own emergency plans (contingency plan, ERP or other) the Group central crisis management system was updated in 2016. It includes procedures for the escalation of alerts, the assessment of their severity, the organisation in crisis units and feedback, as well as crisis management coordination interfaces with site emergency plans.

These procedures have been deployed across all sites. As in 2015, special attention was paid to crisis simulation exercises: out of the 42 sites monitored, 90% conducted one or more exercises in 2016, some of them in cooperation with the fire brigade.

5.2.2.4 RISKS RELATED TO INDUSTRIAL AND ENVIRONMENTAL SAFETY

The ERAMET group is exposed to the risk of accident or major industrial and/or environmental damage that could affect one of its sites, which could affect the safety or health of people on site and/or in the surrounding area, and/or significantly impact the environment. Such an event could lead to an interruption of business, jeopardising the continuity of a strategic Group asset, as well as additional costs related to legal claims against ERAMET and damage to its reputation.

RISK MANAGEMENT

The Environment, Industrial Risks and Product Responsibility Department coordinates initiatives aimed at reducing, managing and controlling industrial and environmental risks. The organisation, means and methods for controlling these risks are detailed in Chapter 6, section 6.2.1 Challenges, objectives, organisation and means for the prevention of environmental and industrial risks.

With regard to major projects and investments, the Group applies criteria such as consideration of the health, safety, social and environmental dimensions of sustainable development as part of its investment procedure, and the Environment, Industrial Risks and Product Responsibility and CSR functions are systematically represented on project steering committees.

5.2.2.5 RISK OF FAILURE OF INFORMATION SYSTEMS, PROTECTION OF INFORMATION AND CYBER ATTACKS

The Group depends on IT infrastructure and applications, particularly for supply, production, distribution and invoicing, reporting and consolidation activities, as well as new product design and development.

The risks to the Group could be information system malfunction (loss of availability, data theft, destruction or loss of data integrity) related to external threats (denial of service, hacking, malware) or internal threats (tampering, breach of data confidentiality).

Other types of indirect threats should also be prevented, such as those related to social engineering (Chairman or treasurer fraud, blackmail, ransomware, etc.).

All of these risks and threats could impact the Group's operations and profitability.

RISK MANAGEMENT

To address these risks and threats, the Group stepped up its information system security and cybersecurity by recruiting a Group Chief Information Security Officer at the end of 2017, who reports to the Information Systems Department and is responsible for:

- preventing risk by raising employee awareness, emphasising good practices to follow and by constituting the cybersecurity team covering all Group entities;
- continuing the Information Systems protection programme and strengthening access control of people and materials, as well as detecting potential vulnerabilities by auditing critical elements;
- improving the detection of security incidents and the response model in accordance with the type of threat or its potential impact.

5.2.2.6 TRANSPORT RISKS

The profitability of the Group's mining activities and the competitiveness of its mining assets depend on the conditions of transport of ore to the port areas of the countries in which it operates and the use of shipping to transport its products: first, in various stages, to production sites and then for delivery to customers, because of the long distances between the mines where raw materials are extracted and the sites where they are processed, and between those sites and the markets. An interruption in sea or rail transport or a sharp rise in transport prices would have a negative impact on results and asset profitability.

RISK MANAGEMENT

To protect itself against sharp rises in sea freight costs, the Group seeks to negotiate long-term contracts with predefined conditions and to book some ships on a long-term basis. During periods of low sales activity, however, this may entail the renegotiation of contracts. The risk of damage is moreover covered by specific insurance policies. The Group holds the concession to operate the Trans-Gabon railway for a 30-year term beginning in November 2005. In addition to providing a public service and transporting miscellaneous goods, the railway carries manganese ore from the Moanda mine to the port in Owendo (Libreville).

COMILOG, through its Port Minéralier d'Owendo subsidiary, has a concession to operate the ore port of Owendo.

In Senegal, Grande Côte operations, a subsidiary of TiZir, itself a subsidiary of ERAMET, holds a 25-year railway concession as of 2011 to transport ore from the mining site to the Dakar harbour facilities.

Grande Côte Opérations benefits from a licence to use the port area at the Dakar autonomous port.

5.2.2.7 RISKS INHERENT IN PRODUCTION RELIABILITY AND THE DEVELOPMENT OF NEW METALLURGICAL PRODUCTS

Aubert & Duval, a subsidiary of the Group's Alloys Division, produces high-power forged or die-forged parts, as well as high-performance steels and super alloys, particularly for the aerospace and energy markets. The failure of the design or manufacturing process or the chain of controls could result in legal and financial consequences for Aubert & Duval related to production downtime or the inability of the customer to use the product and the resulting product recall campaign. In addition, Aubert & Duval and ERAMET would be exposed to reputational risks, loss of confidence impacting the sustainability of the subsidiary, and financial risks of counterparties incurred by the holding ERAMET S.A.

RISK MANAGEMENT

Aubert & Duval has rolled out a global quality management organisation to improve the reliability of the production cycle by implementing the following control methods:

- extensive work to strengthen the capability of existing critical products and those under development;
- identification and tracking of key parameters to detect drift and weak signals;
- a production organisation based on self-control and anomaly detection;
- enhanced audit and product controls by the quality teams;
- a policy of prevention of falsification (awareness, audits);
- product qualification processes in close connection with customers and external certification bodies.

5.2.3 LEGAL RISKS

5.2.3.1 RISK OF NON-COMPLIANCE WITH REGULATIONS

The ERAMET group deploys the applicable regulations to all of its sites worldwide.

Like any French organisation with international operations, ERAMET may therefore be exposed to legal and/or reputational risks, with potentially significant financial impacts if one of its employees fails to comply with the many laws in force.

RISK MANAGEMENT

Risk ownership and responsibility for risk management are assigned at the most appropriate level, according to the principle of subsidiarity, therefore each operations manager is directly involved in the management of risks (see 5.1.1—Internal Control above) related to the activities for which he or she is responsible.

As a service centre, the Group Legal Department provides the whole Group with legal support on all matters within its area of expertise.

Regarding ethics and corruption regulations, the Group Ethics Officer, in conjunction with the Group Legal Department and the Communication and Sustainable Development Department, coordinates efforts to reduce and control the risk of breaches of the Ethics Charter or non-compliance with ethics regulations. The organisation, means and methods for controlling these risks are detailed in Chapter 6.3 Information relating to societal commitments in favour of sustainable development and in particular 6.3.3 Responsible governance and 6.7 Human resources.

5.2.3.2 RISK OF LEGISLATIVE AND REGULATORY CHANGES

Mining operations are subject to specific regulations, depending on extraction locations and activities. These regulations chiefly relate to:

- mining permit and concession regimes;
- obligations specific to mining operations;
- environmental protection and biodiversity limits and controls;
- site restoration after depletion.

These regulations may change, with a possible impact on operations and results. This is currently the case in Gabon, following the introduction of the Mining Code with the enactment of Law 017/2014 of 30 January 2015, although the decrees for its application have not been published yet.

In addition to actual mining activity, industrial operations are also subject to specific regulations, depending on the industrial site. These regulations mainly cover:

- the regimes governing mining permits and authorisations;
- compliance with limitations on waste discharge into the natural environment during site operation, taking due account of the major industrial risks and health impacts associated with operations, and the management and elimination of industrial waste;

- the obligations entailed in restoring the site after cessation of operations, factoring in the risks relating to polluted sites, ground pollution and waste.

These regulations may change, with a possible impact on operations, particularly where additional capital expenditure is required to factor in environmental concerns in response to changes in regulations.

The Group's products are obtained through the use of metals and the implementation of strict regulatory processes, where the prevalence of the precautionary principle could expose the Group to threats to the sustainability of its operations or activities to preserve the health of employees and/or local residents, to expensive adaptations of production processes, or to the standardisation or overhaul of the production of certain operations.

RISK MANAGEMENT

The Communication and Sustainable Development Department (DC2D), in liaison with the Group Legal Department, coordinates the risk control measures related to legislative and regulatory developments. The organisation, means and methods for controlling these risks are detailed in Chapter 6 of this Registration Document, in particular, sections 6.2 Environmental protection and 6.5 Responsibility for chemicals.

5.2.3.3 SIGNIFICANT DISPUTES

Apart from the matters explained below, as far as the Company is aware no government, judicial or arbitration proceedings exist, pending or imminent, that are liable to have or in the last 12 months have had any material effects on the financial position or profitability of the Company and/or the Group.

FORMER COMILOG EMPLOYEES IN CONGO

Before the Trans-Gabon railway started operating, COMILOG exported its manganese ore via Congo, where it employed nearly 1,000 people at the time. Following a very serious rail accident on 5 September 1991 in the Republic of Congo, COMILOG's rail shipments of ore through this country were suspended. This situation persisted and led to the discontinuation of COMILOG's operations in the Congo, and dismissal of its Congolese employees. After several years of negotiations delayed by the civil war in the Congo, a "Memorandum of Understanding for the final settlement of litigation relative to the cessation of COMILOG's activities in the Republic of Congo" was concluded between the Republic of Congo, the Gabonese Republic and COMILOG on 19 July 2003. Under this memorandum, COMILOG and the Republic of Congo put an end to all past and future disputes, and the Republic of Congo agreed to take on all liabilities and obligations arising from COMILOG's operations in the Congo. Under the terms of this agreement, COMILOG paid the Republic of Congo the sum of one billion two hundred million CFA francs to compensate the employees who were dismissed. This sum was in addition to the real and movable assets transferred free of charge by COMILOG. Challenging the terms of the agreement, 867 former employees of COMILOG in Congo summoned three French subsidiaries of COMILOG, which had never been their employers, and COMILOG to appear before the Conciliation Committee of the Paris Labour Relations Court on 9 October 2008. In a ruling on 26 January 2011, the adjudication panel of the Labour Court declared that it had no territorial competence in the matter. The applicants filed an appeal before the Paris Court of Appeal. The Court of Appeal agreed to conduct an initial examination of six cases. In judgements on 20 June 2013, it ordered two of COMILOG's French subsidiaries to produce various documents. COMILOG and its subsidiaries submitted an appeal against these rulings to the Court of Cassation, and accordingly issued a request to the Court of Appeal for an adjournment until the Court of Cassation had ruled. The Court of Cassation ruling on 28 January 2015 rejected the appeals, confirming that the Paris Court of Appeal judgement of 20 June 2013 had not decided that French employment courts would be competent to rule on the merits of the dispute between the claimants and their former Gabonese employer, and that it had moreover not decided that the French subsidiaries of COMILOG were their employers.

Consequently the six cases were again examined by the Paris Court of Appeal, issuing six judgements on 10 September 2015 whereby it ruled that COMILOG's French subsidiaries were not co-employers of the plaintiffs and that COMILOG was in fact a Gabonese company. It dismissed the challenges of four plaintiffs, who appealed against these four rulings. However, in the case of two of the plaintiffs, who had instigated proceedings with the Congolese authorities, it stipulated French jurisdiction to rule on the claims made against COMILOG, considering that these plaintiffs had been denied justice by the Congolese authorities and that these legal disputes had a sufficient connection with France.

COMILOG lodged an appeal in the Court of Cassation against those two judgements, and the two judgements of the Court of Cassation under this appeal were delivered on 14 September 2017. The Court of Cassation allowed COMILOG's appeal, dismissing the two contested judgements of 10 September 2015 on the grounds that the mere holding of a stake by ERAMET in the share capital of COMILOG did not authorise the Court of Appeal to judge that the dispute had sufficient connection with France to come under the jurisdiction of the French employment courts. The Court of Cassation referred the parties to the Paris Court of Appeal in a different composition.

On 13 December 2017, the Court of Cassation, ruling on the appeals brought by the four plaintiffs whose contradiction was rejected by the Paris Court of Appeal on 10 September 2015, dismissed the four appeals on the grounds that the Court of Appeal had rightly held that the French courts did not have jurisdiction.

5.2.4 FINANCIAL RISKS

5.2.4.1 LIQUIDITY RISK

The Group has a healthy financial liquidity position at 31 December 2017, with €2,075 million of cash surpluses, of which €1,681 million is classified as cash and cash equivalents. These cash surpluses are for the most part transferred to Metal Securities, the Group company in charge of centralising and investing the ERAMET group's cash surpluses.

In other respects, the Group's net debt amounted to €376 million at 31 December 2017.

For more details, see Note 7 to the consolidated financial statements presented in Section 3 of this document.

COVENANTS

The main covenants at Group level are described in Note 7 to the consolidated financial statements in Section 3 of this document.

5.2.4.2 MARKET RISKS

The Group is primarily exposed to three types of market risk: currency risk, interest rate risk and commodity risk. These three types of risk are measured and managed by the Group Treasury Department in accordance with Group policies.

CURRENCY RISK

The ERAMET group is exposed to two types of currency risk, as follows:

- transactional currency risks when a Group company pays or receives net flows in a currency other than its functional currency;
- foreign currency risks to the balance sheet due to changes in the net assets of subsidiaries measured in currencies other than the euro.

Transactional risks

The Group has pooled its subsidiaries' transactional currency risks since 2003. Each Group company reports to Group Treasury on its currency exposure. This management scheme is part of a multi-year policy based on procedures approved by the Executive Committee and monthly reporting to its members.

Currency hedging has been carried out via the special-purpose entity, Metal Currencies, since 2007. The subsidiaries in question determine the amount of their net exposure. The associated risks are then hedged if the net amount is greater than €2 million or the equivalent thereof per currency and per year.

Currency hedging primarily involves the US dollar, but also includes the Norwegian krone, the pound sterling and the Swedish krona.

Details of hedges are explained in Note 7 to the consolidated financial statements in Section 3 of this document.

At 31 December 2017, the fair value of currency hedges covering transactional risks represented a net liability of €7 million (31 December 2016: net liability of €39 million).

Sales and purchases denominated in foreign currencies (invoices issued, invoices received, receipts and payments) are translated at a monthly exchange rate that represents an accurate approximation of the market exchange rate. At the end of each month, trade receivables/payables and bank account balances are restated at the hedging rate indicated by the Treasury Department. Any differences between:

- the monthly exchange rate applied to recognise sales and receipts/purchases and payments; and
- the contractual settlement price for hedges,

are recognised by each company under current operating income on sales (under "Translation adjustments on sales") or purchases (under "Cost of goods sold").

A change of plus or minus 0.10 in value in the EUR/USD rate would have an impact, before tax, on the hedges recognised in equity of around +€17 million if rates rise, and approximately -€20 million if they fall.

Balance sheet risks

The ERAMET group manages part of the currency risks to the balance sheet by issuing financial liabilities denominated in the same currency as the net assets concerned.

The Group manages balance sheet currency risk on a case-by-case basis.

INTEREST RATE RISK

a) Regarding its gross debt position, the Group considers its debt position and market trends when deciding whether to hedge for interest rates. The Group's Treasury Department is responsible for setting up hedges.

A 10-basis point change in rates would not have a significant annual impact on the Group's overall floating-rate debt.

b) Cash surpluses managed by Metal Securities are mostly invested in instruments linked to the EONIA rate (Euro OverNight Index Average) or EURIBOR (Euro Inter-Bank Offered Rate).

A 10-basis point change in rates would not have a significant annual impact on financial income.

5.2.4.3 COUNTERPARTY RISK

The Group is exposed to several types of counterparty risk: in relation to its customers and its financial partners, particularly because of its cash surpluses.

For customer risk, the Group uses credit insurance, letters of credit or documentary credits. For unsecured receivables, the Group has a number of different monitoring and hedging tools: business intelligence ahead of transactions (rating and business-intelligence agencies, published financial statements etc.). Trade receivables are monitored by a credit manager for each Group Division and credit committee meetings are held to set limits for each customer.

For credit risk concerning financial counterparties, the procedure applicable to Metal Securities sets general investment limits according to counterparty rating and maturity of investments. Each counterparty is also subject to regular monitoring of the assessments by credit analysts and/or rating agencies, and all risks are reviewed quarterly.

For UCITS, the procedure applicable to Metal Securities sets a double risk-dispersion rule, with both a maximum investment ratio for a given UCITS and the spreading of the assets managed by Metal Securities. This procedure is in addition to the risk-spreading rules applied by the fund managers themselves to their assets.

5.3 INSURANCE

5.3.1 RISK IDENTIFICATION AND CONTROL AND USE OF THE INSURANCE MARKET

As part of the implementation of its risk management policy, in 2017 the Group completed a new mapping of the Group's risks, as well as the mapping of the Divisions' activities and entities. As risks are identified and their impact controlled, the Group seeks and puts in place, through its brokers, the most appropriate solutions on the insurance market that offer an optimum cost/cover balance to transfer the financing of its residual risks as part of global insurance schemes underwritten by pools of insurers that are internationally recognised for their reputation and financial solidity.

As part of these investments, the Group Risk Management and Insurance Department:

- ensures risk-premium-retention optimisation, including through the intervention of the Group's reinsurance captive;
- sets up Group schemes to cover its residual risks, in particular by subscribing to various financial lines covering all of the Group's cross-functional activities;
- together with the Division heads, establishes the policy for coverage of insurable operational risks, in particular for all fully consolidated Group companies;
- monitors the operational risk prevention policy of the insured entities in liaison with the Communication and Sustainable Development Department;
- uses the insurance market to cover risks that are specific to some of its subsidiaries' activities or non-recurring operations, and in cases where insurance is required under local regulations.

In addition, as part of its human resources policy, the Human Resources Department seeks the most appropriate solutions for its international activities on the personal insurance market, and subscribes to insurance schemes able to guarantee the best social protection against the major risks (health, welfare, professional assignments) to which employees are exposed when carrying out their duties.

5.3.2 REINSURANCE

The Group also has a captive reinsurance company (ERAS) that enables it to provide primary coverage in some insurance schemes. The Group is thus able to more effectively manage premiums via a retrocession mechanism and to decide on retention limits. The Divisions are accordingly encouraged to develop their own prevention programmes.

5.3.3 AMOUNT OF COVER

The Group considers that it has established sufficient cover, both in terms of scope and amounts insured or cover limits, for the main risks relating to its global operations.

5.3.4 DIFFERENT TYPES OF INSURANCE COVER

The Group has a varied range of insurance schemes designed to cover the different insurable risks to which it is exposed.

The four main insurance schemes cover civil liability, environmental civil liability, property damage, business interruption and transport risks.

5.3.4.1 CIVIL LIABILITY INSURANCE

GENERAL CIVIL LIABILITY INSURANCE

This scheme covers the civil liability incurred by the Group as a result of damage caused to third parties by its business operations or products, i.e. general operating liability, lessors' insurance, product liability including for aerospace products, professional civil liability and cover for sudden and accidental pollution. Cover is comprehensive, meaning that everything not excluded is covered, exclusions being those commonly applied for such risks. Cover is applied on a "claims" basis, meaning that it applies to any claim made during the insurance period (including the subsequent five-year period, pursuant to French regulations). For any claims received, the scheme applies from France. If applicable, when local regulations require local policies, it is used in addition to these policies to compensate for differences in conditions and/or limits on a DIC/DIL basis worldwide.

As of 1 July 2017 this scheme is fully placed with Allianz Global Corporate & Specialty for a period of three years.

It is based on a "master" policy issued in France covering €75 million and two additional "excess" policies of €50 and €25 million, supplementing the master policy and thus providing total cover of €150 million.

CIVIL LIABILITY FOR AERONAUTICAL PRODUCTS

The capacity of this scheme, operated with Allianz Global Corporate & Specialty is €800 million.

ENVIRONMENTAL CIVIL LIABILITY

As this scheme was up for renewal, it was put up for tender in 2016. The new scheme with a capacity of €30 million has been subscribed with AXA Corporate Solutions for two years.

5.3.4.2 PROPERTY DAMAGE AND BUSINESS INTERRUPTION INSURANCE

This worldwide scheme covers property damage incurred suddenly and accidentally to the insured property, including the risk of machinery breakage, and any operating losses arising to all Group entities. Cover is comprehensive, meaning that everything not excluded is covered, with exclusions commonly applied for such risks.

This scheme is covered by a pool of insurers with HDI-Gerling Industrie as lead insurer, for a maximum guarantee of €300 million. It was renewed for three years as of 1 January 2017.

5.3.4.3 TRANSPORT INSURANCE

A global Group transport insurance scheme is in place. This scheme covers all Group entities worldwide, for all types of transport and all types of freight or goods transported. The scheme comprises three policies: “cargo” for goods shipping, “charterer” with RAETS Club and “hull and machinery” with AXA Corporate Solutions.

6

CSR

6.1 SUSTAINABLE DEVELOPMENT POLICY AND ORGANISATION

6.1.1 SUSTAINABLE DEVELOPMENT POLICY

ERAMET is a mining and metallurgical group that operates around forty industrial sites and develops projects. Through the nature of its mining and industrial activities, the Group is concerned with all topics of sustainability and corporate social responsibility (CSR): economic and social development, environmental protection, control of industrial and product risks, quality of relationships with stakeholders and respect for human rights.

Aware of its very strong interaction with the territories in which it operates, ERAMET has long been committed to an approach of continuous progress and improvement in order to place CSR at the heart of its activities. The aim of ERAMET, by conducting its activities in its locations sustainably, is to support the development and constantly reinforce the smooth integration of its operations into new territories and in new sectors.

In line with this approach of continuous improvement that creates shared value, the ERAMET Board of Directors adopted a Sustainable Development policy in 2010.

This policy is structured around four priorities:

- the protection and development of the employees of the Group;
- the management of risks to and impacts on health and the environment;
- the integration of sustainable development into product policy and innovation;
- and finally, maintaining a relationship of trust with stakeholders.

These priorities are "operationalised" with the Divisions and sites through policies, roadmaps, or specific standards that result in the definition of specific multi-year objectives for each of the Group's businesses and activities, as well as action plans that ensure their effective implementation.

The latest version of these objectives and action plans was validated by the Group's Executive Committee in November 2017.

The complete text of the Sustainable Development policy is available on the ERAMET website: http://www.eramet.com/publications/la-politique-de-developpement-durable.

Implemented in 2015, the Group's Ethics Charter sets out the rules and principles of action and behaviour that are applicable to and binding on all Group employees. The Charter forms the basis of ERAMET's ethics compliance programme, approved by the Executive Committee in November 2016 and deployed throughout the Group. It is related to the commitments of the Group and its employees in many areas: development, respect and trust with stakeholders, safety of employees and their families, respect for and protection of the environment, safety, respect for customers, social dialogue, the fight against all forms of coercion and harassment, transparency, prevention of corruption, compliance with competition rules, etc.

These two fundamental documents have been translated into the eleven languages of the countries where the Group operates.

6.1.2 CSR ORGANISATION

The Group's commitment translates into involvement at the highest level of the Company. The Communication and Sustainable Development Director and the Human Resources, Health, Safety and Security Director—both members of the Group's Executive Committee—propose, support and monitor the multi-year objectives and associated action plans. They report to the Executive Committee.

The effective integration of CSR topics into the Group's activities is also closely monitored by ERAMET's Board of Directors, in particular through two of its Committees: the Strategy and CSR Committee, and the Audit, Risks and Ethics Committee.

The Communication and Sustainable Development Department (DC2D) has an Environment, Industrial Risks and Product Department (DERIP) and a Public Affairs Department (DAP), while the Human Resources Department (DRH) includes a Social Relations Department, a Safety and Prevention Department, a Security Department and a Medical Advisor, responsible for promoting the Group's Health Policy. The Group Ethics Officer and the Divisions' Purchasing Departments complete this system.

These corporate functions are organised and structured around practices and processes aimed at continuously strengthening their commitment and efficiency, highlighting a strong culture of risk identification and control.

The objectives and action plans are available in all of the Divisions and operational entities of the Group. Their effective execution and the good coordination between the Corporate functions and the Divisions have been strengthened by the establishment of working groups and cross-functional committees focusing on various themes (biodiversity, mining environment, responsible purchasing).

Furthermore, the Group pays particular attention to the integration of social, environmental, health and safety, cultural and societal criteria in the design and development of its projects. By referring to the best international standards, the Group aims to build long-lasting relationships with its stakeholders wherever it establishes a base, in accordance with specific rules and cultures, and current scientific knowledge. The Communication and Sustainable Development Division is systematically represented for this purpose in the Steering Committees of projects. Section 6.4 of this chapter details the application of these general principles for all the Group's projects.

The Group is also committed to responsible purchasing. The actions related to this theme are detailed in section 6.3.4.

Finally, ERAMET has put in place monitoring and control measures and tools to ensure the concrete implementation of sustainable development objectives throughout its scope of activity. These tools include dedicated information systems that collect and consolidate data and indicators for all Group companies. Details of the standards and tools used to produce this information are given in the methodological note in paragraph 6.8.

The Group also relies on an internal audit system for the performance of its entities in the areas of Environment, Health, Safety and Energy, which is detailed in paragraph 6.2.1. The data obtained from these audit and control systems enables us to continuously feed the Group's continuous improvement approach.

6.2 PRESERVATION OF THE ENVIRONMENT

6.2.1 CHALLENGES, OBJECTIVES, ORGANISATION AND RESOURCES FOR THE PREVENTION OF ENVIRONMENTAL AND INDUSTRIAL RISKS

6.2.1.1 ENVIRONMENTAL ISSUES AND RISKS FOR ERAMET SITES

The Group's industrial and mining sites carry out activities that are sometimes very different from each other in geographical areas that are themselves diverse. Therefore, environmental issues and risks vary greatly from site to site.

The environmental issues and risks specific to the Group's mining operations are described in detail in the paragraph dedicated to the mining environment (6.2.6).

The following table aims to give an overview of the major environmental issues and risks for the major categories of the Group's industrial sites. This summary aims to help the reader in his or her understanding; it is necessarily macroscopic and schematic and cannot completely reflect the diversity of the issues and risks for each site taken individually. Some sites also include activities in several of the categories presented here. Moreover, the majority of the industrial sites located in France fall under the ICPE (classified facilities for environmental protection) regime and some are under SEVESO status.

TABLE SUMMARISING THE ENVIRONMENTAL ISSUES AND RISKS AT ERAMET'S INDUSTRIAL SITES

	PYROMETAL-LURGICAL SITES (FURNACES)	HYDROMET-ALLURGICAL SITES	METALLURGICAL DEVELOPMENT AND TRANSFORMATION SITES (ROLLING MILLS, FORGING, DIE-FORGING, HEAT TREATMENT, ETC.)	COMMENTS
Water consumption	Significant	Significant	Moderate	Except for the hydrometallurgical sites, the vast majority of the Group's water consumption is linked to industrial equipment cooling loops. The water consumed in these processes does not undergo any transformation. In addition, the vast majority of sites work in closed loops, which greatly reduces the demand. In other cases, water is returned to the natural environment.
Emissions into water	Moderate	Significant	Weak	Hydrometallurgical sites are the sites that present relatively the most significant risks of water pollution, due to the use of chemicals and an aqueous process. All industrial waters are managed in accordance with applicable regulations.
Atmospheric emissions	Strong	Weak	Moderate	Sites that have metallurgical furnaces or electricity generation plants are the sites that amass most of the Group's atmospheric emissions (dust, nitrogen oxides or sulphur). The main sources of emissions from installations are equipped with capture and treatment equipment, in accordance with applicable regulations and the best available technologies.
Energy consumption/ greenhouse gas emissions	Strong	Weak	Moderate	Sites that have metallurgical furnaces and/ or electricity generation facilities are the sites that amass the bulk of energy consumption and greenhouse gas emissions.
Production of hazardous waste	Significant	Significant	Moderate	Pyrometallurgical activity produces dust, sludge and slag, which, depending on their intrinsic characteristics and locations of operation, can be considered hazardous waste.
Impacts on biodiversity	Weak	Weak	Weak	The Group's industrial sites are mainly located in urban and industrial areas.
Risks of historical soil pollution	Significant	Significant	Significant	The production sites are generally designed on soil protection slabs and the storage of hazardous products is equipped with retention systems, which reduces the risk of soil contamination. However, as industrial practices have evolved, the oldest sites may present risks of historical soil pollution.

Note that the noise or light pollution does not represent a significant environmental impact. The various sites concerned respect the noise levels stipulated in their operating licences, and the subject does not appear as important in the assessment of litigation made by the Group.

6.2.1.2 ENVIRONMENTAL GOALS

The Group's environmental and environmental risk management actions form part of the eight principles of action set out in the Environmental Charter, the full text of which is available on the ERAMET website at the following address:

http://www.eramet.com/sites/default/files/charte_environnement_2010_fr.pdf

As described in the introduction (6.1), cross-functional or site-specific environmental progress objectives in direct implementation of the Sustainable Development policy are defined by the Executive Committee and updated and monitored on a quarterly basis by the Environment, Industrial Risks and Products Department.

Since 2007, the Group has also set an environmental compliance goal ("zero disputes"); the aim of this is to strive for zero warnings or criminal proceedings resulting from breaches of binding regulatory requirements by Group sites. Details of this measure—which was changed dramatically in 2015—and its results are provided in paragraph 6.2.2.

Finally, the Group pursues the objective of deploying certified environment management systems following the ISO 14001 standard for all industrial and mining sites with significant environmental issues. The results for this objective are detailed in section 6.2.2.

6.2.1.3 ORGANISATION AND INSTRUMENTS FOR THE PREVENTION OF ENVIRONMENTAL RISKS

To implement its objectives, the Group relies on a network of internal experts and on a structured organisation:

- The Environment, Industrial Risks and Products Department (DERIP) defines the Group's benchmarks, coordinates the general dynamic of continuous improvement, implements the control mechanisms of the internal standards and provides expert technical support to the sites and projects.
- The Public Affairs Division (DAP) facilitates and coordinates CSR actions related to relationships with stakeholders and monitors the anticipation of regulatory change.
- More than 80 people make up the network of HSE functions at sites, with a reporting line to their senior management for the vast majority of them.
- Once a year, the Committee of Occupational Hygiene, Health and Safety (HS&S) and Environment (E) analyses the skills available within the Group with regard to requirements and concerns. This proactive approach is conducted in coordination with the Human Resources Departments of the Group Divisions and Departments of Prevention and Safety/Sustainable Development and Environment.

In November 2017, the HSE network's biennial mobilisation seminar was held in Le Havre, bringing together more than 80 Group HSE specialists and managers. The seminar was dedicated to information-sharing sessions regarding new multi-year objectives and feedback on the topic of "relationships with stakeholders".

Training and awareness activities on the essentials of environmental responsibility management are developed at sites, in the Divisions or at Corporate level.

Monitoring and control systems constitute one of the key strengths of the Group's environmental management.

Thus, a dedicated environmental information system (EraGreen) has been fully deployed in all industrial and mining sites, allowing for the collection and consolidation of environmental performance indicators. These indicators are mostly derived from the sampling and analysis plans developed by the sites as part of their operating permits.

The Group also relies on a demanding internal audit system for the performance of its entities in the areas of Environment, Health, Safety and Energy. The common audit guidelines are structured as three pillars: human involvement, operational control and prevention. They fully take into account the requirements of ISO 14001, OHSAS 18001 and ISO 50001. Mixed teams of the Group's internal auditors (corporate departments, division coordination, and site representatives) trained according to an internal guidelines system, conduct these audits which last several days and make it possible to situate in detail the performance of the sites. This involvement strengthens the cross-functional level of expertise of HSE managers and promotes experience sharing between operational teams. Over the last four years, 29 of 37 sites with significant environmental concerns have been audited according to these terms.

Corrective action plans are defined at the end of each audit, and for all risks considered significant, a quarterly report on the implementation of corrective actions is consolidated at Group level.

6.2.1.4 ORGANISATION AND INSTRUMENTS FOR THE PREVENTION OF INDUSTRIAL RISKS

The main industrial risks to which the Group's sites may be exposed are fire, explosion (including, for certain sites, related to the risk of contact between water and molten metal), machine breakdown on critical equipment, and natural events (floods, storms/cyclones, etc.).

Assistance to the sites is mainly provided in the project phase, when performing their hazard studies. These analyses are used to exhaustively identify major accident scenarios and their causes and impacts, as a result of which prevention and/or protection safeguards (important safety items) are implemented to reduce the likelihood or seriousness of an event. In 2017, this mainly concerned the Lithium project and the rolling mill industrial development project at the Aubert & Duval plant in Les Ancizes. At the same time, the Group launched a programme in 2017 aimed at systematically revising the prevention and/or protection barriers for its non-Seveso sites in operation.

The control system is based primarily on the programme of biennial insurance engineering visits (insurance prevention audits) to its industrial sites in close collaboration with insurers, brokers and the Group Insurance Department. Any significant risk detected during these audits results in a corrective action plan by the site concerned.

The following sites were visited in 2017:

- **ERAMET Alloys:**
  - Aubert & Duval Imphy, Pamiers, UKAD and EcoTitanium,
  - Erasteel: Commentry and the three Kloster sites (Söderfors, Langshyttan and Vikmanshyttan);

- **ERAMET Manganese:**
  - ERAMET NORWAY Kvinesdal,
  - COMILOG, CIM and C2M in Moanda (Gabon),
  - COMILOG Dunkerque.

The follow-up of the corrective actions agreed following these visits is set out in a summary report covering compliance with ERAMET's industrial risk standards (revised in 2016) and the progress of recommendations made by the insurer during prevention visits (version of December 2017, issued in February 2018).

The Group has also developed crisis prevention and management procedures. These procedures focus on three areas:

- crisis prevention: identification of weak signals and operational response thereto, crisis simulation exercises so that each person knows their role and in order to continually improve emergency planning (in conjunction with the Group industrial risk standards);
- serious incident management: definition of a serious incident, Group reporting, feedback;
- crisis management: as the sites already have their own emergency plans (contingency plan, ERP or other), the corporate crisis management system was reviewed and now includes procedures for escalation of alerts, assessment of their severity, organisation into crisis units and feedback.

These procedures were deployed across all sites. As in 2016, special attention was paid to crisis simulation exercises across all sites: out of the 34 sites monitored, more than 90% conducted one or more exercises in 2017, some of them in cooperation with the fire brigade.

6.2.1.5 FINANCIAL RESOURCES DEVOTED TO ENVIRONMENTAL PRESERVATION

The overall environmental investment is estimated at nearly €25 million in 2017. This figure is globally stable compared to 2016 in absolute terms, it reflects a slight increase of 7% of these investments on a like-for-like basis (given the sale of several sites in 2016). This reflects the sustainability of ERAMET's commitments to environmental protection.

The investments considered here relate strictly to environmental prevention and protection. For example, they cover the installation of new equipment or work performed in order to minimise impacts. They also cover certain investments made for new activities with an exclusively environmental dimension. In 2017, environmental investments were apportioned at 50% for air pollution control and 25% for water pollution prevention, with the remainder given to waste management, biodiversity and the prevention of other impacts.

In the prevention of air pollution, for the second year in succession, the biggest investment in 2017 relates to the Marietta pyrometallurgical production site in the USA, where several new facilities to reduce dust emissions from the site have been established. Significant investments in air quality have also been made at the new industrial facilities at the Sandouville (France) and Commentry (France) sites. Finally, very significant investments have also been made to improve the capture of fugitive dust at the SLN Doniambo (New Caledonia), Sauda (Norway) and TTI Tyssedal (Norway) sites.

In relation to the prevention of water pollution, the most significant investments in 2017 relate to the improvement of the effluent treatment plants at the Sandouville and Commentry sites in France and the finalisation of an extensive operation to equip the various COMILOG sites in Gabon with hydrocarbon separators.

6.2.2 ISO 14001 CERTIFICATIONS AND ENVIRONMENTAL COMPLIANCE INDICATORS

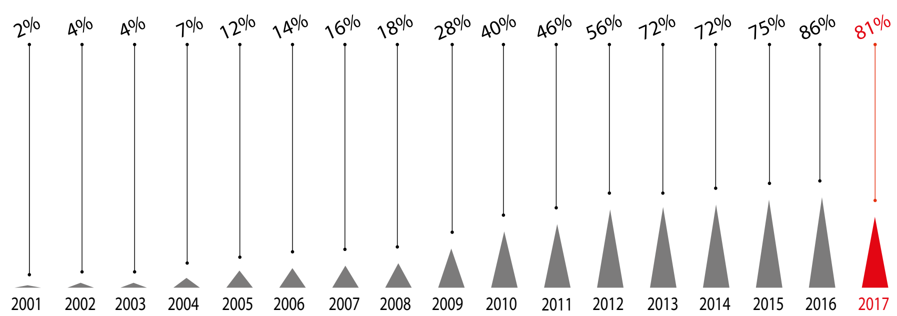
It should be noted that since 2013, the Group measures the progress of its ISO 14001 certification target for sites likely to have a significant impact on the environment.

For example, sites with few or no significant environmental risks, such as sites that have ceased operations or distribution centres, are not included in the scope of this indicator.

As at the end of 2017, sites that have obtained ISO 14001 certification represent 81% of the target goal. The Group's change in scope that occurred in 2017 (disposal of eight certified sites) is the exclusive reason for this slight decline in the rate of certified sites.

All the sites that were due for recertification in 2017 successfully retained their certification, some under the new 2015 version of the standard.

EVOLUTION OF ISO 14001 CERTIFIED SITES (INCLUDING MINES)



"ZERO DISPUTE" GOAL (ENVIRONMENTAL COMPLIANCE)

The ERAMET group promotes a policy of strict regulatory compliance, transparency and dialogue with the supervisory authorities in all circumstances, particularly in the event of temporary difficulties or special operating conditions. Since 2007, it has worked towards an environmental compliance goal; this is aimed at achieving zero formal notices or legal proceedings arising from any breach by Group sites of binding regulatory requirements.

To measure the achievement of this objective, the Group monitors four indicators:

- **Type 1—Weak signals:** Written warning by the authorities as a reminder of a deadline which, if not observed, could lead to formal notice (known in the US as a "notice of violation"), complaints by a third-party against the plant or in the media.
- **Type 2: Declaration of a non-compliance** and notice by the authorities to take action by a specific deadline in order to avoid a fine; for example, in mainland France, New Caledonia, Gabon: "notice of violation"; in the US: "notice of enforcement" or "consent agreement" between the authorities and the operator, or an "administrative order".
- **Type 3—Legal action:** Legal proceedings by the public prosecutor or any other public authority following a notice of violation or a claim brought before the courts by a third party. Legal claims by employees or third parties for damages arising from an environmental infringement. Legal claims by third parties against an administrative permit issued pursuant to environmental legislation.
- **Type 4—Actual sanction:** An administrative sanction (fine, suspension of permit), unfavourable legal ruling or criminal conviction.

In 2017, no new type 3 or 4 event was recorded, while there were four cases of type 2 events (compared to three in 2016).

6.2.3 EMISSIONS MANAGEMENT

6.2.3.1 AIRBORNE EMISSIONS

		2015	2016	2017
Airborne emissions				
Sulphur oxides (SOx)	tonnes	13,298	14,848	13,072
Nitrogen oxide (NOx)	tonnes	5,746	6,038	6,910
Volatile organic compounds (VOCs)	tonnes	362	338	348
Total dust channelled	tonnes	1,087	1,232	1,519
Nickel	tonnes	13.0	12.8	8.9
Manganese	tonnes	117	122	276

Pyrometallurgical activities with their fusion plants and heat treatment furnaces contribute the most to channelled air emissions, including power plants. CO_2 emissions are discussed in paragraph 6.2.5.

Air emissions are a function of the nature of raw materials and ores used, the transfer and loading technologies in place, the installed capacity of the equipment and especially the level of activity of the sites.

In pyrometallurgy, channelled emissions are generated in the handling of materials, furnaces, grinding and milling operations, as well as operations involving molten liquid metal and slag. In hydrometallurgy, channelled dust emissions most often occur during the handling, grinding, drying or transfer of materials.

The effluent purification devices generally used in the Group's factories are electrostatic precipitators, baghouses and washing towers. Specific treatment systems for certain pollutants can also be used, such as activated carbon filters. The different items of equipment are installed according to the characteristics of the industrial processes, the targeted purification performances and regulatory constraints.

The sulphur oxide (SOx) emissions are mainly generated at SLN (thermal power station and Doniambo plant). The 12% decrease recorded in 2017 for the Group is mainly due to a decrease in electricity production at the thermal power station (linked in particular to improved production at the Yaté dam) and the use of fuel oil with very low sulphur content (TBTS+) since June 2017.

Nitrogen oxide (NOx) levels increased in the year under review (+14%). This is mainly due to the ramp-up of GCO's mining production, which required an increase in the energy production of its power plant.

Atmospheric emissions by volatile organic compounds (VOCs) have been generally constant over the last three years.

Channelled air emissions of dust and manganese rose by just over 20%. This increase is mainly due to an improvement in the measurement system at the Moanda Industrial Complex (CIM) in Gabon, which led to an upwards revaluation of the quantities issued.

Atmospheric emissions of nickel fell sharply compared to 2016; this is attributable to the SLN power station whose production and consequently its emissions were reduced in 2017.

6.2.3.2 AQUEOUS WASTE

		2015	2016	2017
Aqueous waste				
Suspended solids (SS)	tonnes	8,420	10,304	10,944
Chemical oxygen demand (COD)	tonnes	58.1	96.7	126
Nickel	tonnes	6.3	7.2	6.7
Manganese	tonnes	22.2	36.1	37.5

As with air emissions, ERAMET has shown its determination to reduce its aqueous waste. Industrial sites are working to improve treatment processes to ensure a better quality of discharged water.

In addition to preventive systems, such as basins and double-walled storage tanks, curative mechanisms, such as effluent treatment plants using physical-chemical processes or hydrocarbon separators (separation by decantation), are used to allow discharges that are in accordance with the statutory limit values.

For Suspended Solids (SS) discharge, a slight increase was recorded this year (+6%). SLN in Doniambo (New Caledonia) contributes most of the Group's discharge, and the variability of the SS content of the seawater used to cool the plant and the slag granulation is the primary cause of this variation.

Chemical Oxygen Demand (COD) discharge also increased significantly in 2017 (+30%). Occasional malfunctions of the hydrocarbon separator at the Aubert & Duval site in Pamiers (France), the increase in the volume of water discharged by the Aubert & Duval site in Les Ancizes (France), and the declaration of discharges in 2017 at the Moanda Metallurgical Complex (C2M) in Gabon, which had not measured this parameter previously, explain this change. It should be noted that, following the closing down of SLN's Bessemer workshop, COD discharge was reduced by 66% for this site.

In terms of metal discharge, nickel discharge has remained relatively stable over the past three years.

Manganese in aqueous discharge remains substantially unchanged compared to the previous year.

Finally, the Group's sites closely monitor the quality of groundwater and the impact of the activity on soils and subsoils. Several hundred piezometers are distributed throughout the Group's various sites, both within and outside of the Company, to support the initial phases of any new project (characterisation of the initial state) and also to monitor any impacts on ground and surface water.

6.2.3.3 REHABILITATION/ RESTORATION OF SITES

The Group exercised the utmost vigilance against the potential impacts on soils and subsoils resulting from past, current or future activities, both in the area of its industrial and mining activities.

Over several years, the Group has developed expertise to support the cessation of activity of certain industrial sites. This expertise concerns the investigation, identification, monitoring and management of potentially impacted sites through various projects, such as the rehabilitation of industrial sites and the end-of-life of landfills or old mines. This expertise is also consulted in the context of internal audits or in advance of acquisitions and disposals. It is important to mention the implementation of a policy of systematic characterisation of soil conditions before any new project, in accordance with the Group's Sustainable Development policy. Finally, the Group is taking action to strengthen its knowledge of the state of the soils and subsoils of the various sites at which the Group operates.

In 2017, the main advances in the management of closed industrial sites concern:

- *Aubert & Duval Gennevilliers (France):* Plants B and C ceased operations in 2011, and decommissioning and restoration work was carried out between 2013 and 2016. The inventory report (administrative clearance) was obtained in 2017, allowing the sale of the land to the semi-public development company of the municipality of Gennevilliers at the end of the year. Plant A, which began a similar approach in 2014, filed a management plan for the remediation of its land in 2015; it is currently under instruction by the authorities.
- *Valdi Feurs (France):* The site notified the authorities of the winding up of its business in 2014. The remediation work, which began in 2015, was completed in 2016. The inventory report (administrative clearance) was obtained in 2017.
- *Valdi Le Palais (France):* Due to the transfer of its waste recovery activities to Erasteel Commentry (France), the site notified the authorities of the termination of its activities in September 2016. The site proceeded to secure and evacuate all the remaining stocks and products. The buildings and spaces were sold in 2017 to CGEP, a subsidiary of Rio Tinto, which owns the subsoil. The rehabilitation of the site was transferred to CGEP as part of a request for implementation of the third-party procedure provided for by French regulations. The request is being considered by the authorities.

The rehabilitation of mining sites is a major focus of the environmental policy; it is described in Section 6.2.6 "Mining environment" and Section 6.2.7 on biodiversity.

6.2.4 CIRCULAR ECONOMY

6.2.4.1 PREVENTION AND MANAGEMENT OF WASTE

The implementation of an environmental management system on more than 80% of the Group's sites entails specific waste management that respects the following management hierarchy: prevent waste generation/reuse/recycle/recover or otherwise dispose of safely and in an environmentally friendly manner.

Special efforts are made to reuse the waste when their physical-chemical properties permit it; for example, slag from SLN (New Caledonia) and the poor-quality slag from COMILOG Dunkerque are combined and approved for road technology applications. The Group's sites are also very active in the areas of recovering waste for use as secondary raw materials (see paragraph 6.2.4.2 Raw Material Consumption).

		2015	2016	2017
Waste production				
Amount of non-hazardous waste	thousands of tonnes	4,467	3,959	4,509
Amount of hazardous waste	thousands of tonnes	61	66	64

The concepts of hazardous and non-hazardous waste are defined in accordance with the regulations of the host countries. Indeed, to date the measures regarding waste are very disparate from one country to another.

NON-HAZARDOUS WASTE

The measurement of non-hazardous waste does not include tonnages of deliberately rich slag that is generated as part of the ferromanganese pyrometallurgical process to feed the silicomanganese production furnaces as a secondary raw material, thus contributing to the concept of circular economy.

The mining activities and their related industrial operations are the main source of non-hazardous waste. A significant tonnage of these is stored in industrial basins in Gabon. These are the fine fractions of manganese ore collected after the washing step which serves to isolate the grained fraction intended for the market. In terms of nickel activity, the Doniambo plant generates another important tonnage of non-hazardous waste through pyrometallurgical activity corresponding to the smelting of slag. The three major contributors—SLN, the Moanda mine and the Moanda Industrial Complex (CIM)—account for 99% of the total amount calculated for 2017.

After the decrease observed in 2016, the amount of non-hazardous waste produced in 2017 returned to close to 2015 values. These changes are directly related to fluctuations in mining activity in Gabon.

At much lower tonnages, industrial activities of the steelworks and of the smelting-reduction or of the ferro-alloys production sectors of the Group generate non-hazardous by-products or waste. They are in the form of slags or inert slag mainly stored in an internal landfill or are subject to some external recovery.

Finally, although quantities are still much lower, local initiatives are also being implemented at many sites to reduce food waste: accurate forecasts of the people present on site each day (absences, holidays, visitors, etc.) to inform the catering service, or the composting of plant food waste or redistribution to neighbouring farm animals.

HAZARDOUS WASTE

The activities that generate hazardous waste are mainly derived from the pyrometallurgical processes of the Group's mining divisions (76% of the total amount for the Group). The ERAMET Alloys sites of significant size, such as the plants in Pamiers and Les Ancizes, are also responsible for significant quantities of hazardous waste.

These activities produce dust recovered by filtration devices, sludge and sodium-calcium slag, which, depending on their intrinsic properties and the location of the operation, can be considered hazardous waste.

This hazardous waste is treated through specific, authorised channels. Controls are put in place to ensure the proper management of this waste throughout the process (transport of waste, delivery to approved centre and final treatment).

The amount of hazardous waste produced has remained relatively stable over the last three years.

6.2.4.2 CONSUMPTION OF RAW MATERIALS

The sustainable use of mineral resources is presented in section 6.2.6 "Mining environment" and additional information can be found in section 6.3.4 "Responsible purchasing".

Approximately 9 million tonnes of raw materials are consumed by the Group's plants, of which about 75% is ore (produced overwhelmingly by the Group's mines) and 7% is reducers (coal and coke). The rest of the consumption consists mainly of metals used in alloy factories, and various additives.

ERAMET is fully committed to promoting a circular economy by developing the use of secondary raw materials.

For years, ERAMET has committed itself to recycling within its processes certain wastes generated at its own sites, as well as to recovering—for use in various processes—waste containing metals resulting from the manufacture or use of products marketed by other companies.

The Group's Alloys division has a strong history in such recovery of materials. Indeed, metal residues both internally produced (machining chips, scraps, etc.) and externally produced (secondary raw materials) are fed into the furnaces of the Group's steel mills. This sector stands out particularly for its extremely high recycling rates. The use rate of secondary raw materials is highly variable depending on the site and processes; it can reach almost 90% for some sites.

Recycling by the Alloys division has been extended to aviation-grade titanium through the EcoTitanium site for the production of ingots for UKAD from massive scrap and chips, whose economic model implements the circular economy principle.

Similarly, in the pyrometallurgical factories that manufacture manganese alloys, large tonnages of rich ferromanganese slag are used for the manufacture of silicomanganese.

6.2.4.3 INDUSTRIAL ECOLOGY

Industrial ecology is a management style in which rather than thinking in terms of end-of-chain pollution reduction in keeping with final waste, the aim is to reduce the flow of materials and energy by designing industrial ecosystems in which these flows circulate in cycles as much as possible.

Thus, a material flow emitted by a process, instead of being rejected after use, can be reused either internally or by a third party. Such flows of electricity, steam, waste or water can be reused in three different ways:

- reuse internally to power another process or for other purposes, such as heating a plant's offices;

- reuse externally by other neighbouring companies to supply their own facilities through such flows or reuse of flows from other companies;
- reuse externally by the community (such as for heating shops or sports facilities).

Aware of the need to control their impact, the Group's sites have long sought to implement or reinforce this type of approach, as the following examples demonstrate.

REUSE OF INTERNAL FLOWS

Examples of internal recycling are numerous and often historical. Water recycling methods are common practice and can reach rates of as much as 95%. The recovery of rainwater to supply the industrial water circuit of a plant in substitution of groundwater or surface water is also part of the objectives of some sites. This is the case, for example, of the Erasteel Commentry and MKAD Varilhes plants (France), which introduced this practice in 2016.

In terms of energy efficiency, the hot gasses generated are often reused internally, such as by the SLN Doniambo plant in New Caledonia, which recovers energy from the smoke of the melting furnaces to preheat the ore.

REUSE OF FLOWS BY OTHER COMPANIES OR FROM OTHER COMPANIES

The transformation of the Erasteel Commentry plant (France) is an industrial ecology initiative because the new activity implemented consists of recovering industrial waste (recovery of salt alkaline batteries, recycling of scale and other metal-bearing scrap).

In Auvergne, the "EcoTitanium" plant started operations in 2017. As Europe's first aviation-grade titanium plant using recycled materials, EcoTitanium will produce alloys from massive titanium scrap and chips collected from major aircraft manufacturers and their subcontractors.

In France, the Sandouville site uses steam as the primary source of energy. 97% of this steam comes mostly from a neighbouring business (Sedibex) which burns chemical waste. The supplement is provided by a wood-fired boiler installed on the site.

REUSE OF FLOWS BY NEIGHBOURING COMMUNITIES

Some of the Group's sites offer surplus flows to neighbouring communities free of charge. The Norwegian sites of ERAMET Norway in Sauda and in Kvinesdal use their surplus heat production to heat the subsoil of the streets of the city, which are often icy or snowy, as well as the arena of the local stadium to prevent the ground from freezing in winter. Similarly, the heat production surplus at the Tizir Titanium and Iron plant in Tyssedal (Norway) is used to heat the neighbouring buildings.

This type of approach is spreading. Thus, at the R&D level, the Group's research centre, ERAMET Research (Trappes, France) incorporates these requirements as goals in its process development programmes: optimal neutrality of residues, minimisation of waste and consumption (whether energy, water or consumables, etc.).

6.2.4.4 WATER CONSUMPTION

		2015	2016	2017
Consumption				
Total water consumption	millions of cubic metres	32.6	31.9	33.5

Before any comment on the water consumption of ERAMET group's sites, it is important to point out that none of the Group's industrial sites are located in a country confronted with "water stress" according to the definition adopted by the UN, that is to say, whose water resource per inhabitant, for all uses combined, is generally less than 1,700 cubic metres per person per year. Although this water resource is often substantial or abundant on its sites, the Group attaches real importance to its preservation. Multiple actions are taken to use only the required amount.

Total water consumption breaks down in 2017 as follows:

- 54% surface water (seawater, river or lake);
- 30% groundwater;
- 12% industrial water (industrial-grade water supplied from an external network);
- 4% potable water purchased from a distribution network.

Mining, metallurgy and hydrometallurgy activities consume water in several ways:

- processes for cooling furnaces and other metallurgical installations;
- washing of ores, raw materials and by-products;
- hydrometallurgical processes: solubilisation and reaction media.

Water resources are essential for running some of the processes used within the Group. The cooling of electric furnaces, for example, must be perfectly managed and optimised. In some cases, a lack of water supply may lead to risky situations in which safety must be ensured before any other consideration.

Whenever technically possible, the sites:

- promote internal recycling of water consumed. The cooling of furnaces and other metallurgical facilities, as well as other high-consumption uses, are mainly performed in a closed circuit. This is the case, for example, of the washing of ores in Gabon, or the mining facilities in Senegal. The water consumption is then essentially supplemented in order to compensate for evaporation or losses in the system;
- prioritise the use of water from a nearby industrial site such as ERAMET Norway Porsgrunn.

In 2017, total water consumption increased slightly compared to 2016.

This is mainly due to the Grande Côte Opérations (GCO) site in Senegal, which alone accounts for 26% of the Group's total consumption, and which in 2017 saw water consumption rise to the same levels as in 2015. Water needs on this site can vary greatly over time, depending on the characteristics of the deposit encountered by the mobile facility during the year. To this end, 2016 had benefited from exceptional piezometric conditions and good optimisation of water requirements through mining planning.

The TiZir Titanium & Iron (TTI) site in Norway regained a normal level of activity after two years of reduced production; its water consumption thus returned to a level close to that of 2013 and 2014.

6.2.5 ENERGY AND CLIMATE CHANGE

All the issues related to energy purchases, energy efficiency and climate change are coordinated by the Group Energy Centre, reporting to the Group's Industrial Affairs Department, with direct accountability to the Group's General Management.

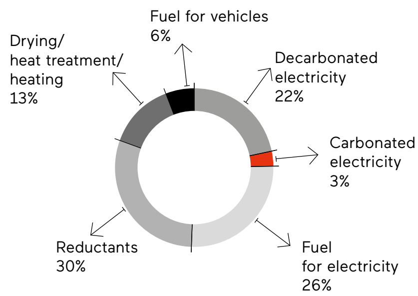
6.2.5.1 ENERGY CONSUMPTION

Energy consumption of 16.6 TWh in 2017 was stable compared to the four previous years. The change in scope (sales of ERACHEM and ETP) decreased consumption by 1.1 TWh while increases in activity (CMM, SETRAG, TiZir, Valmet, EcoTitanium) increased it by 1.2 TWh.

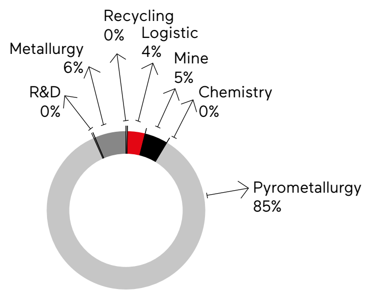
The energy consumed by the Group corresponds to several major types of uses:

- Extractive metallurgy: in order to convert, through reduction reactions, the oxides contained in the metal alloys that it markets, the Group relies mainly on pyrometallurgical processes.
  - These processes require an energy supply to reach the temperatures of the reduction or smelting reactions, in the form of electrical energy and metallurgical reducers also containing energy. These consumptions are directly dependent on the activity.
  - Good control of the processes also requires upstream control of the water content of the ores. The consumption of energies for these uses is dependent on climatic conditions.
- Preparation and hot forming metallurgy: the manufacture of alloys, their hot forming, and associated heat treatments are consumers of electric energy and gas.
- The processes used by nickel and manganese chemistry and recycling activities are also energy consumers, mainly electricity and gas.
- The last use corresponds to the use of fuels for mining machines and directly operated rail transport. Consumption depends on activity (volumes of ores produced) and especially on ratios of stripping and preparatory work (total volumes handled).

ENERGY CONSUMPTION 2017



CONSUMPTION PER ACTIVITY 2017



ERAMET group's activities can be classified into seven trades (pyrometallurgy, metallurgy, chemistry, mining, logistics, recycling and R&D). 85% of the energy requirements are consumed by 14 Group pyrometallurgical plants.

It should also be noted that 88% of the electricity purchased in 2017 (compared to 83% in 2016) was produced with little or no use of fossil fuels (Norway, France, Gabon) and therefore with a low carbon footprint (69% hydroelectric and 19% nuclear).

6.2.5.2 ENERGY EFFICIENCY

- The Group Energy Policy, which incorporates the principles of the ISO 50001 standard, continues to be deployed by the Group Energy Centre in line with the energy efficiency initiative launched in 2005.
- The Group has therefore decided to set up a complementary mode of operation between the sites and the corporate functions. Three types of interlocutors have been defined:
  - the Group coordinator, whose main tasks are implementing the initiative, the methodological contribution (the Group coordinator is an AFNOR-certified ISO 50001 auditor and a member of the ISO 50001 expert committee), expertise on several of the Group's businesses, and regulatory and technological monitoring;
  - the site energy correspondents, representatives of the site management under the ISO 50001 standard, whose mission is to locally support the process of continuous improvement around energy;
  - the site management, whose main role is to commit to an energy management system based on the principles of the ISO 50001 standard and to allocate resources that are adapted to the challeng-

es of each site. Division management is called upon to support site management.

- As part of the energy efficiency initiative, energy performance indicators are set up at the sites and are integrated into the management of industrial performance.
- The values and developments of these indicators are analysed in relation to each local process. Because of the variety of jobs and processes, consolidation of these indicators at the Group level would have no purpose. Consequently, and for reasons of confidentiality and protection of our processes, the Group decided not to communicate more precisely on these indicators.

In 2017, a new site (Aubert & Duval Pamiers) obtained ISO 50001 certification, bringing the total number of certified sites to six (three ERAMET Norway sites, ERAMET Sandouville and COMILOG Dunkerque).

PARTICIPATION IN THE DEVELOPMENT OF INTERNATIONAL STANDARDS

ERAMET contributes to work carried out by AFNOR experts on developing the ISO 50001 standard. The Group also has a presence on the "ENERGEST" standardisation committee, which aims to standardise and promote energy efficiency practices.

6.2.5.3 CLIMATE CHANGE

GREENHOUSE GAS MANAGEMENT AND REDUCTION POLICY

The main duties of the Group Energy Centre are to:

- actively participate in the climate change committees of French and European professional organisations (AFEP, A3M, Eurofer, Euroalliages) which are the industrial partners of the French and European authorities in the drafting of regulations on this subject;
- inform the relevant sites about these regulations and assist them in applying them;
- contribute, in close collaboration with the Communication and Sustainable Development Department, to the implementation of the Group's Climate Change Policy adopted in December 2016 by ERAMET's Executive Committee;
- manage the accounts of French sites included in the European registry of greenhouse gas emission quotas. The Norwegian sites are managing their own accounts in cooperation with the Group Energy Centre.

SITES SUBJECT TO THE GREENHOUSE GAS EMISSION QUOTA SYSTEM UNDER THE EU DIRECTIVE 2009/29 EC OF 23 APRIL 2009, KNOWN AS ETS

The Group has actively participated in consultations between industry, through professional organisations, and national and European authorities (Commission, Parliament and Council).

ERAMET sites concerned by the ETS Directive:

- **Alloys Division:** Aubert & Duval: Les Ancizes, Firminy, Pamiers and Interforge.

  Erasteel: Commentry;
- **Manganese Division:** COMILOG Dunkerque, ERAMET Norway (Porsgrunn, Sauda, Kvinesdal) and TiZir Titanium & Iron in Tyssedal (Norway).

Under the ETS, these sites receive quotas free of charge.

It should be noted that the forging sites (AD Pamiers and Interforge) are not currently part of the list of areas "at risk for carbon leakage" and therefore may not ultimately qualify for free quotas. On a transitional basis, they received a decreasing number of free quotas (from 80% of historical emissions in 2013 to 30% in 2020).

At the end of 2013, the European Commission approved the free quotas proposed by the French and Norwegian authorities. All of the Group sites concerned were officially allocated free quotas for the entire period 3 (National Allocation Plan 3).

IMPACT OF CLIMATE CHANGE

A study was initiated to assess and anticipate the impact of climate change on the Group's activities. Specific questions are addressed to the sites through the EraGreen environmental reporting tool on their risk assessment and the adaptation measures envisaged.

In 2017, about 49% of the sites reported that they could be affected by the consequences of climate change. The consequences cited most often by sites are:

- the possible impact of a rise in sea levels;
- the possible impact of extreme weather events (drought, strong winds, floods, etc.).

In the context of the current body of knowledge of the possible effects of climate change, the sites have not planned any short-term measures for adapting to certain hypothetical consequences. In relation to a possible rise in sea levels, the sites located near a coast refer to the altitude at which they are located, which guarantees an impact considered minimal to negligible.

At the Group level, climate change will lead to higher taxes on energy, and greater difficulty of access to financing for certain investments. At present, it is difficult to assess the consequences more accurately.

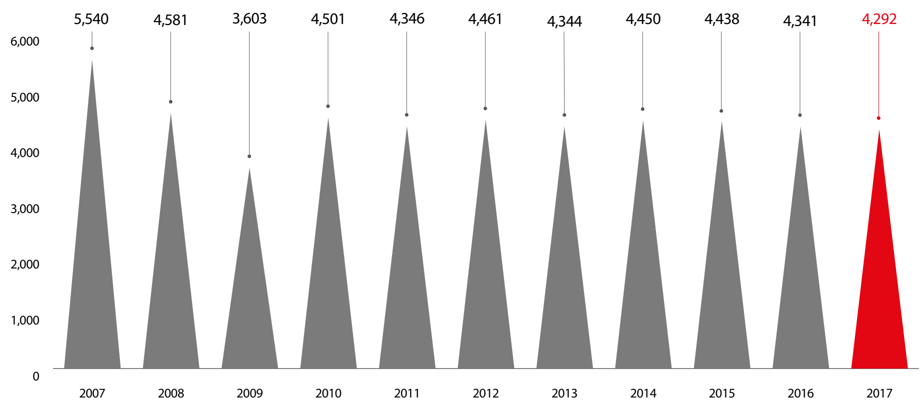
CARBON ASSESSMENT

Changes in the Group's carbon assessment (scopes 1 and 2)

Monitoring of changes to the carbon assessment is based solely on emissions from scopes 1 and 2. The data for calculating these emissions is entered in the Group's environmental data consolidation system (EraGreen).

The table below shows changes in the Group's emissions from 2007 to 2017.

CHANGES IN EMISSION—TONNES OF CO_2 EMITTED (SCOPES 1 AND 2)



We can observe stability in this assessment, with a downward trend from 2014 to 2017. Similar to energy consumption, the drop in value for 2017 is mainly related to the sale of certain entities (-176,000 tonnes) and the increase in activity of others (+112,000 tonnes).
Moreover, Aubert & Duval (AD) is the only entity subject to the application of Article 75 of the Grenelle II Act and Decree No. 2011-829.

With the help of a consultant, a carbon assessment was conducted for this scope **in 2011**, based on the "method for carrying out greenhouse gas emission assessments" issued by the national coordination division (2012 version). In accordance with the regulations, an update of this balance sheet was carried out during 2016 on emissions for the year 2015.

The assessment shows the following emissions in tonnes of CO_2 equivalent:

YEAR	2011	2015
Direct emissions (scope 1)	85,491	87,943
Indirect emissions (scope 2)	16,504	12,759
Total emissions (scopes 1 and 2)	101,995	100,702

This comparison shows stable emission levels in the Aubert & Duval scope between 2011 and 2015.

Changes in the Group's carbon assessment (scope 3)

In 2017, the Group carried out an estimated update of scope 3 emissions. The items relating to metal inputs and freight appear to be the most significant within scope 3.

Total scope 3 emissions in 2017 are estimated at 1 million tonnes, including 780 kt for metal inputs and 180 kt for upstream and downstream freight. The methodology for assessing these emissions will have to be refined in the coming years.

In particular, given the complexity of the Group's upstream and downstream transport activities, the assessment of emissions from this part of scope 3 will need to be examined in further detail. In France, the Alloys division plans to implement an information system in 2018 that will allow the monitoring of transport flows of our various subcontractors and thus help to identify our greenhouse gas emissions more accurately.

Therefore, in 2018 and thereafter, the Group should be able to accurately assess its scope 3 emissions, in particular for the transport part.

6.2.6 MINING ENVIRONMENT

This section looks at environmental protection actions deployed at the mining sites in operation (with the exception of measures concerning biodiversity, which are detailed in section 6.2.7). Provisions for developing mining projects are included in Section 6.4 Industrial and Mining Projects.

The Group's mining operations do not include underground mines.

The mine operated by COMILOG in Gabon on the Bangombé plateau is one of the richest manganese deposits in the world, covered by a layer of 4 to 5 metres of waste rock. The characteristics of the deposit and the ore result in the production of very little mine waste.

SLN operates 15 nickel mines in New Caledonia; the seven largest are operated directly by SLN and the others are subcontracted to local operators. The mines are located in rugged terrain at altitudes between 250 and 1,000 metres. In this type of deposit, it is necessary to move about 7-9 tonnes of tailings to produce 1 tonne of mineable ore. Storing these tailings in conditions that guarantee safety and protection of the environment is, therefore, a key issue.

The Grande Côte Opérations (GCO) mineral sands mine in Senegal produces zircon, ilmenite, rutile and leucoxene. The deposit is located in the sand dunes near the coast to the north-east of Dakar. The extraction operations take place in an artificial mobile basin of 12 hectares and about 6 metres deep and follow an optimised route to exploit the deposit. The mining process involves a dredge with a capacity of 7,000 tonnes per hour, connected to a floating concentration plant, where minerals are separated from the sand by a grading and gravimetric process. After extracting the recoverable fractions (around 1.7% of the treated sand), the sand is directly put back at the rear of the facilities to reform the dune. The resulting heavy mineral concentrate is transferred to separation plants located on land, which make it possible to obtain the commercial products by separation. The low volumes of products extracted and not processed in this stage are reincorporated into the reconstituted dunes. The water needed to run operations is pumped into a deep aquifer and recycled to the maximum extent. The mine uses no chemicals.

The following table summarises the main environmental issues and risks for the Group's mining sites.

TABLE SUMMARISING THE ENVIRONMENTAL ISSUES AND RISKS AT ERAMET'S MINING SITES

	SLN MINES IN NEW CALEDONIA	COMILOG MINE IN GABON	GCO MINE IN SENEGAL	COMMENTS
Pressure on water resources (quantity)	Low sensitivity	Low sensitivity	High sensitivity	The high levels of rainfall at the sites in New Caledonia and Gabon make the issue of water consumption relatively low in sensitivity. Conversely, in Senegal, the two aquifers used by the mine are important reserves for local residents and for the country. Measures are being taken to limit the quantities taken from these aquifers.
Erosion	High sensitivity	Medium sensitivity	Medium sensitivity	The nature of the soils and rocks, the topography of the deposits and the presence of fragile receiver environments make erosion a very sensitive subject in New Caledonia. In Senegal, protecting the dunes reconstituted after dredging against wind and water erosion is an issue, but outside the freshly reconstituted areas this subject is of minor importance. In Gabon, the recent extension of the deposit into a sloping area has increased the acuity of the issue somewhat, but it remains low in significance for the rest of the mine.
Acid drainage	No acid drainage	Low risk of acid drainage	Low risk of acid drainage	Generally, ERAMET mining sites are little concerned by the risk of acid mine drainage. In Gabon, only a horizon of tailings located in the current extension of the deposit is likely to present this risk in a localised way. In Senegal, a sandy horizon containing intercalated peat lenses may be encountered during mining operations and may potentially generate low acidification.
Production of tailings	High sensitivity	Low sensitivity	Low sensitivity	The tailings from the Moanda mine are mostly returned immediately to the mining area. In Senegal, the sand is returned directly to the environment after extracting the recoverable fraction, which represents only 2%. By contrast, in New Caledonia, the production of tailings is much larger. SLN's methods of exploitation are increasingly changing from stockpiles to filling pits with tailings.
Production of residues	Low sensitivity	Medium sensitivity	Low sensitivity	Only the COMILOG mine and the Tiébaghi and Népoui mining sites produce significant quantities of mine tailings resulting from concentration steps by mechanical means. These residues are chemically stable and are not hazardous to the environment. In New Caledonia, residues from processing plants are, moreover, commercially processed as mining by-products. The characteristics of the small quantities of residues produced in Senegal allow their return to the natural environment during the reconstitution of the dune.
Impacts on biodiversity	High sensitivity	Medium sensitivity	Medium sensitivity	The biodiversity of the New Caledonian sites is recognised as remarkable due, in particular, to its very high endemicity. Studies based on international standards have shown that the mining sites in Gabon and Senegal do not have this level of sensitivity. However, it should be noted that the Senegal mine is adjacent to major vegetable production areas.

6.2.6.1 MANAGEMENT STRUCTURES OF THE MINING ENVIRONMENT

Teams dedicated to the consideration of the environment in mining are present at the sites and subsidiaries concerned in Gabon, Senegal and New Caledonia.

In the last few years, as part of its Sustainable Development policy, ERAMET has strengthened the structuring, formalisation and international coordination of tools for environmental management at mines. As part of this, the following actions have been carried out:

- All mining subsidiaries have formalised a Mining Environment plan of action; the progress of these action plans is reviewed regularly with the Group Environment, Industrial Risks and Products Department.
- A community of mining environment experts has been set up and meets regularly. Its role is to formalise good practice guidelines applicable throughout the Group and to encourage the exchange of expertise between sites. A compendium of Mining Environment good practices was published in November 2015.
- Environmental Management Systems compatible with the requirements of ISO 14001 have been deployed by the mining subsidiaries. In March 2016, SLN became the first mining and metallurgical company to obtain ISO 14001 certification in New Caledonia. The certificate covers the mining activities of the seven main mines, which are operated directly by SLN. At the same time, in April 2016, COMILOG successfully renewed its certification initially obtained in 2012 for a scope including the operations of the Moanda mine, the storage, the shipping of ore, the agglomerate activities in Owendo, as well as equipment maintenance. In Senegal, significant improvements are under way with the implementation of an environmental management system aligned with the requirements of ISO 14001 throughout the various functional units of GCO in collaboration with the Group's environmental team. In 2017, GCO also updated its Environment, Biodiversity, Safety, Ethics, Quality and Communities policies.
- All SLN mining sites have updated their environmental impact assessments in recent years as part of the reform of the Mining Code of New Caledonia. This considerable work allows each site to have comprehensive studies on the environment and the ecosystems in which they are located, and effective environmental management plans adapted to their specific characteristics.
- At the same time, for the COMILOG mine in Gabon, major environmental studies have been carried out to improve the level of knowledge of the environmental characteristics of the site with the aim of pursuing the development of a relevant rehabilitation strategy for the site. These studies focus on soils, hydrology and hydrogeology, as well as on biodiversity.
- Finally, in cooperation with the authorities, COMILOG chose to carry out a full environmental impact study, beyond the regulatory requirements applicable, to extend the operation of the Moanda mine to the edges of the deposit (part of the sloping deposit located within the COMILOG concession).
- In Senegal, the Grande Côte mining site, following the audit and updating of its Environmental Management and Social Plan (EMSP) received its environmental compliance certificate on 24 October 2016 from the supervisory authorities, and then, in 2017, the joint ministerial decision granting definitive authorisation for all its classified establishments.

6.2.6.2 RESPONSIBLE RESOURCE RECOVERY

Mining recovery is one of the core trades of the Group. The mineral resource is mined in a responsible way, i.e. by minimising the impacts during the exploration and extraction stages and by optimising the recovery of the deposits. In New Caledonia, geologists limit the opening of access tracks, favouring indirect geophysical methods, non-environmental impacts, and the helicoptering of equipment during exploration campaigns. They also make use of modelling tools to complement their knowledge of the deposits and to better evaluate resources. This data is relayed to miners who optimise the extraction steps by reducing the volumes of tailings to be handled, precisely mapping, minimising cleared areas, and maximising the recovery of the mineral profile. Improved recovery can be translated on the ground by the introduction of GPS devices on the buckets and shovels, and the display of loading plans in the cabins.

At the same time, ERAMET research teams are working to recover tailings and ores with lower and lower levels of content.

SLN has developed techniques for recovering ores initially considered marginal, thus extending the life of the deposits significantly while reducing the final environmental impact. These results have been obtained with the construction of ore washing plants (Mineral Processing Plants) which allow the ore to be concentrated without adding any chemicals. Since mid-2010, SLN has been recovering by-products from the ore washing plants, as well as selectively stockpiled products (laterites and low-grade saprolites). In seven years, almost 3 million tonnes of low-grade saprolites and by-products from ore washing plants were recovered.

Another example: since 2016, more than 20,000 tonnes of sand containing zircon, initially considered as a residue, have been recovered by the GCO teams.

Finally, the Trappes research centre is working on the development of innovative, geo-metallurgical methods with the high added value of non-destructive properties and modelling, which make it possible to define the complex horizons of geological profiles.

6.2.6.3 WATER MANAGEMENT

At mining sites in New Caledonia, and to a lesser extent in Gabon, the major issue of water management is to prevent the entry of suspended solids (SS) into the receiving environment through run-off caused by erosion due to surface stripping.

To avoid this, SLN has long equipped its sites with sedimentation ponds that trap suspended matter in order to prevent their transport into the natural environment. Upstream of these works, many precautions are taken to minimise erosion: roofing of sites to prevent water entry, minimisation of open areas, conservation of natural embankments at the edges of stripping sites, organisation of run-offs to reduce speed, implementation of hydraulic locks, etc. These measures are documented for each SLN mining site in a Water

Management Plan that meets the regulatory requirements of New Caledonia. The implementation of these Water Management Plans as mining progressively evolves represents an ongoing commitment and considerable investment. As of the end of 2014 and before the implementation of the new regulations, SLN mining sites began a phased equipment upgrade programme for water management works, using probes and sampling instruments to better assess the performance of environmental protection measures. Finally, monitoring of the proper functioning of the water management works is now carried out using drones. In total, investments dedicated to water management for these sites exceed €14 million over the last four years.

The special expertise of SLN on the topic of erosion prevention was compiled in a technical guide (the "Blue Guide"), updated in 2012, which serves as an industry reference in New Caledonia and beyond for the Group.

In Gabon, the subject of erosion is less significant given the topography of the plateau deposit and the draining characteristics of the upper geological layers of the plateau. This was confirmed by the study carried out in 2012-2013 to define the water bodies and hydrology of the site. Nevertheless, operators are aware of the measures to be taken to limit erosion. This theme still attracts attention due to the ongoing extension of the deposit into the sloping part. A specific water management plan associated with the extension of the deposit has been developed. As part of this plan, a specific environmental monitoring system is in place, which confirms the effectiveness of the measures taken and makes it possible to verify that the very limited and localised phenomenon of acid mine drainage does not have a significant impact on the natural environment.

In addition, in recent years, major advances have been made at the Moanda site for the management of aqueous waste from the ore mill. Since 2010, discharges to the Moulili river were discontinued with the commissioning of tailings ponds (ultra-fine). These basins were constructed in such a way as to be able to recover the overflow waters and redirect them to the concentration facility, thus eliminating any direct discharge into the river.

In Senegal, the subject of water management is important as the operation of the mine uses two aquifers, one of which is very important to the people and the country in general. Given this situation, every precaution is taken to ensure that the impact of the mine is as low as possible. GCO has an expert team fully dedicated to hydrogeology. It makes monthly use of the services of the Ministry of Water, which thus monitors it systematically.

The water management system was designed and authorised by the competent department of the Senegalese government to avoid additional pressure on the superficial water table used to supply the agricultural crops for local residents. All mining installations are controlled to ensure minimal variations in the level of this water table. This aquifer is subject to bi-daily monitoring. More than 80% of the mine's net water consumption is used to ensure a constant water level in the basin in which the facilities float. For this, the mine uses a deeper aquifer, for which limits on pumping rates have been set by the authorities and respected by GCO since the start of production. The water from this aquifer is recycled to the maximum extent possible. In addition, this aquifer is also subject to continuous monitoring. As such, nine piezometers were installed in 2015 to control the deep aquifer (Maastrichtian).

Monitoring and "water policing" operations are carried out internally and continuously by the GCO Environment Department. Monthly reports on this matter are sent to the relevant authorities. Since the start of the operations, monitoring has demonstrated the effectiveness of the measures taken and the absence of damaging consequences on water resources.

6.2.6.4 TAILINGS AND MINE WASTE MANAGEMENT

Given the considerable volume of tailings being handled at SLN operations, the storage of tailings in appropriate structures and their revegetation is a vital environmental task in order to minimise erosion and the impacts on the ecosystem and landscape.

Thanks to its extensive experience, SLN has developed effective techniques that have been validated by the authorities, one of which is to create tailings stockpiles. The works are carried out according to professional standards and their stability is guaranteed in the long term, even during exceptional cyclonic rains. These tailings stockpiles are subject to continuous monitoring (internal auscultation) and regular audits by an external third party. As for water management techniques, SLN has published a technical guide, updated in 2012, which explains the construction methods tailings stockpiles and their design rules. This guide applies to all SLN mining sites operated directly or by outsourcing. Moreover, in order to minimise land clearing and promote site rehabilitation, SLN privileges flat-top piles in old mining pits, when the environmental conditions are favourable.

In Gabon, the problem is again less sensitive since, on the one hand, the volumes of tailings being handled are much less, and on the other hand because the technique of exploiting by the successive opening/closing of compartments allows the majority of tailings to be placed directly into the compartments after extraction.

The Senegal mine is not at all affected by this problem, since the sand dune is reconstituted after passing the dredge and extracting the recoverable part.

Mine wastes, which are produced in the mining facilities at mines in Gabon or at the Népoui and Tiébaghi sites in New Caledonia, are chemically stable and therefore are not hazardous wastes within the definition of the regulations. In New Caledonia, all processing residues from enrichment plants (Népoui and Tiébaghi) are also commercially recovered as by-products of the mine. In Gabon, mine tailings are stored in eight basins with a capacity of about one million cubic metres, consisting of closed dykes with a maximum height of 16 metres. The residues of the metallurgical enrichment plant are stored in a retaining dyke with a maximum capacity of 6 million cubic metres. These structures are continuously monitored for their stability. Furthermore, in 2016, in the framework of its risk prevention initiative, a specific audit of these dykes was commissioned by geotechnical and environmental experts of the Group. The audit found a good level of risk control by respecting the design and operation standards of these structures. While they are still modest in size compared to those elsewhere in the world, an action plan to further strengthen this level of control has been established and implemented.

The GCO plant in Senegal produces a very small amount of residues. The residual products have characteristics which allow their return to the natural environment when the dune is reconstituted.

6.2.6.5 MINE REHABILITATION

IN NEW CALEDONIA

SLN mining sites all practise rehabilitation continuously. This work includes land remodelling operations and revegetation operations, whose methods and results are described in Section 6.2.7 Preservation of biodiversity.

As part of the implementation of the environmental management system for mines, SLN has led, over the past three years, a comprehensive review of its internal procedures and rehabilitation instructions and a formalisation of expertise developed over the past ten years. The objective is to share best practices, ensuring greater consistency between sites, as well as better integration of rehabilitation operations in mine planning in the short and medium term. In this context, two Technical Guide references were published by SLN, one dedicated to the optimal management of top soil (2015) and the other devoted to principles and techniques of mining redevelopment in 2016.

Of the five SLN mining centres, four have a formalised rehabilitation master plan, the last one being in the process of being finalised.

Finally, in recent years, major refurbishment works, allowing a final rehabilitation, were taken, pursued or completed:

- At the Thio Plateau, the remodelling of a very old tailings pit has been completed, putting an end to nine years of work on a site of epic proportions. The next step is the revegetation operations, which will be completed in 2018.
- The Thio Plateau has also been the subject of a vast revegetation campaign, with about 16 hectares of hydraulic seedlings and 20,000 plants.

Below the mining sites, SLN has maintained several rivers on the outskirts of the Kouaoua and Thio mines following two cyclones in the second quarter of 2017.

IN GABON

Revegetation is much easier than in the New Caledonian environment because vegetation recolonisation occurs naturally. The challenge of redeveloping the sites is also landscaping with the need to remodel the tailings stockpiles of a few metres in size created by exploitation.

- Since 2010, the mining procedure has been revised to incorporate land remodelling as it evolves. An effort to remodel the areas disturbed before this date was undertaken in parallel and is subject to an annual target in the mine's environmental management system. The results are detailed in Section 6.2.7 Preservation of biodiversity. Beyond these concrete actions, preliminary studies for the definition of a comprehensive rehabilitation strategy of the Bangombé mine plateau have been continued.
- In addition, operations to rehabilitate the Moulili River by extracting the ultra-fine deposits downstream from the mine's ore washing plant have continued since 2010. At the end of 2017, approximately 11.5 million tons of manganiferous sediments were excavated. These operations are carried out in strict compliance with the Environmental Management and Social Plan prepared after the impact assessment of this work. In a spirit of transparency and dialogue, COMILOG also organised, in June 2014, a seminar dedicated to the rehabilitation of the downstream segment of the river. The seminar brought together all relevant stakeholders (government, civil society, NGOs, scientists, etc.). It helped define a consensus and recommendations for the downstream segment, which were then proposed to the supervisory authorities. Such a consultation process is a first in Gabon. The work agreed at the end of this seminar was started in 2017.

IN SENEGAL

The particular exploitation mode of this mine, with an enrichment plant moving progressively along the deposit, involves the clearing of vegetation consisting of grasses and thinly distributed trees in the area. The revegetation of the reconstituted dunes at the rear of the mobile mining facilities is a strong expectation of the resident populations, and also a challenge in the context of rainfall limited to a short rainy season. After consulting the relevant authorities, local populations and their representatives, a participatory rehabilitation strategy with strong involvement of communities and local authorities was formalised in late 2013. The implementation of rehabilitation is accompanied by the creation of income-generating activities for the host populations participating in the emergence of a local entrepreneurial culture. Regular monitoring of rehabilitation work is carried out through a dedicated formalised cooperation framework, set up in 2015 by the Méouane Sub-Prefect, and consultations with local residents on their expectations with regard to the rehabilitation were renewed in 2016. The success of the rehabilitation operations and the rigorous application of the rehabilitation strategy was confirmed by an audit by the Water and Forests inspection and resulted in the issuance of a certificate of conformity dated October 2015 for rehabilitative operations carried out since the start of production in 2014. In 2016, the rehabilitation methods were adapted to increase the rate of rehabilitation, following the increase in the production rate of the installation, while optimising the related costs. An additional irrigation system is therefore being put in place to allow GCO to continue the revegetation of the sites during the dry season, which lasts nine months. The results are detailed in Section 6.2.7 Preservation of biodiversity.

6.2.7 PRESERVATION OF BIODIVERSITY

The location of ERAMET's various mining and metallurgical activities have enabled it to acquire solid experience in relation to biodiversity. Based on this experience, ERAMET decided to formalise its actions with the adoption of a Biodiversity Policy, which was rolled out and communicated to Group employees in 2015.

This policy is based on three axes:

1. Better awareness and understanding of biodiversity and its features.
2. Act to preserve biodiversity.
3. Raise awareness, exchange and share.

It aims to bring together the practices of the Group's sites under a single commitment. The principles are to be adapted at sites in a manner proportionate to local issues. The full text of this Policy is directly accessible on the ERAMET website at the following address:

http://www.eramet.com/sites/default/files/eramet_politique_biodiversite_fr.pdf

In application of this Policy, for several years now the Group has been committed to:

- participating in *ad hoc* discussions on the local, national, and international scenes;
- increasing ERAMET competence;
- developing methodological tools for coordinated management of biodiversity across Group sites.

The aim is to reduce the impact of the Group's activities, in a manner proportionate to the issues and throughout the life of the sites.

At the international level, ERAMET is very involved in the Business and Biodiversity Offsets Programme (BBOP), a recognised think tank in terms of biodiversity offset that the Group joined in 2011. Since 2015, ERAMET has participated in the annual seminar, as well as chairing the think tank's executive committee.

In France, ERAMET participated in the ongoing discussions on the implementation of the law for the recovery of biodiversity on 8 August 2016, notably through the chairmanship of the MEDEF Biodiversity Working Group(1).

6.2.7.1 THE CHALLENGES OF BIODIVERSITY

ERAMET, through its mining and metallurgical activities, may impact ecosystem species, habitats and services, which may be ordinary or remarkable biodiversity, depending on the location. As illustrated in the table below, the Group's most important biodiversity issues currently relate to New Caledonia, Gabon and Indonesia. Despite a moderate sensitivity to biodiversity at the operations site, Senegal is also the subject of specific focus given the significant rehabilitation and revegetation issues.

ON THE SITES	NEW CALEDONIA	GABON	INDONESIA	OTHER
Number of species (flora and fauna) classified as Critically Endangered (CR)(1) on the IUCN Red List(2)	4	2(*)	0(**)	0
Number of species (flora and fauna) classified as Endangered (EN)(3) on the IUCN Red List	24	1	14(**)	0

(*) These species may potentially be present, but they have not been observed on the COMILOG and SETRAG sites.
(**) These values are derived from the results of characterisation studies developed at the Weda Bay Nickel project.
(1) CR: IUCN classification for Critically Endangered Species.
(2) IUCN: International Union for Conservation of Nature.
(3) EN: IUCN classification for Endangered Species.

The Group does not have a mining or metallurgical site in operation in a protected area. It should be mentioned, however, that the SETRAG railway track crosses the Ramsar(2) site of Bas-Ogooué (56 km), the Ramsar site of Mboungou-Badouma and of the Doume rapids (30 km) as well as the National Park of Lopé (62 km), a UNESCO World Heritage Site(3). The Ramsar sites and the National Park were created between 2007 and 2009, that is to say, 30 years after the construction of the Trans-Gabon railway. SETRAG is also engaged with the Gabonese Ministry of Water and Forests and the National Agency of National Parks in the fight against poaching by raising awareness among its staff and through its policy prohibiting the transportation of protected species. The protocol agreement was renewed in 2016.

Number of sites within 10 km of a protected area	21
Average distance of these sites with protected areas	2 km
Types of protected area	Nature Reserve, National Parks, ZNIEFF(1), ZICO(2), Natura 2000 area(3), Ramsar area, UNESCO World Heritage

(1) ZNIEFF: Natural Area of Interest for Ecology, Fauna and Flora.
(2) ZICO: Important Area for Bird Conservation.
(3) The Natura 2000 network is a European ecological network made up of Special Protection Areas and Special Conservation Areas designated by the Member States.

(1) MEDEF: Movement of Enterprises in France.
(2) The Ramsar List refers to wetlands of international importance.
(3) UNESCO: The United Nations Educational, Scientific and Cultural Organisation.

6.2.7.2 IN NEW CALEDONIA

Société Le Nickel (SLN) operates nickel deposits on various sites in the heart of a region renowned for its rich biodiversity and a high rate of endemism among its flora and fauna species.

Since the 1980s, SLN has developed reliable and environmentally friendly rehabilitation methods. The revegetation work, consisting of hydraulic seeding and plantations, has made it possible to rehabilitate approximately 300 hectares. The naturally low fertility of the soils, rich in metals and poor in organic elements, as well as the extreme rainfall conditions, make it difficult to see the results of this work in the short term because of the very slow growth.

SLN has been carrying out this revegetation activity since 2010 and has thus been able to significantly increase the surface areas treated, while continuing to improve the quality of the projects. In 2017, 31 hectares were rehabilitated and replanted, including 17 hectares at the Tiébaghi site.

AREA (IN HECTARES)	2014	2015	2016	2017
Area affected during the year	48	52	24	15
Area rehabilitated during the year	26	26	19(*)	31
Area revegetated during the year	21	26	19(*)	31

(*) Taking into account the 16 hectares rehabilitated and revegetated on labour sites.

Since 1 January 2013, SLN Management has been committed through a Biodiversity Strategy to following international standards for biodiversity conservation. Through this, in 2017, SLN continued the operational implementation of its plan for the comprehensive management of biodiversity.

In this context, and since 2014, SLN has been working on the reintroduction of rare and threatened plant species through inventories of mining centres, as well as phenological monitoring to better control their propagation. This currently relates to 76 species that have been classified as rare or threatened according to their IUCN status and/or based on current knowledge. A partnership with the New Caledonian Agronomic Institute between 2014 and 2017 allowed SLN to produce a dozen production sheets that are now available for nurseries. The ultimate goal is to reintroduce rare and threatened species into their natural environment. The work and methods are shared and pooled in an *ad hoc* working group established within the Union of New Caledonia Mining Industries (SIM).

In 2017, SLN also continued to monitor the wildlife (reptiles, birds, bats), the marine environment and the water quality of its mining creeks on all of its active sites.

At the same time, SLN continues to participate in the ongoing reflections on the territory, and relating to the compensation and implementation tools, with the SIM and the North and South Provinces, as well as the specialised firms that support them. In 2017, a white paper on biodiversity compensation was developed with the SIM and will be presented to environmental authorities in 2018.

6.2.7.3 IN GABON

The Ogooué Mining Company (COMILOG) has been exploiting manganese ore on the Bangombé Plateau in Moanda, Gabon for more than 50 years.

Although the manganese reserves of this plateau are still considerable and make it possible to envisage more than 10 or even 20 years of exploitation, part of the plateau has already been rehabilitated. The mining procedure has been revised to incorporate a remodelling step and the progressive upgrading of the topsoil. Since 2010, the gradual reshaping of historically disturbed surfaces has also been completed.

In 2014, a mining environment brigade was created, which contributed to the significant increase in rehabilitated areas: 473 hectares in four years.

AREA (IN HECTARES)	2014	2015	2016	2017
Area affected during the year	67	52	75	139
Area rehabilitated during the year	95	119	141	118

At the same time, COMILOG continues to improve its rehabilitation strategy, taking into account the results of the latest environmental studies developed for the Bangombé plateau and the exploitation of its borders.

In addition to the COMILOG mining activities, Lékédi Park (subsidiary of COMILOG), located 5 km from Bakoumba in the south-east of the Gabonese Republic, covers 14,000 hectares of savannahs, gallery forests, and bodies of water.

The park is dedicated to the preservation of protected species, the observation of animals and the reception of young orphans of poaching (mainly primates). It also conducts research on biodiversity and combating poaching in partnership with Gabonese and international scientists and organisations.

In 2017, Lékédi Park received Pan African Sanctuary Alliance accreditation (PASA—https://www.pasaprimates.org), the result of years of work and rehabilitation of the primate sanctuary. This international recognition gives the park visibility and thus obliges continued discipline in its management.

The *Mandrillus* Project, carried out in partnership with the CNRS since 2011, continues. Researchers and field assistants are studying a population of mandrills in the wild to answer fundamental questions in evolutionary ecology, anthropology, food ecology, animal communication (etc.), but also to more applied questions of conservation and epidemiology.

As part of the protection of gorillas, the Park collaborates with the Aspinall Foundation. In 2017, the project to reintroduce orphaned gorillas into the Park was implemented: three gorillas were released in the Batéké Plateau National Park.

The park is also associated with:

- a reintroduction programme for threatened or extirpated species in Gabon (e.g. Defassa Waterbuck) in collaboration with the Agency of National Parks and the International Union for the Conservation of Nature since 2014. The first reintroductions are scheduled for 2018 in collaboration with the Sigeant Animal Park;
- to strengthen the numbers of large wildlife in the Batéké Plateau Park in collaboration with the National Agency of National Parks and the Aspinall Foundation. The reintroduction of lionesses is planned for 2018.

Finally, since 2013, the Park has also been involved with the NGO Conservation Justice and the Haut Ogooué Regional Water and Forest Administration to carry out mutual awareness-raising and anti-poaching campaigns.

In 2017, three major anti-poaching operations were carried out. The last operation, which took place in December, included the seizure of four rifles with ammunition and 48 game animals.

6.2.7.4 IN SENEGAL

In Senegal, the Grande Côte operations began in 2014. Exploitation of mineralised sands involves the clearing of vegetation as a floating dredge moves along the deposit.

Biodiversity is of medium sensitivity in currently exploited areas. However, the mine is in an area where there is still significant plant and animal diversity despite the strong human impact. Three endemic grass species from Senegal have been identified in the mining pass for the next five years. The Senegal mine is also adjacent to very large vegetable production areas. The issues are mainly related to the rehabilitation and revegetation of large areas, as and when the exploited sites are made available, as well as to the management of biodiversity through a participative and inclusive approach.

After reshaping the slag heaps to best reflect the original landscape (dunes), revegetation includes the following steps: covering the relevant areas with manure and topsoil, which promotes the growth of seeds and seedlings, and then sowing/planting local species that stabilise the dunes and providing other products and services in the long term.

The soil revegetation and soil improvement methods implemented in the field since 2014 are convincing. They include:

- the planting of woody species produced in the nursery;
- planting herbaceous seedlings from seeds harvested on site;
- the use of animal manure to fertilise the soil.

Since 2016, GCO has put in place an additional irrigation system to allow the continuity of revegetation operations during the nine months of the dry season. The replanted area in 2017 was thus increased by 50% compared to 2016.

AREA (IN HECTARES)	2014	2015	2016	2017
Area affected during the year	150	188	149	218
Area rehabilitated during the year	2	45	90	138
Area revegetated during the year	2	45	90	138

In 2017, GCO received the biodiversity characterisation studies for the 2017-2021 mining pass and commissioned a herbarium. In 2017, GCO also updated its biodiversity policy.

6.2.7.5 IN ARGENTINA

In November 2016, the Argentine lithium recovery project submitted an application for authorisation to operate. The review continued throughout 2017.

In accordance with the ERAMET Biodiversity Policy, the dossier includes characterisation studies of the initial state, ecosystem services and community uses of biodiversity, as well as the analysis of the potential impacts on the biological environment.

The studies have so far concluded that the issues in respect of biodiversity are limited. None of inventoried flora and fauna is considered threatened at the international level, according to the Red List of the International Union for Conservation of Nature (IUCN).

In this desert environment of the Andean highlands, vegetation is mainly composed of shrubs that grow in a very dispersed manner, leaving large areas of bare soil between them. Habitats are mainly occupied by birds (especially the puna miner and the golden-spotted ground dove), foxes and vicuñas.

6.3 INFORMATION RELATING TO SOCIETAL COMMITMENTS IN FAVOUR OF SUSTAINABLE DEVELOPMENT

6.3.1 TERRITORIAL, SOCIAL AND ECONOMIC IMPACTS OF THE BUSINESS

6.3.1.1 IN THE AREA OF EMPLOYMENT AND REGIONAL DEVELOPMENT

The ERAMET group had a presence in almost 20 countries worldwide in 2017 and is actively involved in the economic and social development of the countries and regions in which it operates. This is reflected in the creation of direct and indirect jobs (with the emergence of companies linked to the activity of the Group's sites) and the construction of local infrastructure that is important for the development or involvement of sites in major national or regional sustainable development initiatives.

JOB CREATION AND LOCAL SUBCONTRACTING

The major subsidiaries of the Group contribute significantly to job creation in the areas in which they operate, recruiting the vast majority of their teams locally. This is particularly true of SLN, the biggest private employer in New Caledonia, with over 2,000 direct jobs, and also of COMILOG, the biggest private employer in the province of Haut-Ogooué in Gabon, with almost 2,000 direct jobs. In Senegal, Grande Côte Opérations (GCO), which represents more than 700 direct jobs, created a recruitment commission with the municipal authorities in order to foster the dynamism of a local employment pool.

In addition, many sites are working to develop local skills over the long term in order to increase the use of these skills. In Senegal, Grande Côte Opérations (GCO) is a partner of the National Centre for Professional Qualification, aiming in particular to collaborate in setting up training programmes in the field of new extractive industry trades. In Gabon, COMILOG continued its contribution to the Moanda School of Mines and Metallurgy (E3MG, which opened in 2016), the result of a public-private partnership between the Gabonese State and ERAMET group. This school, which was set up to train young Gabonese people in the fields of geoscience, process engineering, and mining research and exploration, trained 29 students in these three subject areas in 2017 and received its second intake of students in September 2017.

The activities of the Group's sites often involve a significant amount of outsourcing, and thereby favour the emergence of local companies. This is particularly the case with SLN in New Caledonia, whose mines, plant and support services subcontract activities and draw from the base of local businesses. Overall, SLN generates about 8,000 indirect and induced jobs in this way. In addition, SLN is a shareholder of four semi-public companies *(sociétés anonymes d'économie mixte locale)* created by the North Province. The specific mission of these companies is to develop the outsourcing of mining activities. In 2017, 70% of purchases of products and services by SLN (excluding fuel oil) were made in New Caledonia. In the same year, 80% of COMILOG's operating purchases were made in Gabon.

CONSTRUCTION OF LOCAL INFRASTRUCTURE

In 2017, all of the Group's mining sites continued their participation in the construction of local infrastructure, promoting the territorial and economic development of the geographical areas in which they operate.

In Senegal, Grande Côte Opérations (GCO) financed the construction of the large community market in Mboro, which contains 29 shops. The result of a partnership between GCO and the municipality of Mboro, this market is the centre of gravity of the Niayes retail area. In New Caledonia, as part of several partnerships or agreements with the mining towns and the Provinces, SLN continued in 2017 to contribute to the installation of communal facilities, notably in Thio in the South Province, and in Koumac and Kouaoua in the North Province (drinking water, urban roads and schools, for example). In Gabon, COMILOG also contributed in 2017 to the construction of four classrooms for a secondary school in the city of Moanda, and to a project to supply water and electricity to residents of Lastourville.

INITIATIVES RELATED TO SUSTAINABLE DEVELOPMENT

Sensitive to the impacts they can generate on their environment and communities, sites are increasingly engaged in local or national initiatives related to sustainable development.

Representatives of the sites contribute to local and national initiatives on subjects such as energy savings, "clean production", and water conservation, through their participation in working groups, seminars or training programmes on these topics. For example, in 2017, GCO welcomed a delegation of 28 mining experts from the Organisation of African Geological Services as part of their training in the environmental management of mining sites. In another example, the Commentry site participated in the celebration of the third European Battery Recycling Day, in particular by raising awareness and collecting used batteries with more than 700 pupils from schools in Commentry.

Some sites are also involved in national or European research programmes to work on topics such as energy efficiency and reducing greenhouse gas emissions in the industry.

This is the case for the ERAMET Norway sites of Porsgrunn and Sauda, with their contribution to the "New ERA" European R&D project focusing on technologies that significantly reduce CO_2 emissions and increase energy efficiency. At a national level, these two sites also participate in the Norwegian "Research Centre for Eco-friendly Energy", under the direction of the Research Council of Norway.

On the other hand, the actions implemented by COMILOG in Gabon and by GCO in Senegal are integrated in the two national plans, *"Gabon Émergent"* and *"Senegal Émergent"*, whose objective is to enhance the human, natural and mineral resources potential for each of these two countries in a sustainable development approach.

6.3.1.2 MANAGEMENT OF IMPACTS ON NEIGHBOURING POPULATIONS

Some activities at ERAMET sites may have impacts on local populations and are subject to control measures in compliance with the "mitigation hierarchy" of avoiding, reducing and compensating such impacts. In 2017, these measures focused mainly on population relocation activities for two Group sites.

In February 2017, GCO finalised the resettlement of 35 families (288 people) from the hamlets of the Diogo and Foth villages which were located in a mining area. The ceremony of "handing over the keys" is one of the outcomes of the process guided by the Resettlement Action Plan developed by GCO in consultation with its stakeholders. The new village has 35 permanent houses and community infrastructure (mosque, primary school, health centre, drinking water well), is lit by solar energy and has running water. In addition, alternative farmland was made available with water sources for the irrigation of plots. In partnership with the National Agency for Eco Villages in Senegal (ANEV), GCO also supports relocated populations in the implementation of community projects with high added value, such as the installation of biodigesters to produce biogas and organic fertilisers.

In Gabon, as part of the SETRAG refurbishment project in Gabon, work is planned on the first 30 kilometres of the railway from Libreville to guarantee the safety of the track and local residents. This measure ultimately involves the displacement of nearly 400 people. A Resettlement Action Plan, which outlines the compensation measures for the benefit of those affected, is currently being developed. It was fed into by public and individual consultations with these people, conducted as part of a socio-economic study and census. In 2017, the plan incorporated the recommendations of the international institutions financing the project and will be the subject of a specific local consultation process before its implementation.

These actions, carried out during 2017, are part of the human rights risk management system implemented by the ERAMET group. With reference to the obligations imposed by the law of 27 March 2017 relating to the duty of care of parent companies and contractors, ERAMET has formalised its mapping of the risks of human rights violations, as well as the related organisation and systems to control these risks. The elements relating to this approach are described in the ERAMET group's Vigilance Plan, which is attached to this Registration Document.

6.3.2 DIALOGUE WITH STAKEHOLDERS

ERAMET sites, whether mining or metallurgical, interact daily with a wide variety of stakeholders, local residents, schools, clients, public authorities, associations, etc. From participating in local forums, to setting up partnerships and organising open-house days, each of the Group's sites operates according to its activities, in line with the Group's Sustainable Development policy.

6.3.2.1 INFORMATION AND CONSULTATION OF LOCAL POPULATIONS

The Group is aware of its responsibility towards society and more specifically local populations and is committed to informing its stakeholders about its activities through the provision of publications, the opening of its sites to the public and the establishment of or participation in local forums or meetings for information and consultation. Thus, sites that may generate impacts on the environment and local residents undertake information and consultation actions with them, whether they are regulatory obligations or voluntary initiatives.

COMMUNICATION OF INFORMATION

Many of the Group's sites (including all mining sites) participated in information forums or organised information meetings with local residents.

For projects or sites developing new activities, these information meetings are essential to explain their characteristics and present the measures implemented to control the impacts. In Argentina, for example, Eramine Sudamerica holds regular public meetings and site visits to inform nearby communities about progress on the project to exploit the lithium deposit. In Gabon, as part of the SETRAG upgrade project, a liaison officer organises regular exchanges with local leaders, residents and traders to inform them of the progress of the project.

The sites in operation also have the opportunity to regularly inform their local residents. In France, because of their Seveso "High Threshold" or ICPE (Installation Classified for the Protection of the Environment) status, some sites participate in "Site Monitoring Commissions", composed of representatives of the State, local authorities, local residents, farmers and employees. These commissions constitute a framework for the exchange and monitoring of site activities. This is the case, for example, with COMILOG Dunkerque. In addition to regulatory obligations, some sites organise voluntary information meetings. In Norway, as every year, ERAMET Norway's three sites informed local residents about the status and direction of the Company, and discussed topics such as emissions into the air.

In 2017, one-third of the Group's sites held information sessions with local stakeholders by organising open days for visiting their facilities.

At SLN, the site of the Doniambo plant continued to organise monthly open-house visits for residents of neighbouring districts, enabling them to witness a metal or slag casting. Mining sites have also received a growing number of visits, as was the case at the Thio mine for the launch of "Heritage Month" by the South and North Provinces in August 2017. The 160 visitors were able to interact with the site's employees on this occasion.

Other sites opened their doors to celebrate specific events. This was the case of the Aubert & Duval plant in Pamiers, France, which organised an open day to mark its 200th anniversary in June. The 3,500 visitors were able to follow the end-to-end process of manufacturing a metallurgical part. Also in France, Aubert & Duval's Interforge and Issoire sites opened their doors to more than 2,000 visitors on the occasion of Interforge's 40th anniversary in May 2017. The inauguration of the new ERAMET Sandouville nickel plant in June and the EcoTitanium plant in September also attracted more than 300 visitors to these sites, where they were able to learn more about their activities.

CONSULTATION AND COOPERATION ACTIVITIES

The mining sites and projects have established specific mechanisms for consulting with local residents to ensure that their expectations are taken into account as part of the decision-making process, whether in relation to the management of environmental and societal impacts, or the development of common opportunities.

Thus, as part of the mapping of its stakeholders in 2017, for example, SLN interviewed over 200 stakeholders (tribal leaders, associations, etc.). These interviews allowed SLN to better understand the perception, expectations and concerns of these stakeholders with regard to SLN's activities. In Gabon, COMILOG also organises regular cooperation meetings with its stakeholders. In Senegal, in collaboration with the administration and local elected officials, GCO established thematic community committees that meet on a regular basis and allow the Company to clarify or redirect strategies for controlling environmental and societal impacts.

LOCAL MECHANISMS FOR HANDLING COMPLAINTS

In addition, and depending on their activities, some sites set up dedicated systems to receive and respond to concerns, questions or complaints from local populations. In Gabon, for example, SETRAG's complaints management system is operational in the municipalities of Owendo and Ntoum and is being rolled out throughout the entire area affected by track rehabilitation works.

6.3.2.2 DIALOGUE WITH EDUCATIONAL STRUCTURES AND SUPPORT FOR EDUCATION AND TRAINING

The Group is engaged in an active policy of support to education and training of local people and youth, in particular. This support is reflected in several ways on the sites, at the headquarters, and in the Group's projects.

DIALOGUE WITH EDUCATIONAL STRUCTURES

Many sites and subsidiaries maintain close relations with educational structures. This can include:

- site visits organised for classes at all levels, as was the case in 2017 for more than half of the Group's sites;
- partnership initiatives with educational institutions, in the form of interventions by employees in institutions or skills-based sponsorship, as carried out by over one-third of the sites in 2017;
- participation in the definition of training programmes for educational institutions. This is the case, for example, with the Sauda plant in Norway, which cooperates with the municipality's secondary school to develop a dual curriculum aimed at training qualified operators while allowing them to access higher education training courses at a later date if they wish.

In addition, representatives of the sites or the Group regularly participate as experts as part of specialised masters or graduate schools, notably at INSA (National Institute of Applied Sciences, France) on energy efficiency or at the MINES ParisTech on environment and societal issues in mining and industrial projects.

WELCOMING STUDENTS

In 2017, more than 70% of the Group's sites hosted and trained interns, apprentices or PhD students for a few weeks or months. This represents several hundred students or apprentices each year.

6.3.2.3 DIALOGUE WITH AUTHORITIES

In addition to exchanges related to the regulatory obligations of each site, the organisation of site visits for the authorities is a welcome opportunity to present the investments made or future projects, as well as the main issues. Several Group sites hosted representatives of the administration or elected officials in 2017. This is the case, for example, of the three Norwegian sites of ERAMET Norway, the Marietta site in the United States, and the Commentry and Les Ancizes sites in France, which hosted the mayors of their respective municipalities in 2017 to present their activities.

As part of the establishment of the new EcoTitanium plant in Puy-de-Dôme, in 2017 the site received visits from the two municipalities of Les Ancizes and Saint-Georges-de-Mons, as well as deputies and senators. The site, the first European plant to produce aviation-grade titanium from recycled materials, was inaugurated in September in the presence of many public figures, including the French Secretary of State to the Minister of Economy and Finance, and the CEO of ERAMET.

In February 2017, COMILOG also received a visit from the Prime Minister, Head of Government, to the Moanda School of Mines and Metallurgy, the result of a partnership between the Gabonese State and COMILOG, and the Moanda Metallurgical Complex (CMM).

Dialogue with the authorities is also organised at the Group's head office to present the Group's activities and issues, participate in working groups, visit the facilities, or simply respond to their requests for information. Similar exchanges take place with the European authorities in Brussels.

6.3.2.4 STRONG INVOLVEMENT IN PROFESSIONAL STRUCTURES

ERAMET is actively involved in professional organisations, both national, European and international, which represent its own businesses or sectors and, more generally, contribute to the promotion and development of companies and their industrial and commercial activities.

The Group is involved at several levels. Several members of the Executive Committee and Directors represent the Group within the governance or management bodies: this is the case for the National Industry Council (CNI), the Alliance of Ores, Minerals and Metals (A3M), the Strategic Committee of the Extractive Industries and First Transformation Sector, MEDEF, EuroAlliages, Eurométaux, the European Powder Metallurgy Association, the International Manganese Institute, and the Nickel Institute. Furthermore, several experts from the Group participate in the various committees or thematic working groups set up by these professional bodies.

6.3.2.5 PARTNERSHIP OR SPONSORSHIP ACTIVITIES

The ERAMET group is committed at various levels in partnership or sponsorship activities contributing to the development of local life.

LOCAL PARTNERSHIPS AND SPONSORSHIPS

In 2017, numerous programmes were implemented for local economic development. In Argentina, for example, Eramine Sudamerica continued its project to reintroduce quinoa cultivation within its area of activity, this year by financing the construction of a quinoa storage area and supporting the certification of organic quinoa production by a third party. In New Caledonia, SLN continued its financial support for the Association for the Development of Economic Initiative (ADIE) of which it has been a partner for 17 years, which offers support services to micro-entrepreneurs.

Many of these partnerships or local sponsorship activities have also occurred in the field of education. In particular, COMILOG launched a multi-year programme to support schools in the municipality of Moanda. In 2017, the site supported five primary schools and three large secondary schools (donating teaching and IT materials and building new classrooms, in particular).

Some sites are also active in the field of health. This is the case, for example, of the partnership between Grande Côte Opérations (GCO) and AFRIVAC, who work together to implement campaigns to vaccinate Senegalese children and raise parents' awareness on the subject. In Gabon, COMILOG is a partner of the outpatient treatment centre in Franceville, offering HIV/AIDS patients treatment paid for by the Company. This partnership is part of COMILOG's Gamma programme, supporting the HIV/AIDS awareness actions led by the Gabonese government.

Several sites support local cultural life (music festivals, arthouse films, etc.) as is the case of Aubert & Duval's French sites of Les Ancizes, Firminy and Pamiers, the Brown Europe sites and COMILOG Dunkerque. In 2017, GCO was the sponsor and main partner of the first major art exhibition in Meckhé. Local sporting activities are also sponsored by many sites. COMILOG continued its support for the *Association Sportive Mangasport*, as did the Aubert & Duval Les Ancizes site with the *Union Sportive de la Commune*.

Some sites have also established partnerships in the field of environmental protection, most often with specialised NGOs or research organisations. For example, for many years, the Norwegian sites of TiZir in Tyssedal and ERAMET Norway have partnered with the NGO Bellona, which provides them with advice and expertise on environmental issues. As part of the rehabilitation activities of the Thiebagi mine, this year SLN continued its study in partnership with the New Caledonian Agronomic Institute of the microorganisms present in soils that could be useful for the development of plants.

AUBERT & DUVAL FOUNDATION

The Aubert & Duval Foundation, created in 2010, aims to develop initiatives that contribute to the vitality of regions that host sites of the subsidiary in France and aims to support local projects in the non-profit and micro-economy sectors. The Foundation collects sponsorship requests from French Aubert & Duval sites, reviews the projects and decides which ones to support. In 2017, the Foundation continued its support for the *"Maison de l'alternant des Combrailles"* (Puy-de-Dôme), which allowed 80 young people who chose local apprenticeships to find a housing solution.

6.3.3 RESPONSIBLE GOVERNANCE

6.3.3.1 ETHICAL COMPLIANCE AND PREVENTION OF CORRUPTION PROGRAMME

In line with the values of the ERAMET group and in order to better respond to its global challenges, the Group adopted an Ethics Charter, which has been translated into the Group's languages. It is available on the Group's website at the following address:

http://www.eramet.com/sites/default/files/charte_ethique_groupe_eramet_francais.pdf

In order to fully implement the principles of the Charter, the outline of an ethics compliance programme was proposed by the Group's Ethics Officer. The outline was validated in 2016 by ERAMET's Executive Committee. In this context, the Group formalised its ethics compliance organisation in 2017:

- The Ethics Compliance Committee is led by the Ethics Officer and is composed of members of the corporate functions. Its mission is to promote a culture of ethics within the Group, to ensure the communication and implementation of the Ethics Charter and its principles, and to make recommendations regarding ethical compliance and related procedures. The Committee also prepares the content of ethics training for Group employees.
- The network of 16 "Ethics Compliance Officers" (ECOs), appointed by the Executive Committee and covering the entire Group, is a key element of the system. The ECOs act as local intermediaries for the Ethics Officer and the Ethics Compliance Policy: they ensure the application of procedures, ensure communication with employees, and implement the necessary training programmes. As part of the Group's whistleblowing procedure, the ECOs can be contacted by employees directly. They also conduct field investigations at the request of the Ethics Officer as part of the Group's whistleblowing procedure. The ECOs are supported by a network of Ethics Compliance Ambassadors, which they appoint.

- The Responsible Purchasing Committee is made up of members of the Divisional Purchasing Departments, the Group Legal Department and the Group Communication and Sustainable Development Department. Among the actions carried out in 2017, the Committee introduced the "contractualisation" of the Responsible Purchasing Charter in respect of suppliers and led the mapping of ethical and CSR risks in the supply chain. The Committee also established the procedures for monitoring the ethical performance and CSR of suppliers via dedicated due diligence tools (see 6.3.4).
- The Responsible Sales Committee is made up of members of the Sales Departments, the Group Legal Department and the Group Communication and Sustainable Development Department. The Committee oversees the gradual implementation of clauses "contractualising" the Group's ethical commitments with its customers. It has also established methods for assessing the ethical situation of customers through the use of dedicated due diligence tools. In addition, particular vigilance is exercised in relation to exports potentially involving countries subject to international sanctions.

At the same time, the Group conducted a mapping of its risks of corruption and influence peddling in 2017 with the help of an external service provider. The results of this mapping are used to feed the various risk management actions implemented by the internal structures listed above.

Finally, several awareness-raising indicatives in relation to the ethics culture were also launched in 2017:

- deployment of an e-learning course to raise awareness of the main themes of the ethics charter among a population of over 2,000 employees, including executives and staff most exposed to the risk of corruption;
- the organisation of a campaign to electronically sign a "certificate of ethical compliance" with the people who attended the awareness training;
- information, addressed to the Group's 8,000 employees connected to electronic mail, on the organisation of ethical compliance and particularly on the implementation of the network of Ethical Compliance Officers (ECOs). This information was accompanied by the distribution of the Group's whistleblowing procedure and was displayed at all sites in order to reach all employees.

6.3.3.2 ALERT MECHANISM

The Ethics Charter and the Group's ethics programme lay down a set of rules and principles for actions and behaviours that apply to everyone and include a professional whistleblowing system. This system allows each employee to notify the Group Ethics Officer or the Ethics Compliance Officer (ECO) of his/her entity of any events that may violate the principles and commitments of the Ethics Charter and the laws or rules relating to ethics and applicable to our business activities. In particular, the Group encourages employees to report the following:

- corruption, fraud, conflict of interests;
- anticompetitive practices;
- discrimination and harassment at work;
- conduct contrary to the Group's policies and standards in relation to health, hygiene, safety at work and the protection of the environment;
- violation or risk of violation of the human rights of Group employees or external persons affected by the Company's business activity.

The whistleblowing procedures are made available to employees in the Ethics Charter available on the Group's intranet and are displayed on the premises of each entity. These alerts can be submitted anonymously.

The alert is managed according to a procedure that can be viewed on the Group intranet. This procedure guarantees that the employee initiating the alert has complete confidentiality, and insofar as the employee acts selflessly and in good faith, it also guarantees that no action can be taken against him or her as a result of the use of this mechanism.

6.3.3.3 EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE (EITI)

ERAMET has been a member of the Extractive Industries Transparency Initiative (EITI) since 2011. This initiative is based on a set of principles and rules, bringing together a coalition of governments, businesses, civil society groups, investors and international organisations to promote revenue transparency at a local level. By adhering to these principles, ERAMET demonstrates its willingness to ensure the responsible development of natural resources and to ensure transparency in financial flows between companies and host countries, and also to ensure regular accountability to its stakeholders.

ERAMET has sites in three EITI member or candidate countries: Senegal, Indonesia and Norway. In Senegal, the Grande Côte Opérations (GCO) joint venture is contributing to the preparation of the country's EITI reports, submitted in July 2017 to the process of validation of the status of "EITI implementing country". In Indonesia, ERAMET does not yet have a mining operation, and it only has non-extractive sites in Norway: these subsidiaries were not therefore required to contribute to the EITI reports on these two countries.

6.3.4 RESPONSIBLE PURCHASING

6.3.4.1 THE GROUP'S RESPONSIBLE PURCHASING CHARTER

Due to the issues associated with the Group's businesses, purchases are the subject of particular attention and also strong expectations from stakeholders on this issue ERAMET is committed to a responsible purchasing approach, which aims to favour suppliers offering products or services that respect environmental and social criteria while maintaining a high level of competitiveness.

This initiative, led at Group level by a Responsible Purchasing Committee (see 6.3.3.1), is governed in particular by the ERAMET Responsible Purchasing Charter. This charter formalises the Group's desire to strengthen the integration of sustainable development issues related to procurement, and promotes a dynamic of continuous improvement. ERAMET's expectations with regard to its suppliers, subcontractors and service providers primarily target three main areas: human rights and working conditions, environment and products, and good business practices. It is available on the ERAMET website at the following address:

http://www.eramet.com/system/files/publications/pdf/eramet_charte_achats_responsables.pdf

Moreover, in France the ERAMET subsidiary Aubert & Duval is a signatory of the "Responsible Supplier Relations Charter" (formerly the "Inter-Company Relations Charter"), which was jointly developed in 2010 by the Business Ombudsman and the association of purchasing managers in France (CDAF). This promotes equitable relationships between buyers and suppliers with respect to everyone's rights and duties, with particular attention on the relationship between major contractors and SMEs.

6.3.4.2 RELATIONS WITH SUBCONTRACTORS AND SUPPLIERS

The ERAMET group's activities involve the significant use of external purchasing and, to a lesser extent, outsourcing. Due to the nature of its activities, the entire ERAMET group spends about 60% of its turnover on the purchase of goods and services. As a result, the Group pays particular attention to CSR issues related to its upstream value chain.

In the case of subcontracting (less than 6% of the Group's turnover), it should be noted that in the mining sector this only concerns eight mining sites in New Caledonia, in a context of social and environmental law similar to that of Metropolitan France.

PERFORMANCE EVALUATION OF SUPPLIERS AND SUBCONTRACTORS

In order to reinforce existing practices at the level of certain sites or subsidiaries, in 2017 ERAMET launched a comprehensive and progressive approach to assessing the CSR performance of its suppliers. The Group's top 50 suppliers and subcontractors in terms of volume of purchases were thus invited to answer an assessment questionnaire that was checked and analysed by an external third party (EcoVadis). The questionnaire focuses on CSR criteria, such as respect for the environment, the management of the value chain, respect for human rights and labour relations, and business ethics. The analysis of the results of this first assessment campaign identified a small number of suppliers whose performance is considered weaker, for which corrective actions are being defined and will be implemented during the course of 2018. A second campaign was also launched at the end of 2017 and will be followed up in the same way in 2018.

In parallel, and with reference to the obligations imposed by the law of 27 March 2017 relating to the duty of care of parent companies and contractors, during the year the Group formalised its responsible purchasing approach by structuring it around a risk approach. The Responsible Purchasing Committee created a mapping of the CSR risks related to the activities of its suppliers and subcontractors, and defined a procedure for assessing the situation of its suppliers and subcontractors with regard to these risks. The elements relating to this approach are described in the ERAMET group's Vigilance Plan, which is attached to this Registration Document.

6.3.4.3 MONITORING OF THE "CONFLICT ORES" THEME

Some of the Group's activities require the use of tungsten in metal form in their manufacturing processes. This metal comes from ores that may be called "conflict" ores if their exploitation is used to finance armed groups and fuel civil wars in some parts of the world. ERAMET is therefore very attentive to the conditions of supply of these materials and in particular to compliance with the specific provisions of the "US Dodd Frank Act", as well as the guidelines set by the OECD for multinational companies.

The ERAMET buyers in charge of these supplies thus systematically require their suppliers to provide information concerning the origin of the ores used for the manufacture of tungsten metal sold to ERAMET. They are also asked what due diligence measures they have put in place to verify this origin. To this end, the Group's buyers use the Conflict Minerals Reporting Template (CMRT), supplied and updated regularly by the Responsible Minerals Initiative (RMI), previously known as the Conflict Free Smelter Initiative.

Finally, the Group's Public Affairs Department closely monitor the work of the European Parliament and the Council of the European Union, which culminated in the adoption in May 2017 of the European Council Regulation on Conflict Minerals, the provisions of which will enter into force on 1 January 2021.

6.4 INDUSTRIAL AND MINING PROJECTS

All projects carried by the Group are developed in accordance with the Group's Sustainable Development policy, the ethics, environment, health and safety charters and policies, and the regulations of the applicable countries, in accordance with applicable international norms and standards. The aim is to build a long-term trusting relationship with the communities present in the settlement sites and to prevent any risk of infringement on the fundamental rights of these communities, particularly, where applicable, indigenous communities. This requires the implementation of mechanisms for dialogue with the representatives of relevant stakeholders.

Environmental, social, societal and health aspects are taken into account from the most upstream phases of projects. Sustainable development experts and specialists are integrated into the industrial, technical, legal and financial teams, and participate in the various steering committees, from pre-project phases to feasibility studies and pre-construction. Likewise, they participate in acquisition audits in the case of merger or acquisition projects, as well as in due diligence related to the transfer of assets. Finally, the elements of environmental and social management for which the Group is responsible form part of the process of evaluation and management of risk for these investments.

The following paragraphs detail the consideration of sustainable development factors in the main projects undertaken by the Group in 2017.

6.4.1 PROJECT TO IMPROVE THE SAFETY AND RELIABILITY OF THE RAILWAY IN GABON

The *Transgabonais* railway, which crosses Gabon from Libreville to Franceville, has a total of 710 km of tracks, 52 bridges, and 22 stations. In addition to transporting the ore from COMILOG to the port of Owendo, it plays a strategic role in the economic development of the country.

SETRAG (the *Transgabonais* operating company) operates the railway under a Concession Agreement established in 2005 and updated in 2015. SETRAG is the manager of the railway infrastructure, traffic and operations (passengers, timber, ore and other goods).

For several years, SETRAG has stepped up the pace of maintenance and rehabilitation work on the *Transgabonais* railway. However, the overall condition of the track continued to hinder the operation of the network so SETRAG decided to intensify the infrastructure renovation programme. The company turned to the International Finance Corporation (IFC) and Proparco to finance the programme, and it successfully obtained funding in 2016.

The concession contract stipulates a contribution from the concession grantor, the State, to certain works, in particular those associated with the reinforcement of infrastructures, the rehabilitation of civil engineering structures, the securing of level crossings and the renovation of "employee" housing developments. In this context, the State has taken steps similar to SETRAG to obtain financing from the French Development Agency, whose terms were finalised in December 2016.

Work started on the Lopé Ivindo section in September 2017.

In accordance with ERAMET's standards, the project was designed to minimise the potential associated environmental or societal impacts, based on comprehensive and relevant studies. Among these we can mention: an environmental and social diagnosis, an impact notice dedicated to a production unit of steel-concrete sleepers, an impact notice for the rehabilitation of the track and an impact study for the exploitation of the sandpit feeding the sleeper unit. On this basis, management plans and dedicated actions have been developed and implemented.

SETRAG reports its results in terms of Environment, Health, Safety and Stakeholder Dialogue to the two financial institutions once a year. It hosts on-site representatives twice a year for follow-up visits to verify the project's compliance with the environmental and social requirements of IFC and Proparco.

6.4.2 THE LITHIUM PROJECT IN ARGENTINA

Lithium is one of the metals with high growth potential, particularly for the development of energy storage for portable equipment and electric vehicles. In collaboration with IFPEN (IFP Énergies Nouvelles), ERAMET teams have developed an innovative extraction process for the production of lithium salts used in the manufacture of cathodes for Lithium-ion batteries.

The manufacture of lithium salts from brines is an alternative process which differs fundamentally from the conventional process of the natural evaporation of brines. The environmental impact of this new method is reduced compared to the conventional method.

In 2012, the Argentine subsidiary, Eramine Sudamerica SA, discovered a lithium deposit in the Province of Salta, in northern Argentina: the *"Salar de Centenario-Ratones"*. Since then, it has pursued an exploration programme which has revealed a significant resources potential, sufficient to develop a major industrial project (see section on "Resources—Reserves"). In 2014, the government of Salta formalised the agreement signed between REMSA, a public company of the Province of Salta, and Eramine Sudamerica, allowing ERAMET to become the owner of the mining deeds of the deposit covering nearly 500 square kilometres.

In 2017, exploration and hydrogeological simulations on the Ratones salt flat continued in order to confirm the chemical properties of the brine and reduce the uncertainty of resource estimates. Engineering studies and pre-industrial pilot testing of lithium carbonate production have been conducted since 2016. The social and environmental studies required for the development of the project have been completed and are currently being considered by the local authorities. These include the environmental and social baseline study and the environmental and social impact assessment, and involved more than 25 external experts, local teams and ERAMET's corporate support functions.

Pumping tests, drilling, hydrodynamic modelling, engineering studies, as well as social and environmental studies were carried out in accordance with the Group's

Sustainable Development policy, that is to say, in compliance with Argentine regulations and taking international standards into account. A special effort is being made to integrate the sustainable development criteria into the design of the project and the plant. For example, this ongoing effort has reduced projected water consumption by about 30 percent, which is very important in this very arid region of the world. This progress has been accomplished either by modifications that reduce water requirements, or by adding elements that better recycle water in the process.

Eramine Sudamerica maintains regular dialogue with the inhabitants of some of the communities neighbouring the project site, and has initiated several development projects with them. These include the revitalisation of quinoa cultivation for the purpose of economic development and the fight against malnutrition, and an initiative in partnership with the Ministry of Health to develop access to health services for the inhabitants of the *Altiplano*.

6.4.3 WEDA BAY NICKEL PROJECT IN INDONESIA

Because of sluggish market conditions in recent years, most of the nickel processing projects in Indonesia had been suspended or slowed sharply. The Weda Bay Nickel (WBN) project on Halmahera Island was no exception.

2017 was marked by the resumption of detailed studies of a project following the signing of an agreement between ERAMET and the Chinese steel group Tsingshan, the world's largest producer of stainless steels, for the development of the Weda Bay Nickel deposit.

ERAMET contributes to the partnership with this nickel deposit, located on the island of Halmahera and which has been acknowledged by several years of geological exploration. Tsingshan will recover the ore on an industrial complex for an eventual capacity of 30,000 tonnes of nickel.

The desire to implement strong environmental and societal commitments for this project is an integral part of the objectives set out in the agreements signed between ERAMET and Tsingshan.

6.5 RESPONSIBILITY FOR CHEMICALS

6.5.1 ISSUES AND RISKS

ERAMET is one of the world's leading producers of alloys, super alloys and high-performance steels, and it generates a series of chemicals that result from the various hydrometallurgical, pyrometallurgical or recycling processes. The Group pays particular attention to the management of the chemical substances and mixtures it uses or produces in order to substitute as far as possible the most dangerous substances and to ensure a high level of risk control, protection of human health and the environment.

Due to the diversity of its activities, the ERAMET group is characterised by its dual role as both a user and producer of chemical substances and mixtures. Indeed, the development of these products requires the use of ores, minerals, recycled secondary materials and a series of metal inputs to adjust the right compositions of the desired grades. The use of chemicals as "commodities" (acids, bases, salts, etc.) is also important. It is also necessary to manage the numerous products used at the laboratory level, as well as in maintenance of installations and for other specific purposes such as water treatment or the capture of vapours and aerial particles.

All this requires significant involvement in improving knowledge about their intrinsic properties, their impacts and the definition of risk management measures for employees, local residents and users of the products. This approach involves both analysing the danger of the metal elements constituting certain products and taking into account their physical shape depending on whether they are marketed in a massive form or not. The Group's mining activities are also included in this management.

The Group's commitment is reflected in its involvement in professional bodies devoted to the development of robust scientific knowledge and the role of the main declarant assumed by certain subsidiaries in order to meet the requirements of the European regulation REACh (Registration, Evaluation and Authorisation of Chemicals).

At the European level, special attention is always paid to monitoring the selection of substances of very high concern by the authorities and to the process which may result from their inclusion in the list of candidate substances for authorisation. The REACh Regulation includes an authorisation procedure whose purpose is the progressive substitution of substances of very high concern with less dangerous substances. The selection of these substances involves the Member States, the European Commission and the European Chemicals Agency (ECHA), as well as the producers, importers, and users of these substances, and other interested stakeholders. This selection process continued during 2017. The Group has participated in some of this work and has actively contributed to exchanges between producers and users, in particular, within the professional organisations concerned.

6.5.2 THE ERAMET ORGANISATION

A Product Stewardship Unit at Group corporate level defines the rules and standards for managing chemical products and provides support and services to Divisions and sites to help them comply with the numerous regulations. This structure's activity has three main objectives:

- improve the technical and scientific knowledge of Group products;
- provide support and information to internal and external customers;
- harmonise the chemical risk management methods on the sites.

6.5.2.1 IMPROVE THE TECHNICAL AND SCIENTIFIC KNOWLEDGE OF GROUP PRODUCTS

The complexity and diversity of ERAMET's activities and products has led to the centralisation of the Group's toxicological and ecotoxicological expertise at Group level. This organisation makes it possible to capitalise on the knowledge accumulated in the Group's various business sectors (nickel, cobalt, manganese, titanium, etc.) to improve the quality of available knowledge and reduce the investments and time spent on tests in order to obtain it. This knowledge is essential for defining appropriate and proportionate risk prevention measures.

Scientific knowledge and the regulatory environment are constantly changing in relation to mineral toxicology, and ERAMET took a proactive stance in 2017 by supporting research partnerships with Norwegian universities and official bodies to improve its knowledge about dust exposure in manganese alloy activities. ERAMET also supports the scientific initiative by the Nickel Producers Environmental Research Association (NIPERA) in Europe and the US to establish methodological standards for linking the toxicity of a metal or alloy to its surface and solubility properties in biological liquids. The toxicity of an alloy does not simply result from the sum of the toxicities of its components.

6.5.2.2 PROVIDING SUPPORT AND INFORMATION FOR OUR INTERNAL AND EXTERNAL CUSTOMERS

A fundamental mission of the expertise on chemicals is to be in support of the internal customers that are the commercial, logistic or industrial functions. In 2017, this included answering more than two hundred requests ranging from the establishment of a RoHS certificate of compliance for the electronics and electrical industry, to clarify information on SDS (Safety Data Sheets) for clients in the chemical industry, or for the assignment of the UN number and the hazard class adapted to the multimodal transport of dangerous goods.

This constant support for the Group's sites also applies to the traceability of the products used, from the receipt of raw materials to the delivery of the finished product to the customer. Product traceability is mainly carried out upstream so as to identify the supply source of raw materials. The users of our products attach great importance to traceability, which must enable them to trace them back to the raw materials used in the development of the part concerned and to identify all the steps performed to obtain the finished product from this material.

When required, sites complete safety data sheets (SDS), which are used to disseminate information on chemicals. However, when the drafting of an SDS is not mandatory, but the Group considers it important for external and internal stakeholders to have sufficient information on products and substances, sites prepare RMISs (Risk Management Information Sheet), largely identical to the SDS.

In addition, the Group's entities and sites only sell their products to other manufacturers ("Business to Business" relationship). In this context, the Group produces and disseminates to its customers complete information about the product and its downstream use. Numerous information and exchange forums are also organised between the upstream and downstream players in the industrial sector of metal and metal processing.

The centralised organisation of the chemical risk also makes it possible to intervene more readily in the Group's projects (see paragraph 6.4) and provide the necessary expertise to organise the tests that will allow the best characterisation of future products in order to register them in REACh, establish their hazard classification and support the site during the ramp-up phase. This support service was specifically requested in 2017 by the Commentry and Sandouville sites.

6.5.2.3 HARMONISING OUR METHODS OF CHEMICAL RISK MANAGEMENT ACROSS OUR SITES

ERAMET group production sites are found on five continents, and they must, therefore, follow and respect various regulations concerning hygiene and controls of chemical exposures in the workplace. In this area of regulation, there may be significant differences from one country to another for the same substance. Harmonisation and communication between sites on these subjects is therefore important for exchanging, explaining, and implementing practices and references ensuring a corresponding protection or a level higher than the regulations in force in the relevant country. In concrete terms, a Group Products Committee brings together the Group Prevention and Safety Department, the Group Medical Advisor, the Group Environment, Industrial Risks and Products Department and the Hygiene, Health and Safety Coordinators of the Divisions. It defines and monitors the priority actions for the year. Thus in 2017, eight practical toxicological sheets were made available internally to define references and good practices, accompanied by a methodological guide for the measurement of exposure.

Important work has also been done to identify the chemical risk assessment tools used by the sites. This inventory, followed by critical exchanges and analyses of the tools used, allowed the Group to develop a consolidated chemical risk assessment methodology, which will be deployed across all sites as of 2018.

6.6 SAFETY, HYGIENE AND HEALTH

6.6.1 HEALTH/SAFETY STRUCTURE AND FUNCTIONING

The Group's commitment to the field of health and safety at work is elevated to the highest level by the Group's Executive Committee. ERAMET's Human Resources Director provides leadership for the dedicated actions.

This commitment is embodied in a Safety charter, revised in 2015, and a Group Health policy reviewed in 2017.

The Director of Prevention and Safety, and the Group's Medical Advisor report directly to the Human Resources Director. Together, they establish and propose to the Executive Committee the Group's health and safety policies and guidelines. Once validated, these guidelines are defined in the divisions by the Deputy General Managers, assisted by Health and Safety coordinators, and then by the Site Managers, who are themselves assisted by a site Health and Safety coordinator.

Prevention of damage to health and accidents is at the heart of the system, and concerns ERAMET employees and subcontractors who work on the sites. It is based on the analysis of risks in the workplace, which determines the actions and preventive measures to be implemented.

In relation to Safety, actions at Group level are coordinated within the framework of the "Group Safety Committee" which includes the Human Resources Director, the Deputy CEOs, the Safety and Prevention Director, and the Health and Safety coordinators of the divisions.

The proper operational implementation of the Safety Policy is monitored through by corporate audits. An annual programme is established and validated by the Group Safety Committee every year to focus these audits on the major issues of the year. They are conducted by the Group Safety Director and his/her team, or a division coordinator. The audit reports are communicated to the General Management and the site and are tracked by the division coordinators.

The effectiveness of accident prevention is monitored on a monthly basis by measuring accident frequency rates (FR). The Group has established a reporting system that makes it possible to monitor FR1 and FR2 on a monthly basis and to react in case of drift or non-achievement of objectives.

Employee health is monitored by Occupational Health professionals. The main French sites of the Group (Les Ancizes, Pamiers, Commentry, Interforge, Issoire, La Pardieu, Clermont and Gennevilliers) for Aubert & Duval, ERAMET Sandouville, COMILOG Dunkerque, all employees of *La Tour Montparnasse* (Paris), Trappes (ERAMET Research and ERAMET Engineering) are now grouped together under the autonomous department of Occupational Health, whose certification by DIRECCTE IDF was obtained on 29 April 2017. This service consists of three centres:

- North Centre: one Occupational Doctor and two Occupational Health Nurses;
- Auvergne Centre: three Occupational Doctors and six Occupational Health Nurses;
- South Centre: one Occupational Doctor and two Occupational Health Nurses.

The SLN site of Doniambo (New Caledonia), the COMILOG site of Moanda (Gabon) and the SETRAG site of Owendo (Gabon), for their part, have an Occupational Health Service with one or more occupational doctors and nurses.

6.6.2 MAIN HEALTH/SAFETY ISSUES AND RISKS

6.6.2.1 RISK IDENTIFICATION AND ASSESSMENT METHODOLOGY

SAFETY RISK MAPPING METHODOLOGY

The prevention of risks of work-related accidents is based primarily on the analysis of risks in the workplace, conducted within the plants. This highly operational analysis makes it possible to secure a specific operation by identifying all the risks to which the operators are exposed and the means of control implemented to manage them.

These local analyses are compiled in the risk register of each site (known as the "single risk assessment document" for French sites). These risks are assessed according to a scale based on the frequency x gravity pair (FxG), taking into account the protection measures in place. This methodology makes it possible to identify the most critical risks and thus feed into the site's Safety Improvement Plan. Risk registers make it possible to group the risks by standard activities specific to each site. For example, it includes mechanical handling, machine driving, walking, etc.

At Group level, the risk analysis is based on this segmentation by type of activity. The risk assessment is based on actual accident statistics taken from the reporting of accidents over a period of several years, according to the frequencies actually observed and the average potential severity evaluated on a case by case basis.

HEALTH RISK MAPPING METHODOLOGY

The prevention of health risks is based on workplace risk analyses conducted by the health and safety teams.

The documents that identify these risks (see safety risk mapping above) allow health professionals to build their action plans for the individual medical monitoring of employees and actions to improve working conditions.

The Group's Medical Advisor coordinates these actions and organises the network of health professionals.

6.6.2.2 MAIN HEALTH/SAFETY RISKS

SAFETY RISKS

The Group's risk analysis of workplace accidents allowed the risks identified to be grouped into three distinct families:

- **Technological risks**, associated with processes and facilities present the greatest potential severity: an explosion, a toxic gas leak, or equipment failure can impact several people in a single incident. The frequency of occurrence of these events is the lowest in our history.
- **Critical activities** are dangerous tasks that are carried out on a daily basis as part of the operation of our facilities. They include machine work, work at height, vehicle traffic, working in confined spaces, working with liquid metal, etc. Failure to control these risks can lead to serious accidents. In 60% of cases, the consequence of lack of control of these critical activities is work stoppage and, in a little over 10% of cases, serious injury.
- Finally, the Group's operations involve many routine activities, such as walking, lifting and moving objects and using hand tools. About two-thirds of the Group's accidents involve these activities, but the severity of the accidents associated with them is statistically less serious than for critical activities. For these routine activities, the accident rate that triggers a work stoppage is only 40% (compared to 60% for critical activities), while the rate of serious accidents is less than 1% (compared to more than 10% for critical activities). ERAMET groups these activities which are difficult to categorise under the heading "**non-standardised activities**".

HEALTH RISKS

Based on the analysis of workstations and safety risks, occupational health professionals identify risks that may have a lasting or deferred impact on the health of employees.

These risks may be physical (noise, vibrations, awkward postures, repetitive movements, night or alternating work, electromagnetic fields, extreme temperatures, exposure to dangerous chemical agents, including asbestos) or have a risk of impact on psychological health (workload, organisation of work, social support in the workplace, autonomy).

Deferred risks are risks of occupational diseases, which are reported separately based on reports sent to the employer or which result in investigations by internal or regulatory prevention services. In France, a Table of Occupational Diseases is regularly updated (Social Security Code).

In the other countries where the Group operates, there are regulations specific to each state.

The health risks of local populations are assessed by mapping the health risks of employees and the results of their assessment.

These risks may give rise to specific health risk surveys published to the various stakeholders: example of the Moanda epidemiological survey distributed to the Gabonese Ministry of Public Health and the local Cooperation group.

6.6.3 RISK PREVENTION STRATEGY

6.6.3.1 DESCRIPTION OF THE STRATEGY

SAFETY STRATEGY AND PREVENTION ACTIONS

The ERAMET group adjusts the prevention tools for the three main families of risk in terms of safety:

- The **prevention of technological risks** is based on the implementation of barriers (technical, organisational and human) as a result of hazard studies. Prevention depends greatly on the technical expertise of the teams that has been acquired over years of operations and their ability to identify and respond to weak signals.
- The risks associated with **critical activities** are too important to leave the choice of method of operation to the stakeholders; these activities are also strongly governed by rules. ERAMET has compiled a set of minimum essential rules—"Essential Safety Requirements"—that are required by all sites, in compliance with local legal requirements. Limited in number, they are communicated as part of the Group communication campaign. They are auditable and audited as part of corporate audits.
- Finally, **non-standardised activities** cannot reasonably be governed by simple rules. It is not practical to write rules on how to use a hammer or adjust one's pace depending on the condition of the ground. For these work situations, ERAMET develops the situational intelligence of its teams so that the stakeholders learn to make safety-related decisions. Team awareness, feedback, and especially interactions with the chain of command in the field are all systematically used to guide decisions towards safer behaviour.

In 2017, the Group assessed the implementation of these prevention strategies, and determined a roadmap to improve the control of safety risks with the aim of reducing by six the accident frequency rate on a continual basis (FR2) in 2020. The following areas have been defined:

- make the barriers robust following the review of technological risks at all sites;
- comply with essential requirements for critical activities: each year, each site must implement a plan to comply with the essential requirements for two critical activities that it has selected, with the objective of achieving 100% compliance at the end of the plan. The Group aims to achieve at least 70% overall compliance with the applicable essential requirements by 2020;
- work towards safe behaviour through coherent and repeated feedback, especially by using "safety interactions": this is a Group tool consisting of a manager to observe and give feedback to the operators on the choices they have made when performing a task. The Group requires that all supervisors at operational sites conduct at least one safety interaction per week;
- implement "consequence management" in relation to safety. In addition to feedback from the field during interactions, the control and the willingness to apply the Group's prevention strategies must be an assessment and development factor both for operators and managers. The Group affirms that involvement in safety matters will have an impact on career development at ERAMET. This translates into safety criteria in the assessment of individual performance.

HEALTH STRATEGY AND PREVENTION ACTIONS

The health prevention strategy is based on the Group's health policy, which was presented to the Executive Committee on 29 August 2017.

This policy has four strategic axes broken down into specific and priority actions with monitoring indicators.

The strategic axes are:

- reducing and managing the effects and impacts of the Group's activities on the health of employees and local residents.

  In 2017, the Group established four standard sheets for products that constitute a health risk and which are handled by Group employees (Manganese—Nickel—Oil Mist—Polycyclic Aromatic Hydrocarbons). The application of these standards will be audited from 2018 at the sites concerned;
- continued employment for all employees during their professional career, including when affected by poor health;
- occupational doctors periodically monitor employees with a health problem with the departments and HR services;
- participation in general public health and chronic disease prevention campaigns;
- each site will be committed to initiating awareness campaigns on public health issues in partnership with public utility associations;
- the prevention of risks to psychological health and the implementation of actions for the Quality of Working Life:
  - each Group site must offer its employees support with a psychological health professional who is accessible anonymously; in 2018 a discussion will be initiated to have one or more themes common to all sites that allow an improvement in the Quality of Working Life,
  - at the sites of *La Tour Montparnasse* and Trappes, "prevention specialists" (on a voluntary basis) were trained in 2017 and tasked with reporting back to management and healthcare professionals.

Management of asbestos risk

For the Group, the asbestos risk is divided into environmental asbestos at Nickel mines and also the management of asbestos products at industrial sites.

In New Caledonia, specific operating procedures exist to control veins of asbestos-containing ores in the event that mining activity uncovers them. The operators are trained in the precautions to be taken, and special medical monitoring has been set up, in consultation with the authorities, social partners, and other mining operators.

No industrial site of the Group has ever produced or processed asbestos, nor marketed composite materials made up entirely or partially of asbestos. This material has never been used as a raw material by ERAMET but rather only as a component of certain materials of heat transfer equipment. As an example, refractory materials containing asbestos, used in the past at the Les Ancizes site, represented less than 1% of all refractory materials used at the site.

In accordance with applicable regulations, particularly in France, the Group has had asbestos technical diagnostics (DTA) carried out on its industrial sites by authorised firms, the conclusions and recommendations of which are then translated into detailed action plans.

The chemical risk management measures related to chemical products with regard to employees' health are described in section 6.5.2.3 Harmonising our chemical risk management methods at our sites.

The monitoring indicators for these actions are transmitted on a quarterly basis and analysed at the level of General Management in charge of Health. These indicators specifically include declared and recognised occupational diseases (OD) In France, the ODs are grouped together in the form of tables. There are currently 98 of them. Each table has three criteria, namely:

- designation of pathology;
- care time limit (maximum time between the cessation of risk exposure and the first medical diagnosis of the disease). For example:
  - for carpal tunnel syndrome (TMS) this period is seven days,
  - for deafness, it is one year,
  - for lung cancer linked to asbestos, it is 40 years;
- indicative or limitative list (according to the table) of work likely to cause the disease.

Excluding exceptions, occupational disease is recognised by the CPAM when the three criteria are met.

In 2017 for the Group sites based in France, there were:

- eight ODs recognised (seven related to asbestos tables 30 and 30a and one related to noise table 42);
- 14 ODs reported and under investigation (eight for tables 30 and 30a, four for table 57: TMS, one for table 98: low back pain and one off chart.

The other indicators which will be monitored on a quarterly basis in 2018 as part of the Group's Health Policy concern:

- number of employee visits to a health professional;
- number of employees who benefited from an adapted workstation for more than three months;
- number of sites having implemented and following the recommendations of the Group standards in terms of monitoring the toxicology of products to which employees are exposed.

A collective agreement on health and safety at work for France was signed at the end of 2017 dealing with the "right to disconnect". No collective agreement was signed in 2017 on health and safety at work.

6.6.3.2 SUMMARY SHEET OF 2017 ACTIONS

2017 ACTIONS IN RELATION TO SAFETY

The guidelines defined for 2017 concerned:

- **the deployment across the sites of the first two essential requirements**, and the measurement of their compliance through corporate audits. The Group has published a booklet covering all 14 essential requirements and has organised communication campaigns on the management of external companies, and subsequently on mechanical handling. 31 audits were conducted on the Group's sites, covering more than 88% of hours worked. The average compliance rate was 71% on the two requirements selected by the sites. This figure includes audits conducted at the beginning of the campaign (when the action plan had not yet been implemented), so it is normal that the compliance rate was lower.

- **deployment of the "Safety Management Fundamentals"** training programme for supervisors who need to carry out safety interactions. More than 1,700 supervisors were trained in one-day courses over a period of 16 months, including an operational part in the workshop.
- **implementation of field interactions:**

2017 ACTIONS IN RELATION TO HEALTH

Specific actions taken in 2017:

- development of standards for the prevention of chemical risks (Nickel—Manganese—PAH—Oil Mist);
- implementation of a programme to improve the services of the Marcel Abéké Hospital in Moanda with a view to achieving WHO certification;
- setting up of support mechanisms to listen to and support employees in difficulty.

6.6.4 HEALTH/SAFETY PERFORMANCE

TRENDS IN THE FREQUENCY RATE (FR) SINCE 2011

The Group measures its safety performance by means of the two performance indicators, Frequency Rate 1 and Frequency Rate 2, defined as:

- FR1: frequency rate of accidents at work with stoppage of ERAMET employees and temporary workers. The severity of these accidents corresponds to an inability for the victim to return to work for at least one day due to the accident. FR1 is expressed in number of accidents per million hours worked;
- FR2: frequency rate of accidents at work with and without stoppage of ERAMET employees and temporary workers. The severity of these accidents corresponds at least to treatment of the victim by a health professional (doctor) going beyond first aid (e.g. stitches, prescription of medications, applying a splint, consultation of ophthalmologist, etc.). FR2 is expressed in number of accidents per million hours worked.

The severity rate for 2017 is 0.28.

FR2 (EMPLOYEES + TEMP. STAFF)	2011	2012	2013	2014	2015	2016	2017
Group	23.25	20.03	17.28	16.84	13.64	13.22	10.26
Nickel	42.83	42.77	34.44	34.49	27.72	22.24	15.64
Alloys	32.51	27.99	24.87	21.55	21.33	20.16	17.51
Manganese	10.46	6,296	5,888	7.94	4,191	5,679	2,989

FR1 (EMPLOYEES + TEMP. STAFF)	2011	2012	2013	2014	2015	2016	2017
Group	7.25	4.30	5.54	5.67	4.76	5.26	4.60
Nickel	6.79	4.86	4.28	6.81	5.23	9.00	5.76
Alloys	13.26	7.73	13.42	10.38	10.21	8.86	9.06
Manganese	4.57	1.89	1.53	2.62	1.47	1.72	0.90

6.7 HUMAN RESOURCES

6.7.1 THE GROUP'S HUMAN RESOURCES POLICY

The ERAMET group considers that the women and men who make up its community are the main drivers of its performance. Dependent upon them is the quality of client relations which are at the heart of the Group's business plan. Dependent upon them are future developments based on enhanced technical leadership and the fullest possible expression of their managerial and technical skills. Dependent upon them is the proficiency of management and the operational excellence of each of their fields.

The ERAMET group's Human Resources strategy is a reflection of the Group's strategy to face the issues facing the Group. It revolves around six strong strategic axes:

1. Identify, attract, retain and develop talent that translates into the desire to diversify our talent pool in order to make it more international, with a better representation of women at the managerial level, develop local talent, anticipate skills needs, develop cross-functionality, versatility and mobility to staff our projects and absorb cycles, prepare the leaders of tomorrow, develop and transmit skills.
2. Develop and recognise value-creating performance by ensuring the implementation and management of the performance cycle, accompanying employee performance and strengthening the link between compensation and performance: base, variable, and long-term remuneration.
3. Strengthen managerial skills, define and promote the role of managers, by associating them and training them to manage their teams.
4. Participate in the implementation of a work environment that is respectful of employees and of the Group's values by aiming at 'zero accidents', through the promotion of well-being at work illustrated by fairness, transparency and exemplary management, ethics and respect for the Group's values, active management of Occupational Health issues, application of national regulations and ILO directives at all Group sites, while ensuring to all of our employees social protection to cover the major risks while preserving our competitiveness.
5. To develop and promote a constructive relationship with our social partners by ensuring the implementation of a decentralised but coordinated approach, anchored in the economic realities of companies and sites, by facilitating a transparent and continuous dialogue, by ensuring that structures and organisations evolve and are exemplary in their social treatment.
6. Developing the operational excellence of the HR function, by acquiring efficient and adapted tools, by displaying a clear and readable organisation serving its internal clients, putting the HR function at the heart of strategic and business challenges.

The ERAMET group, while having a very strong international dimension (approximately 60% of the Group's workforce works outside Metropolitan France), also relies on subsidiary companies which have a significant presence and local awareness. The Group's human resources management is thus decentralised while relying on unifying principles and tools common to all of the Group's companies and sites.

The social policy of the ERAMET group is based on the clear desire:

- to strongly involve the Group's management (information and exchange seminars, development paths, meetings with the Group's management and the companies that comprise it, mobility and intra and inter-division career development);
- to connect employees with the life of their Company and the Group through clear and regular information (regular and corporate newspapers, Group intranet, integration days for new hires);
- to communicate with social partners, both formally (remuneration, training, social protection, and employment management policy) and on a daily basis at the sites.

6.7.2 EMPLOYMENT

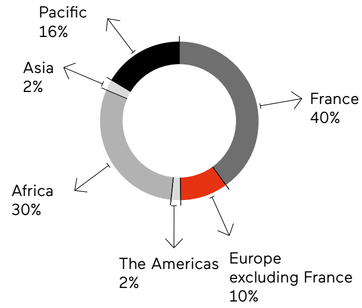
6.7.2.1 TOTAL WORKFORCE AND BREAKDOWN BY GEOGRAPHICAL AREA

As at 31 December 2017, the Group employed 12,590 employees in 20 countries, compared to 12,777 employees at 31 December of the previous year. The Group's HR reporting in force concerns the consolidated workforce and the workforce under management.

NUMBER OF EMPLOYEES AS AT 31 DECEMBER (PERMANENT AND FIXED-TERM CONTRACTS)

	2015	2016	2017	2017 DISTRIBUTION
France	5,159	5,136	5,049	40%
Europe excluding France	1,316	1,165	1,218	10%
Americas	666	325	250	2%
Africa	3,771	3,789	3,746	30%
Asia	822	245	298	2%
Pacific	2,204	2,117	2,029	16%
Total	13,938	12,777	12,590	100%

WORKFORCE REGISTERED IN 2017 BY GEOGRAPHICAL AREA



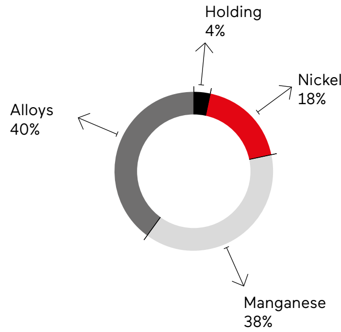
6.7.2.2 BREAKDOWN OF TOTAL WORKFORCE BY DIVISION

The workforce decreased by 1.5% between 2016 and 2017: it is stable for the Holding, increased by 3.7% for the Alloys division, but decreased for the Nickel and Manganese divisions. The decrease in workforce is largely due to the disposal of Gulf Chemical & Metallurgical Corporation (-65 employees) and Eurotungstène Powder (-118 employees).

EMPLOYEES BY DIVISION

	2015	2016	2017	2017 DISTRIBUTION
Holding	439	441	440	3%
Nickel Division	2,777	2,534	2,320	18%
Manganese Division	5,898	4,962	4,809	38%
Alloys Division	4,824	4,840	5,021	40%
Total	13,938	12,777	12,590	100%

BREAKDOWN OF 2017 WORKFORCE BY DIVISION



6.7.2.3 BREAKDOWN OF TOTAL WORKFORCE BY CONTRACT TYPE

As at 31 December 2017, 96% of Group employees had permanent employment contracts.

The technical nature of the mining and metallurgy professions requires a long professional training period, and the use of short-term employment contracts remains very minor.

Employees on fixed-term contracts within the Group have the same rights and benefits (pension systems, healthcare costs, profit share, etc.) as employees on permanent contracts.

WORKFORCE BY TYPE OF CONTRACT

	2015	2016	2017	2016 DISTRIBUTION
Permanent	12,812	12,285	12,113	96%
Fixed-term	1,126	492	477	4%
Total	13,938	12,777	12,590	100%
Temporary workers (in full time equivalent)	934	680	900	

6.7.2.4 BREAKDOWN OF THE TOTAL WORKFORCE BY SOCIO-PROFESSIONAL CATEGORY

ERAMET extended the French notion of socio-professional category to all its entities, which share the following definitions:

- Workers: workers (blue collars);
- Supervisory staff: clerks, technicians, foremen (white collars);
- Management: executives, managers, post-graduate staff, civil engineers (white collars).

BREAKDOWN OF WORKFORCE BY SOCIO-PROFESSIONAL CATEGORY

	2015	2016	2017
Workers	53%	52%	53%
Supervisory staff	33%	34%	33%
Management	14%	14%	14%

6.7.2.5 AVERAGE AGE AND AGE DISTRIBUTION

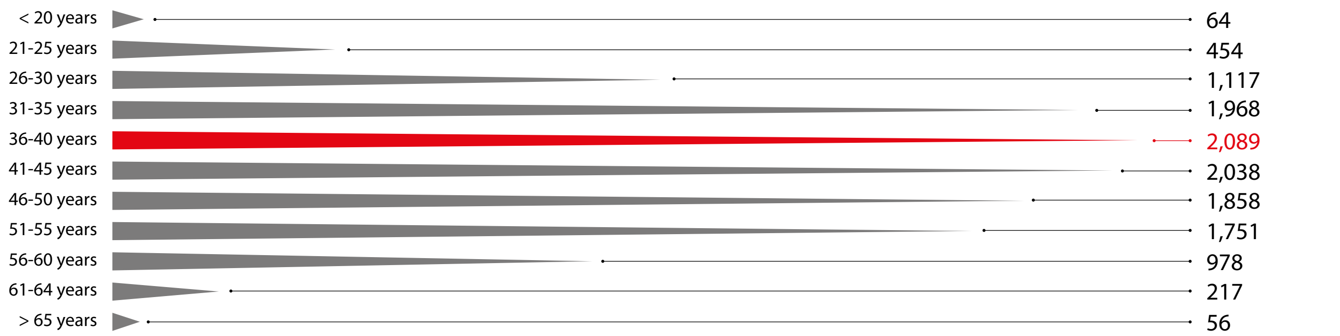
The average age of Group employees was 42 years as at 31 December 2017.

WORKERS	SUPERVISORY STAFF	MANAGEMENT
40.5	43.3	44.2

Employees aged 50 and over represent 27% of the total workforce; those aged 30 and under represent 13% of the total workforce.

ERAMET carefully monitors the evolution of the age distribution of its managerial staff, particularly in order to anticipate the retirement of its key employees. Since the implementation of the People Review process at the local, division and Group level, ERAMET has succession plans updated every year for all its key positions.

AGE DISTRIBUTION OF THE GROUP



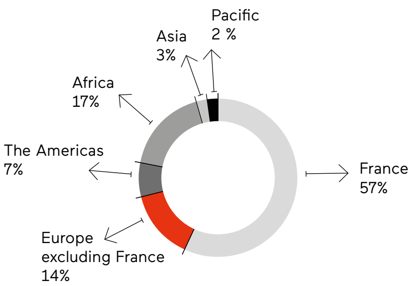
6.7.2.6 RECRUITMENT

Group companies recruited, excluding transfers between Group companies, 954 employees in 2017, down 24.8% compared to 2016. Since the summer of 2013, the Group has frozen the external recruitment of managerial staff and is actively encouraging internal mobility.

NEW RECRUITS BY REGION (EXCLUDING TRANSFERS WITHIN THE GROUP)

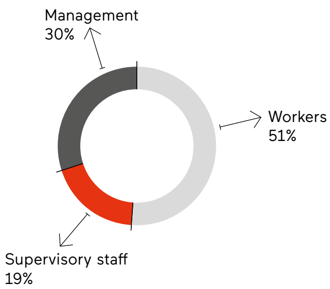
	2015	2016	2017
France	387	579	544
Europe excluding France	153	42	135
Americas	176	81	67
Africa	258	519	166
Asia	95	32	23
Pacific	87	16	19
Total	1,156	1,269	954

NEW RECRUITS 2017 EXCLUDING TRANSFERS



The permanent contract recruitments, amounting to 471 people, are divided into the following occupational categories:

PERMANENT CONTRACT RECRUITMENTS EXCLUDING TRANSFERS



Since 1 January 2013, ERAMET prioritises the recruitment of permanent employees under the age of 30 and over 55.

	PERMANENT CONTRACT RECRUITMENTS 2017	
	< 30 YEARS	> 55 YEARS
Total	219	23
% of total permanent contract recruitments	46%	5%

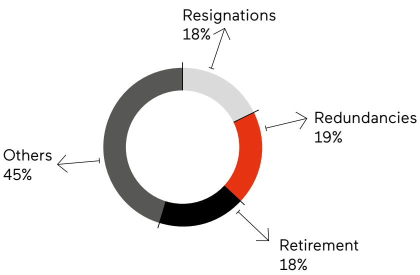
6.7.2.7 DEPARTURES

In 2017, the total number of departures (this concept includes resignations, redundancies, retirements, conventional breaks but does not include Group transfers) reached 1,156, of which 206 were resignations (18% of departures), 222 were redundancies (19% of departures), and 205 were retirements (18% of departures). Other reasons for leaving (45% of departures) mainly consist of end of fixed-term contracts and the disposal of Gulf Chemical and Eurotungstène, representing 283 employees.

DEPARTURES BY REGION (EXCLUDING TRANSFERS WITHIN THE GROUP)

	2015	2016	2017
France	381	570	592
Europe excluding France	151	206	85
Americas	177	419	140
Africa	232	495	208
Asia	129	603	29
Pacific	94	106	102
Total	1,169	2,399	1,156

BREAKDOWN OF DEPARTURES BY REASON IN 2017



6.7.3 LABOUR ORGANISATION

6.7.3.1 WORK TIME

The organisation of working time depends on the companies, the nature of their activities and their location and is defined in order to best meet the requirements of the activity and the wishes of the employees. Wherever it operates, the ERAMET group complies with legislation on working time regulations. As an indication, the working hours are:

- in Metropolitan France: 35 hours per week;
- in Norway: 37.5 hours per week;
- in New Caledonia: 38 hours per week;
- in China, Gabon, the United States, and Sweden: 40 hours per week over five days.

6.7.3.2 PART-TIME WORKERS

Part-time employment contracts exist in many countries where the Group operates. The number of staff covered by this modality represents 1.7% of the total number of staff.

As at 31 December 2017, 216 people were part-time, two-thirds of whom were women.

73% of part-time employees, or 158 people, work in France and they account for 3% of the total workforce in Metropolitan France.

6.7.3.3 ORGANISATION OF WORK

In 2017, **56%** of employees were enrolled on a daily basis, while **44%** were on posted schedules.

6.7.3.4 ABSENTEEISM (DATA FROM THE CSR SURVEY)

The reasons for absence taken into account here are random and unplanned absences, such as sickness, maternity, accidents at work, commuting and unjustified absences.

The average absenteeism rate for the Group was 2.7% in 2017. Of the 27 sites in France, eight have absenteeism rates below 1.5%, with the national average being 3.3%. For the rest of Europe, the average rate is 3.1% with variations from 0% to 5.8%. The Americas has a rate close to 1.6%. Africa has an average rate of 1.6%, as does Asia. The average rate observed in the Pacific region is 4.7%

6.7.4 A FAIR AND COMPETITIVE REMUNERATION POLICY

The skills and level of responsibility of the employees are remunerated by a fixed salary in line with the experience gained and the practices observed for each trade on the market. The Group's remuneration policy aims to be fair and competitive but also tailored to the specific local factors of host countries.

One out of two executives benefits from remuneration schemes based on quantitative and qualitative annual targets. The Group makes available a common framework for setting and assessing annual objectives.

Collective performance remuneration schemes may exist in certain countries, be they mandatory legal schemes (profit-sharing in France, etc.) or schemes voluntarily implemented by the Group in accordance with local practices (profit-sharing calculated in the light of the Company's results, collective savings plans). The profit-sharing plans are often based on negotiated criteria related to safety, environment and the activity of the Company. Depending on the arrangements in force, these premiums may be invested in saving schemes on advantageous terms.

We conduct pay scale analyses every year to ensure our remuneration packages are competitive relative to practices in other companies operating in the same sectors.

In each country in which the Group operates, the remuneration policy implemented aims to reward performance, while adapting to the local context.

6.7.4.1 PERSONNEL COSTS—SOCIAL COSTS (SOCIAL CONTRIBUTIONS)

Salaries represent the main part of staff remuneration.

In 2017, personnel costs for the ERAMET group amounted to €676 million, compared with €675 million in 2016.

More than 8,300 employees, or 65% of the workforce, benefited from a revaluation of their fixed salary in 2017, whether through a general increase or an individual merit-based increase.

6.7.4.2 SOCIAL BENEFITS

In line with the Group's agreements relating to the provision of insurance against major risks and the uncertainties of life, the ERAMET group wanted all of its employees in Metropolitan France to benefit from additional health insurance. In France, a new collective agreement was signed in December 2016 by all the organisations representing staff. This agreement ensures that social protection is brought into line with legislation on responsible contracts, but also improves the handling of certain expenses, such as pharmacy, dental implants, alternative medicine and laser eye surgery.

In the area of pension insurance, a new agreement was signed for France in June 2016. It provides for a 10% reduction in employee and employer contributions and a 10-month moratorium on contributions in view of the excellent results of the scheme, but also the improvement of the death benefits, the introduction of a "Caregiver Assistance" guarantee allowing the employees concerned to have access to a solution of listening, assistance and advice from professionals.

Provisions are set aside for retirement benefits, severance payments, medical coverage, pension plans and other commitments for active or retired employees in accordance with the conventions in force in each country.

The portion not covered by insurance companies or pension funds, in particular for US and Norwegian companies, is also provisioned (defined benefit plans in general). The specific commitments for these schemes are in the United States, Norway, New Caledonia and France. Other plans are defined contribution plans where employer contributions are recognised as an expense in the period for which they are related. The main quantitative assumptions used to calculate these commitments are detailed in the consolidated financial statements.

Finally, an additional pension plan (Article 39) for a group of managers is also fully funded. The estimated actuarial value of the plan for active beneficiaries is €41.2 million as at 31 December 2017.

6.7.4.3 EMPLOYEE STOCK OWNERSHIP PLAN

In order to build Group membership through the world where it operates, and share the created value, the ERAMET group has opted, since 2009, for the deployment of global bonus share plans. This programme, called EraShare, originally consisted of allocating 5 bonus shares to each of the Group's employees, regardless of the country of activity, division, occupation or level of responsibility.

Since July 2011, in France and Italy, and since July 2013 in other countries, employees benefit from all the rights attached to the ERAMET shares: voting and dividend rights. An information leaflet on EraShare was also prepared in the nine languages used within the Group to support the worldwide implementation of the plan.

Eight new bonus share plans were implemented from 2010 to 2017 with the same scope, and allowed the allocation of 2 additional shares each year to more than 12,000 employees.

6.7.4.4 EMPLOYEE INCENTIVE PLANS

In Metropolitan France and New Caledonia, profit-sharing agreements are regularly negotiated and signed with the social partners. They complement, where they exist, the regulations governing participation. The incentive is paid to members of staff with more than three months of service as at 31 December in an amount that is partly uniform and partly dependent on gross annual remuneration. In 2014, the Group's Human Resources management specified, in a framework memorandum, the three components that the ERAMET group wishes to find in the new agreements renewed from 2014 onwards:

- Group financial result, with a criterion common to all entities in France;
- financial result of the entity;
- operational criteria specific to the entity (safety criterion, service rate, reject rate, variation in WCR, etc.).

In 2017, the Group's companies in France paid the profit-sharing plan for the year 2016. A gross amount of €8.3 million was paid to the beneficiaries concerned (gross). SLN in New Caledonia has in turn paid over €2.6 million in profit-sharing to the employees concerned.

6.7.4.5 EMPLOYEE SAVINGS PLAN

In Metropolitan France and New Caledonia, ERAMET group employees can sign up to a Company Savings Plan to build up their savings. The Savings Plan may receive the incentive bonus, profit sharing, as well as voluntary payments made monthly or on a one-off basis by the employees. Group companies participate in the savings plan through a system of matching the sums paid by employees (the methods for paying the matching contribution vary from company to company).

A range of diversified FCPE (Corporate Mutual Funds) is offered to Group employees. A collective retirement scheme also exists in the form of a PERCO (Collective Retirement Savings Plan), into which the payments are paid.

At 31 December 2017, 6,907 employees and former employees of ERAMET in France were signed up for an Employee Savings Plan, with total assets representing roughly €91 million, or €13,000 per saver. Total assets are divided between the FCPE of the PEE/PEG (87% of the assets) and the PERCO (13%). In 2017, the Group's French companies paid approximately €3.3 million in contributions (gross value) to the Group Savings Plan (PEG) and the PERCO, or €752 per employee on average.

6.7.5 MEANINGFUL AND DYNAMIC SOCIAL DIALOGUE TO DEAL WITH PROFOUND ORGANISATIONAL CHANGES

6.7.5.1 SOCIAL DECLINATION OF THE ERAMET STRATEGY

In 2017, the strategy of the ERAMET group was socially marked by the practical consequences of restructuring plans and cost reduction, as in recent years.

However, the new strategic choices that have led to plans to sell and discontinue activities that have become non-strategic have accentuated the density of social relations.

Multiple, in-depth and didactic exchanges on strategic issues with the social partners in the organisations and countries concerned made it possible to explain the technical and strategic choices and their organisational impacts.

Moreover, in France, the Works Councils have been informed and consulted on the strategic directions, on the economic and financial situation and on the social situation of employment and working conditions, in accordance with recent changes to the Labour Law in relation to social dialogue.

6.7.5.2 ASSET DISPOSAL AND BUSINESS RESTRUCTURING PROJECTS

The proposed sale of ERACHEM, whose teams are present in France, Belgium, the USA, Mexico and China, gave rise to local informational meetings with American, Mexican, Belgian and French staff representatives, as well as at the central level with the European Works Council.

Moreover, in France, the Eurotungstène Works Council was openly associated with this business transfer project from the upstream phase of the process.

The same applied to the information-consultation procedure on the consolidation of the Aubert & Duval steelworks in Les Ancizes and the Firminy project, which was conducted in parallel with multi-month negotiations with a view to establishing an agreement defining all the social measures and methods of supporting the project signed on 26 October 2017 by the three trade union organisations in Aubert & Duval.

At a central level, the Group and European Works Councils were informed and had the opportunity to put their questions directly to the Group Chairman and the managers of the relevant divisions on the various divestment and restructuring projects mentioned above, as well as on the SLN performance plan.

6.7.5.3 THE ESTABLISHMENT OF A NEW ORGANISATION AT THE LEVEL OF THE MINING DIVISIONS

The social dialogue stages were key when bringing together the central functions of the Nickel and Manganese Divisions to develop operational synergies by promoting team cohesion and simplifying operating methods. The social partners were consulted on the objectives, the challenges, the target organisation and the implementation schedule and delivered their opinion in May 2017. As a follow-up to this new organisation and to promote a common working environment, the representative trade union organisations of ECM and ERAMET Nickel signed an agreement to come together under an Economic and Social Unit (ESU), allowing the implementation of a homogeneous social policy.

6.7.5.4 DYNAMIC UNION RELATIONS, SUCCESSFUL COLLECTIVE BARGAINING AND IMPACTFUL SOCIAL EVENTS

2017 saw rich social developments in France with the negotiation of the Macron orders, leaving more room for social dialogue, and more negotiation opportunities for companies. ERAMET's management and employee representatives have decided to engage in a concerted, lasting transformation of social dialogue.

At the level of each of our companies, Management and Staff Representatives have initiated discussions and even negotiations on topics that have recently emerged: Gender equality, Quality of life at work, Teleworking, etc. Some thirty ERAMET sites around the world signed new agreements in 2017. These mainly concern remuneration, profit sharing and participation, social benefits and working time.

SLN management and unions have worked together closely on the objectives and conditions for the implementation of the SLN 2020 competitiveness plan and have always maintained a constant dialogue. Work time projects and corporate reorganisations have a direct impact on SLN productivity and the achievement of expected gains. In this context, a central agreement was signed on the reorganisation of working time at mining centres.

Note should be made of the establishment of the Bureau of the Group Works Council to promote the liaison of Committee members between meetings and to strengthen discussions between representatives of Metropolitan France and those of New Caledonia.

In Metropolitan France, the conclusion of an agreement on the functioning of collective bargaining and the Group Trade Union coordinators in March 2017 helped to define and update the operating rules of social dialogue and relations between the Group's Management and the representative trade union organisations in Metropolitan France.

At the end of the year, another negotiation ended in agreement—the right to the disconnect, which proposes a system based on awareness-raising and prevention actions, in order to guarantee each employee the opportunity to exercise their right to disconnect.

6.7.6 EMPLOYEE DEVELOPMENT AND CAREER MANAGEMENT

6.7.6.1 CAREER MANAGEMENT PROCESS

The development of people is a key value of the Group, and the first theme of its HR Strategy.

The internal mobility and career development processes have, in fact, been strengthened in recent years as part of the restructuring and demobilisation of project teams, thus encouraging internal reclassifications.

The Group's Career and Mobility Development Charter defines the roles and responsibilities of each (employee, Manager and HR) so that the development and career paths of the Group's men and women can be promoted and encouraged within a clear, defined and shared framework, and with the help of tools and processes.

It places particular emphasis on promoting the initiative and the pro-activity of the employee in his or her own career development.

In order to optimally implement these career developments, management processes are set up and run throughout the year.

The Annual Appraisal Interviews make it possible to identify mobility objectives and to take them into account at both monthly HRD network meetings and during People Reviews. These framework reviews are organised at the level of sites, business units, entities or even countries. They allow the identification of the people to be developed, their potential, etc.

Other meetings are organised by profession (Technical Leadership or Business Committees) to review these development needs in a cross-functional way, to assess medium-term needs and available business resources by profession.

These exchanges are consolidated at the division level during the reviews of Division management, thus making it possible to approach the Annual Appraisal with concrete development elements to be submitted.

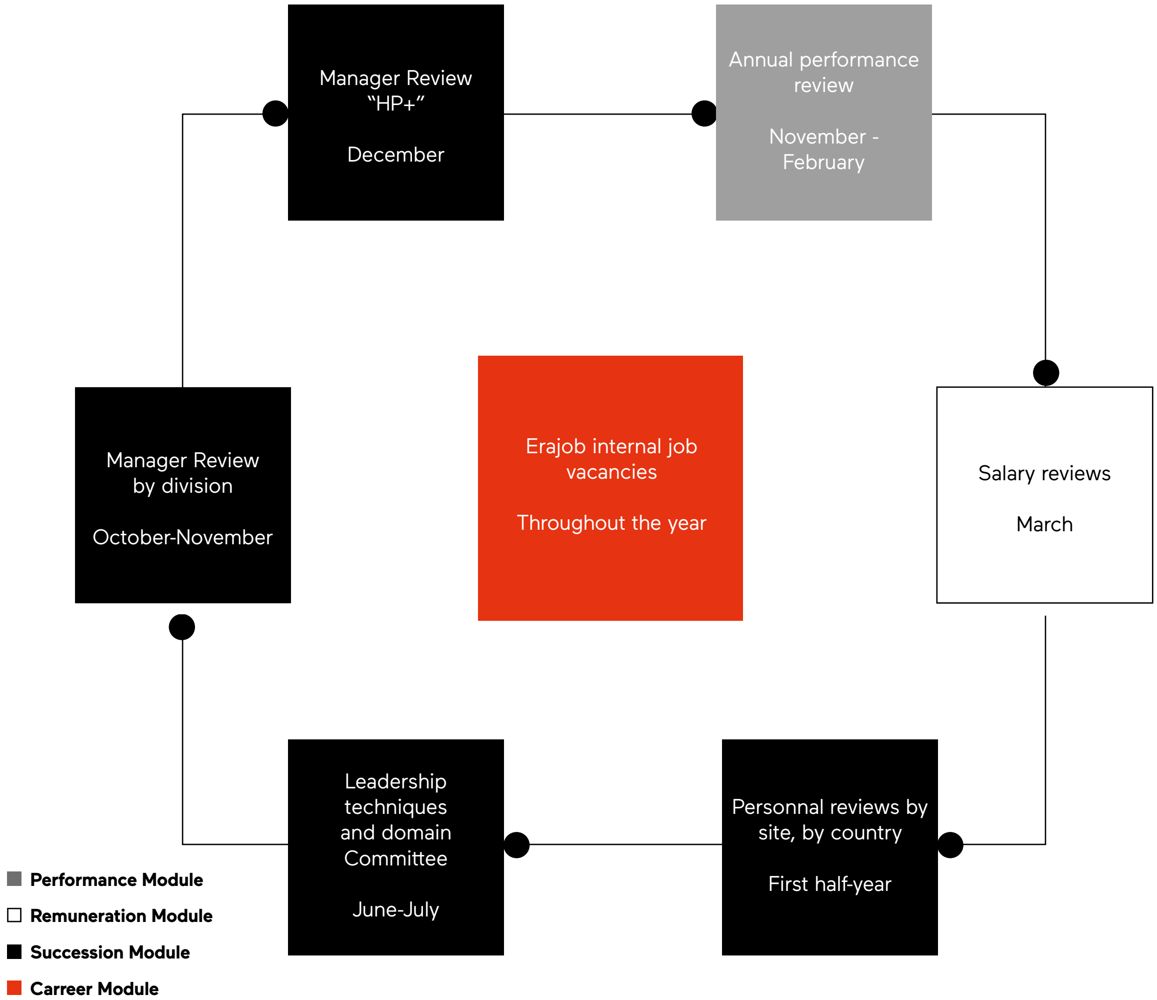
A review of senior executives and holders of key Group positions is performed regularly with the Executive Committee.

Reports are made and the Succession module of Talent@work is used to record these outlooks.

A review of succession plans for key positions in the organisation is carried out on the occasion of the Selection Committee or Remuneration Committee of the Boards of Directors of ERAMET or its subsidiaries.

Lastly, the Professional Interview (set up in the framework of the application of the Act of 5 March 2014 on vocational training, employment and social democracy—Article L. 6315-1 of the Labour Code) for all employees in Metropolitan France has been deployed since 2015. It is devoted to the prospects of professional development, in particular, in terms of qualification and employment. It focuses on the employee's career path, career development, and training needs.

THE HR PROCESS ARE INTEGRATED INTO TALENT@WORK



6.7.6.2 EVALUATION OF PERFORMANCE

Successful mobility or career development is the combination of three elements:

- performance;
- existence of an opportunity;
- willingness to demonstrate functional and/or geographical mobility.

As the cornerstone of operational improvement plans, performance is assessed individually in the context of Annual Appraisals based on objective evidence, with each assessment based on factual evidence.

In 2017, 3,667 employees, executives and non-executives benefited from an annual appraisal interview. Many sites have extended the benefit of this scheme to non-management staff.

Support for the Annual Appraisal Interview has been modified to take into account performance appraisal in the context of the performance of the position, the assessment of professional behavioural competencies and the achievement of objectives.

Following on from the desire to better monitor and evaluate performance, the implementation of this new format, led by a working group, as well as the objective monitoring module (Goal Management) allows the manager to evaluate the performance of his/her employees, to initiate actions with him/her to develop and to follow, throughout the year, the progress of the objectives set for the team, to adjust these if necessary, to use this tool for mid-year interviews, etc.

The now widespread use of the Annual Appraisal Interview form in Talent@Work means a significant improvement in access to information on expressed mobility wishes, better consideration of them in the career management and people review, and an optimised follow-up.

6.7.6.3 ERAJOB AND CAREER MODULE

Job vacancies are published on ERAJOB, the Group's job market and are also available via the HRIS Career module, now making it possible to apply online, to share job vacancies with others, to create alerts on specific positions, etc.

The Recruitment module, developed in HRIS, enables HR and managers in charge of recruitment, through internal or external mobility, to be able to follow the progress of the process, from the job description to filling the position.

To support Managers in their role as career managers, a training module on recruitment and mobility is available as part of IMaGE.

This module enables managers and HR staff to be trained in the same selection interview tools, to make their choices in an objective and transparent manner, to ensure quality feedback to internal and external candidates, and to educate their participants on the subject of non-discrimination.

Moreover, the use of a personality test by appropriately trained and authorised personnel within the HR teams makes it possible to complete candidate evaluations in the context of recruitments or certain mobilities.

6.7.7 TRAINING

IMaGE (ERAMET group Management Institute) designs training courses for Group employees:

- to facilitate their integration by giving them the keys to understanding the organisation and management processes of the Group;
- to develop their skills by giving them access to business and management programmes;
- to promote exchanges of best practices among participants;
- to build development paths.

Integrate, improve know-how, raise awareness of specific risks, share experience and best practices, develop cross-functionality at the Group level, foster the deployment of managerial methods, further strengthen the Group's expertise and technical leadership; these are the points of the training programmes and of the training effort initiated by the Group, each year, at all its sites and locations.

Programmes designed to improve executives' managerial skills ("Fundamentals of Management" and "Performance Driven") are part of a broader managerial training path that also integrates key competencies in Safety, Project Management, Change Management, Continuous Performance Improvement or Communication.

In the field of vocational training for its employees, the ERAMET group also gives priority to safety training and also to business skill development aimed, in particular, at providing better control of processes and their environment.

In 2017, IMaGE (ERAMET group Management Institute) provided close to **7,600 training hours.** About 1,000 employees followed the various programmes. This institute now offers a body of 47 training courses designed to integrate and develop our employees.

The development programme for Group executives started in 2015 and continued in 2016 with the third promotion. ERAMET Executive Development Program is a 12-day programme given in English, developed in partnership with Duke Corporate Education, designed to strengthen the leadership of the participants and prepare them for their advancement within the Group. This third promotion, after the first session in Paris in 2015 (five days of academic contributions), had its "Learning Trip" in India (seven days) in 2016.

New training modules were published in 2017 (such as the programme on the Ethics Charter and the e-learning pilot in the area of management training) and have been added to the IMaGE training catalogue. With regard to training on the Ethics Charter, for example, aimed at all Group managers and "sensitive" staff, the course was taken by more than 2,200 employees in 2017, with a completion rate of 90%.

Emphasis was placed on the digitalisation of the training offer ("blended" learning, e-learning, training via videoconference, etc.) to reach a rate of 25% of total training offered.

Overall, in 2017, ERAMET employees received more than 374,000 training hours, approximately 30 hours per employee for the year. Almost 8,600 employees, or 68% of the total workforce, benefited from training in 2017 (compared to 302,236 hours in 2016, which corresponded to 24 hours per employee, with almost 8,700 employees trained last year).

6.7.8 EQUAL OPPORTUNITIES—MEASURES TO PROMOTE NON-DISCRIMINATION AND PROMOTE DIVERSITY

6.7.8.1 RESPECT FOR GENDER EQUALITY

Women now account for 16% of the total workforce of the Group, specifically: 8% of operators, 24% of supervisors, technicians and employees, and 22% of management.

% of women in the total workforce	16%
% of women in management	22%
% of women in 2017 permanent recruitments	21%
% of women in 2017 permanent management recruitments	33%

All of the Group's entities are mobilising to take action to promote the employment of women, including in jobs traditionally held by a workforce that tended to be male.

Efforts are thus being made locally to promote the technical professions to secondary school pupils and students, to adapt facilities to accommodate female staff (changing rooms and social areas set up, for example, in 2016 at Aubert & Duval Imphy and Issoire and at COMILOG Dunkerque) and to promote the provisions set out in the collective agreements for gender equality signed for numerous sites in Metropolitan France (agreements or specific action plans implemented or renewed in 2016 for ERAMET COMILOG Manganese, Erasteel Commentry and COMILOG Dunkerque). The Alloys division is also working to recruit women in machining trades.

Discrimination prevention is also being addressed in the United States, for example, on the ERAMET Marietta Inc. site, on the occasion of an annual anti-harassment awareness training course.

In Gabon, during the recruitment campaign for the new CMM industrial facilities, an effort was made to recruit women, who represent almost 25% of this unit's workforce.

6.7.8.2 WORK/LIFE BALANCE

The Group has continued the effort devoted over the last five years to raising awareness among teams of Psycho-Social Risks within the framework of the ZEPHYR Programme, in Metropolitan France.

Attention is also being given to this subject at the Annual Appraisal Interview. Indeed, part of the exchange between the employee and his/her chain of command is devoted, at this important annual meeting, to the organisation of work, the workload and work-life balance.

In this area too, the Group promotes a number of local initiatives of a different nature but intended to promote this necessary balance: a listening service has been in place since 2013 at the Group's head office, provided on a monthly basis by an occupational psychologist, and a network of "prevention specialists" has also been established, sabbatical leave was granted to employees wishing to get involved in a personal project, teleworking measures were granted to employees facing personal difficulties or as part of a pilot experiment in 2017 at the Group's head office, and measures favouring parenthood were also put in place at certain sites: organisation of working time, allocation of CESU cheques (Cheques for Universal Employment Services) for the employment of domestic help (child care, tutoring, housework, etc.), inter-company nursery for ERAMET Sandouville and ERAMET Research, concierge at the Les Ancizes site. The entities of the TMM site also organised workshops in 2017 on the theme of quality of life at work, led by professionals (nutrition, sleep, sophrology, etc.).

In 2017, the Group also negotiated an agreement with the social partners on the right to disconnect, which proposes a system based on awareness-raising and prevention actions, in order to guarantee each employee the opportunity to exercise their right to disconnect.

6.7.8.3 EMPLOYMENT AND INTEGRATION OF PERSONS WITH DISABILITIES

The ERAMET group is paying attention to the employment and integration of people with disabilities.

The Group has 245 employees with disabilities (data from the CSR survey). This count is probably underestimated, as the regulations of certain states do not permit the accounting of employees with disabilities.

On most Group sites, different actions are undertaken to promote the employment of people with disabilities: adaptation of premises, access ways and workstations, awareness campaigns, financing of hearing aids, contributing to organisations or associations dedicated to helping people with disabilities, and the two days a month presence at the Les Ancizes site (Aubert & Duval) of a firm to support employees with disabilities in maintaining their employment.

Subcontracting activities are also carried out by work centres or associations employing persons with disabilities. The accessibility of the premises is also a topic discussed at many of the Group's sites.

Each year, the Handicap Mission, composed of representatives of the entities in Paris and Trappes (ERAMET TMM (Holding and Nickel), ECM, Erasteel, Aubert & Duval, ERAMET Research, ERAMET Engineering, ERAMET International) organises various awareness raising events during the "Employment for Disabled People Week". In 2017, the HR departments of Paris and Trappes, in collaboration with the members of the IC-HSCT and in association with the Association for the Social and Professional Inclusion of People with Disabilities (ADAPT), organised events to raise employee awareness about disabilities and took steps to promote recognition of the quality of disabled workers.

The Handicap Mission of the ERAMET group entities based in Paris (Tour Maine Montparnasse) and Trappes complies with the provisions of the Act of 11 February 2005 on Equal Rights and Opportunities, Participation and Citizenship. It was created in 2012 with the aim of raising the Group's employees' awareness of disabilities. It is comprised of representatives of different departments, within each entity (Health/Safety, HR, Communication, etc.). Among its objectives, it aims to develop relevant partnerships with companies in the adapted sector (food services and meal trays, flower decorations, etc.).

The ERAMET group is a partner of the *officiel du handicap*, an organisation made up of public and private players committed to promoting better integration of people with disabilities in France (employment, subcontracting, accessibility, technology, etc.).

During the creation of ERAMET Services (Shared Services Centre) based in Clermont-Ferrand, ERAMET paid attention to people with disabilities in the context of recruitment.

6.7.8.4 EMPLOYMENT OF YOUTH AND SENIORS

Having signed an action plan in France for the Generation Contract, the Group's management is committed to developing intergenerational synergies. This plan is especially marked by the desire to integrate and advance youth and enhance and sustain the experience of older workers. Across the Group as a whole, 38 people aged 10 years younger than the statutory retirement age were recruited on a permanent or fixed-term contract.

In 2017, the Group welcomed more than 1,165 young people on a work-study contract (apprenticeship or professionalization) or an internship.

Since 2013, ERAMET has been involved with 60 major groups, and within the framework of the AFEP (French Association of Private Enterprises), for the employment of young people. The Group is a signatory to an initiative called *"Jeunes et Entreprises"* ("Young People and Companies").

ERAMET is also very much involved at both national and local levels in developing relationships with education. This has resulted in various actions and partnerships: in particular, there will be a large number of visits to 35 of the Group's entities, which in 2017 welcomed pupils from local secondary schools, students from local universities or grandes écoles, teachers and professors.

In order to promote its activities and businesses, the Aubert & Duval Les Ancizes site carried out communication and awareness-raising activities with schoolchildren, job search organisations and jobseekers.

The site opened its doors on Monday, 20 March 2017 to allow the local mission and

AFPI training centre (centre specialised in industry) to visit the cold loop forge workshop. Also with the aim of promoting its business, the site visited two institutions, the Lafayette secondary school in Clermont-Ferrand and the AFPI during its open day. Finally, the Les Ancizes site was able to hold discussions with potential candidates during a job dating event held on Wednesday, 22 March in Clermont-Ferrand.

With a strong commitment from the Trappes research centre (ERAMET Research) and its teams, ERAMET participates in numerous forums for schools in Metropolitan France or in its countries of operation. This is an opportunity to introduce the Group and its businesses, to exchange ideas with young people and to advise them on their career directions. Many of the Group's employees also volunteer, for the most part in teaching courses, to present the Company or to deliver specialised technical courses. Some of these experts are also involved in school guidance councils or their board of governors. Scientific exchanges are also carried out on certain projects with the laboratories of grandes écoles or universities, and teachers.

The Group is also very involved in partnering with grandes écoles through the payment of grants (graduation trips, etc.) and the apprenticeship tax, in particular for the National Chemical Engineering Institute in Paris (Chimie ParisTech), the National School of Geology (ENSG), the School of Mines in Alès (Geology), the Mines ParisTech (ENSMP Soil and subsoil specialisation), the Central School of Paris (Energy specialisation), etc.

SLN ensures a partnership with the preparatory classes of the Jules-Garnier secondary school in Noumea. The SLN competitive exam proves valuable for the young New Caledonians who end up continuing their scientific studies in Metropolitan France.

6.7.8.5 COMPLIANCE WITH THE FUNDAMENTAL CONVENTIONS OF THE INTERNATIONAL LABOUR ORGANISATION AND HUMAN RIGHTS

ERAMET complies with the applicable regulations in the countries where the Group operates.

As the Group points out in the Ethics Charter, ERAMET respects the international standards of the International Labour Organisation and, more generally, complies with the principles of international law relating to human rights. In particular, the Group refrains from using any form of forced labour or child labour, either directly or through its suppliers or partners, and respects the right of association.

The Group also ensures fair treatment of all its employees in terms of professional equality by fighting against discrimination at work, ensures the integrity of those present at each site, and respects the moral integrity of each employee. The Group ensures the quality of human relations within work teams. In particular, it engages in the fight against all forms of violence and helps promote respect for others and fellowship in working relations.

During the annual feedback to the Group's sites on extra-financial items, the Group's various sites are asked whether they comply with the provisions relating to the fundamental ILO Conventions (freedom of association or the right to collective bargaining, the abolition of child labour, the fight against illegal work, the elimination of discrimination at work) and it is important to note the excellent feedback (95% positive replies out of 59 sites surveyed in 2017) demonstrating the attention paid to this subject.

Following the dissemination of the Group's new Ethics Charter in 2015, a programme of various actions aimed at increasing awareness among the various internal and external stakeholders was conducted under the guidance of the Group's Ethics Officer and the Monitoring Committee. Thus, an e-learning programme was designed and deployed throughout the Group in 2017.

6.8 METHODOLOGICAL NOTE

6.8.1 BENCHMARK INDICATORS

The purpose of Chapter 6 is to inform stakeholders about ERAMET's actions in relation to CSR. The indicator framework used for this purpose has been designed to provide the most accurate picture of the significant issues facing the Group given its activities. It firstly includes the list of information required by Article R. 225-101-1 of the French Commercial Code. In addition, and in order to report on monitoring of implementation of the Group's policies and its performance, other indicators were chosen based on those proposed by the Global Reporting Initiative's framework and its variant specific to the Mines & Metallurgy sector.

6.8.2 SCOPE OF REPORTING

The scope of non-financial reporting evolved considerably compared to 2016, following the disposals of ERACHEM, Gulf Chemical & Metallurgical Corporation (GCMC) and Eurotungstène at the end of 2016 or in early 2017. These activities contribute to the consolidated safety and social indicators up to the date of their sale or closure, and are excluded for the whole of 2017 from environmental reporting.

Note the entry into scope in 2017 of the EcoTitanium site (France) for HR, Environment and Social reporting, which started operations in the year under review.

The Squad site (India) whose consolidation is recent will be included in the reporting for 2018.

The non-financial reporting of the ERAMET group covers:

- for the Social and Societal part (information provided in section 6.3): all companies consolidated from an accounting point of view (full consolidation), and also those accounted for by the equity method, as well as the following additional companies: TiZir London, Sodepal, ERAMET Alloys UK, Erasteel GMBH and Erasteel India, representing 67 employees. The new businesses acquired on 1 September 2017 under the name Erasteel Innovative Materials have not yet been included in some of the indicators identified under the heading CSR data. The company scope does not include commercial or administrative offices, nor the sites of Guillin (China) which has stopped operations, Bolingbrook (USA) and Erasteel India (distribution sites);
- for its Safety part: all companies consolidated under accounting standards (global consolidation), and those accounted for under the equity method, as well as the companies EcoTitanium and Sodepal, but with the exception of commercial offices (which represent less than 1% of the Group's workforce). Recent entities in the Group (acquisitions, new projects) may be excluded from the scope of consolidation if their reporting is unreliable or if the project does not yet represent a significant Group activity (for 2017: Maboumine, representing less than 1% of the total workforce). For China, the reporting includes new businesses acquired on 1 September 2017 under the name Erasteel Innovative Materials (EIML);
- for its Environment and Energy part: all of the Group's sites as long as these sites meet the following criteria:
  - ERAMET has a control percentage in the financial sense of at least 40%;
  - Sites are subject to environmental regulations (permit, code, national regulations).

  On this basis, it does not apply to sites:

  - whose activity is solely administrative (ex: commercial offices);
  - in project or closure phase, where no commercial production is carried out (seven entities);
  - since 2016, to the sites whose activity is limited to distribution, it being understood that their cumulative impact is less than 0.1% of the Group total in relation to the main indicators concerned (six sites whose characteristic of non-significant impact is monitored);
  - for this year, the sites AD Irun (Spain) and EIML (China) which were consolidated in 2017.

  To better reflect changes in intrinsic environmental performance, the main environmental indicators are presented, including for previous years, according to the new scope. As a result, data from previous years (2015 and 2016) presented in this document is not that reported in previous non-financial reports.

The following table summarises the entities covered by the various reporting areas.

COUNTRY	LEGAL ENTITIES	SITES	AREAS DATA SOCIAL	AREAS SAFETY	ENVIRONMENT— ENERGY SCOPE	SOCIETAL
Germany	Aubert & Duval Special Steels GmbH—Stahlschmitt & AD Deutschland	Mönchengladbach	x	x		x
	ERAMET International	Frankfurt	x			
Argentina	Eramine Sudamerica	Salta	x	x		x
Brazil	ERAMET Latin America	Sao Paulo	x			
China	Aubert & Duval Moulds & Die Technology (ADMDT)	Wuxi	x	x		x
	Erasteel Trading Co. Ltd Erasteel Innovative Materials	Tianjin	x	x		
	COMILOG Far East Development (CFED)	Hong Kong	x			
	ERAMET China Guilin COMILOG Ferro Alloys Ltd	Guilin	x	x		
	ERAMET COMILOG Shanghai Trading (ECST) & ERAMET COMILOG Shanghai Consultancy Services (ECSCS)	Shanghai	x			x
Korea	ERAMET International	Seoul	x			
Spain	Aubert & Duval	Irun	x	x		x
United States	Erasteel Inc	Boonton	x	x	x	x
		Bolingbrook	x	x		
	ERAMET North America	Pittsburgh	x			
	ERAMET Marietta	Marietta	x	x	x	x
	Aubert & Duval USA	Charlotte	x			
France	EcoTitanium		x	x	x	x
	Aubert & Duval	Les Ancizes	x	x	x	x
		Clermont-Ferrand La Pardieu	x	x		x
		Issoire	x	x	x	x
		Heyrieux	x	x		x
		Imphy	x	x	x	x
		Pamiers	x	x	x	x
		Firminy	x	x	x	x
	Aubert & Duval TAF	Gennevilliers	x	x	x	x
	Brown Europe	Lava-de-Cère	x	x	x	x
	Construction of metal moulds (CMM)	Landévant	x	x		x
	Aubert & Duval TMM	Paris	x	x		
	Erasteel	Commentry	x	x	x	x
		Champagnole	x	x	x	x
		Paris & Chalon	x	x		
	Forges de Monplaisir	Saint-Priest	x	x	x	x
	Interforge	Issoire	x	x	x	x
	UKAD	Les Ancizes	x	x	x	
	ERAMET Holding	Paris and Trappes	x	x		
	ERAMET Engineering	Trappes	x	x		
	ERAMET Research	Trappes	x	x	x	x
	COMILOG Dunkerque	Dunkerque	x	x	x	x
	ERAMET COMILOG Manganese	Paris and Trappes	x	x		
	COMILOG International	Paris	x			
	ERAMET Sandouville	Sandouville	x	x	x	x
	ERAMET Nickel	Paris and Trappes	x	x		

COUNTRY	LEGAL ENTITIES	SITES	AREAS DATA SOCIAL	AREAS SAFETY	ENVIRONMENT—ENERGY SCOPE	SOCIETAL
	ERAMET Services	Clermont-Ferrand	x	X (until 01/04/2017)		
Gabon	COMILOG S.A.	Moanda Complexe C2M	x	x	x	x
		Moanda Complexe CIM	x	x	x	x
		Owendo Mineral Port	x	x	x	x
		Moanda Mine	x	x	x	x
	SETRAG	Owendo	x	x	x	x
	Sodepal	Bakoumba		x		x
India	ERAMET India Private Limited	Mumbai	x	x		
	Erasteel India	Mumbai	x			
Indonesia	Pt Weda Bay Nickel	Jakarta, Halmahera	x	x		x
Italy	Aubert & Duval ADES ACCIAI	Ferrara	x	x		x
	ERAMET International	Trezzano	x			
Japan	ERAMET International	Tokyo	x			
Norway	ERAMET Norway	Kvinesdal	x	x	x	x
		Sauda	x	x	x	x
		Porsgrunn	x	x	x	x
	TiZir Titanium & Iron (TTI)	Tyssedal	x	x	x	x
	Eralloys Holding		x			
New Caledonia	SLN	Nouméa (Doniambo)	x	x	x	x
		Kouaoua	x	x	x	x
		Népoui	x	x	x	x
		Poum	x	x	x	x
		Tiébaghi	x	x	x	x
		Thio	x	x	x	x
United Kingdom	ERAMET Alloys UK	Sheffield	x			
	Erasteel Stubs	Warrington	x	x	x	x
	TiZir Ltd	London	x			
Senegal	Grande Côte Opérations—TiZir	Diogo	x	x	x	x
Sweden	Erasteel Kloster	Söderfors	x	x	x	x
		Långshyttan	x	x	x	x
		Vikmanshyttan	x	x	x	x
Taiwan	ERAMET International	Taipei	x			

6.8.3 COLLECTION, CONSOLIDATION AND CONTROL OF DATA

Social reporting (including safety reporting) is based on the dedicated Era-Link acquisition and consolidation tool and on a qualitative questionnaire, sent in parallel, to the entities concerned (which also enables feedback on the societal commitment of the sites). Comparing the figures from these two tools for some common indicators allows for data verification.

The procedure "Safety and Information Reporting in case of personal accident" is the reference in terms of safety reporting. The applicable version was revised in 2016.

Data relating to occupational accidents are cross-checked with the monthly declarations made by the sites to the Directorate of Prevention and Safety via the Group's HSSE SharePoint.

The process of environmental and energy reporting is subject to a procedure that was updated in 2016, which clearly defines the responsibilities and operating procedures.

Environmental and energy reporting is based on a dedicated information system, called EraGreen, deployed at all relevant sites since 2011. All the quantitative information provided in this report (environmental indicators) is extracted from EraGreen and comes exclusively from the data entered by each of the Group's sites and validated by each site manager.

EraGreen contains systems for checking data automatically through comparison with previous years. In addition, the annual reports of EraGreen sites are systematically checked for consistency by experts from Division or Group departments.

6.8.4 SPECIFIC POINTS AND METHODOLOGICAL LIMITATIONS

- Since 2015, the frequency rates(1) and severity rates(2) of occupational accidents are calculated by including temporary workers in the workforce.
- Due to planning constraints, some monthly environmental data may not be available for the last month of the year. In this case, the missing data is estimated as accurately as possible, based on the historical site data and correlated, where appropriate, to production, in accordance with the Group's standards.
- When an environmental measure is deemed to be faulty or is unavailable, an estimate based on historical ratios is used, adjusted according to the level of production of the site. This situation may arise in particular for nitrogen oxides (NOx) and channelled dust parameters, for which the quantities reported are based on a limited number of measurements during the year.
- Waste: the waste is reported in the environmental reporting by the sites according to the national regulations applicable to them. The reported quantities correspond to the quantities of waste discharged into the treatment systems during the year. The criteria that lead to the identification of hazardous or non-hazardous waste are variable according to the regulations of the different countries, so the reporting cannot be completely homogeneous in this respect.
- Water consumption: the quantities of seawater used for the cooling of the thermal power plant and for the granulation of SLN slag (New Caledonia), and water used for the cooling of the facilities at the Marietta site (USA) are not accounted for as the water is directly returned to the natural environment without undergoing transformation.
- Greenhouse gas emissions: reporting is done in accordance with the rules of the GHG Protocol (WRI). The emission factors used are those most recently published by ADEME (in its Carbon Base), and by the International Energy Agency for electricity.
- Enrolled workforce: employees with a contract of employment with the Company (fixed-term contract "CDD", permanent contract "CDI") and entered in the personnel records on the last day of the period concerned. This information corresponds to the number of people regardless of their working time (full or part time). Each employee is counted as 1.

(1) The **frequency rate** of workplace accidents is the number of accidents that take place at work, occurring during a given period, in relation to one million hours worked.
FR = (number of occupational accidents x 1,000,000)/number of hours worked.

(2) The **severity rate** of workplace accidents is the number of calendar days not worked after an occupational accident, occurring during a given period, based on one thousand hours worked.
TG = (number of days not worked due to occupational accident x 1,000)/number of hours worked.

6.9 REPORT BY ONE OF THE STATUTORY AUDITORS, APPOINTED AS INDEPENDENT THIRD PARTY, ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION INCLUDED IN THE MANAGEMENT REPORT

For the year ended 31 December 2017

This is a free English translation of the Statutory Auditors' report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditor of ERAMET S.A. company, (hereinafter named the "Company"), appointed as independent third party and certified by COFRAC under No. 3-1049[1], we hereby report to you on the consolidated human resources, environmental and social information for the year ended 31 December 2017, included in the management report (hereinafter named "CSR Information"), pursuant to Article L. 225-102-1 of the French Commercial Code *(Code de commerce)*.

COMPANY'S RESPONSIBILITY

The Board of Directors is responsible for preparing a Company's management report including the CSR Information required by Article R. 225-105-1 of the French Commercial Code in accordance with the procedures used by the Company (hereinafter the "Guidelines"), summarised in the management report and available on request from the Company's head office.

INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by regulatory texts, the French Code of ethics *(Code de déontologie)* of our profession and the requirements of article L. 822-11-3 of the French Commercial Code. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements and applicable legal and regulatory requirements.

STATUTORY AUDITOR'S RESPONSIBILITY

On the basis of our work, our responsibility is to:

- attest that the required CSR Information is included in the management report or, in the event of non-disclosure of a part or all of the CSR Information, that an explanation is provided in accordance with the third paragraph of Article R. 225-105 of the French Commercial Code (Attestation regarding the completeness of CSR Information);
- express a limited assurance conclusion that the CSR Information taken as a whole is, in all material respects, fairly presented in accordance with the Guidelines (Conclusion on the fairness of CSR Information).

However, it is not our responsibility to pronounce on the compliance with the relevant legal provisions applicable if necessary, in particular those envisaged by article L. 225-102-4 of the French Commercial Code (Duty of care) and by the law No. 2016-1691 of 9 December 2016 known as Sapin II (fight against corruption).

(1) "whose scope is available at www.cofrac.fr".

Our work involved five persons and was conducted between September 2017 and February 2018 during a five weeks period. We were assisted in our work by our CSR experts.

We performed our work in accordance with the order dated 13 May 2013 defining the conditions under which the independent third party performs its engagement and with the professional guidance issued by the French Institute of Statutory Auditors *(Compagnie nationale des commissaires aux comptes)* relating to this engagement and with ISAE 3000[2] concerning our conclusion on the fairness of CSR Information.

1. ATTESTATION REGARDING THE COMPLETENESS OF CSR INFORMATION

NATURE AND SCOPE OF OUR WORK

On the basis of interviews with the individuals in charge of the relevant departments, we obtained an understanding of the Company's sustainability strategy regarding human resources and environmental impacts of its activities and its social commitments and, where applicable, any actions or programmes arising from them.

We compared the CSR Information presented in the management report with the list provided in Article R. 225-105-1 of the French Commercial Code.

For any consolidated information that is not disclosed, we verified that explanations were provided in accordance with Article R. 225-105, paragraph 3 of the French Commercial Code.

We verified that the CSR Information covers the scope of consolidation, i.e., the Company, its subsidiaries as defined by Article L. 233-1 and the controlled entities as defined by Article L. 233-3 of the French Commercial Code within the limitations set out in the methodological note, presented in Section 6.8 of the management report.

CONCLUSION

Based on the work performed and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report.

2. CONCLUSION ON THE FAIRNESS OF CSR INFORMATION

NATURE AND SCOPE OF OUR WORK

We conducted ten interviews with the persons responsible for preparing the CSR Information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate;
- verify the implementation of data-collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and procedures based on the nature and importance of the CSR Information with respect to the characteristics of the Company, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

(2) ISAE 3000—Assurance engagements other than audits or reviews of historical financial information.

Regarding the CSR Information that we considered to be the most important[3]:

- at parent entity level, we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions), performed analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the management report;
- at the level of a representative sample of sites selected by us[4] on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied and to identify potential undisclosed data, and we performed tests of details, using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents 22% of headcount considered as material data of social issues and between 14% and 29% of environmental data considered as material data[5] of environmental issues.

For the remaining consolidated CSR Information, we assessed its consistency based on our understanding of the Company.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part.

We believe that the sampling methods and sample sizes we have used, based on our professional judgement, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

CONCLUSION

Based on the work performed, no material misstatement has come to our attention that causes us to believe that the CSR Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

Free translation for information purposes. The original French version of this report has been signed. Please refer to the French version of this registration document for signature

(3) Quantitative social information: Workforce on 31 December 2017, Workforce by type of employment contract, Workforce by socio professional category, New recruits, Departures, Number of resignations, Number of dismissals, Percentage of women in managerial positions, Number of training hours held during the exercise, Lost time injury frequency rate, Accident severity rate.

Quantitative environmental information: Energy consumption, CO_2 emission related to energy, Total canalised dust, Chemical oxygen demand (COD), Quantity of hazardous waste, Total water consumption.

Qualitative information: Occupational health and safety conditions, Organization of social dialogue including information procedures, consultation and negotiation with the employees, Summary of collective agreements, The organization of the Company to integrate environmental issues and, if appropriate, the assessments and certification process regarding environmental issues, Resources allocated to prevention of environmental risks and pollution, Consumption of raw materials and measures implemented to improve efficiency in their use, Adaptation to consequences of climate change, Significant greenhouse gas emissions items generated as a result of the Group's activity by the use of goods and services they provide, Measures implemented to protect and conserve the biodiversity, Conditions of the dialogue with stakeholders, Action implemented against corruption, Importance of subcontracting and consideration, in the relationship with the subcontractors and suppliers of their social and environmental responsibility.

(4) SLN Doniambo (New Caledonia), Grande Côte Opérations (Senegal).

(5) Energy consumption, Total water consumption, Quantity of hazardous waste.

7

REMUNERATION OF THE MANAGEMENT AND ADMINISTRATION BODIES

7.1 REMUNERATION POLICY FOR EXECUTIVE CORPORATE OFFICERS

The remuneration of executive corporate officers is set annually by the Board of Directors at the recommendation of the Remuneration Committee. The remuneration of each executive corporate officer is broken down into a fixed portion and a variable portion. The objectives of executive corporate officers are determined by the Remuneration Committee and submitted to the Board of Directors for approval.

The remuneration policy for executive corporate officers established by the Board of Directors is based on the following elements:

- Remuneration is composed of a fixed portion and a variable portion, decided annually by the Board on the basis of recommendations by the Remuneration Committee, which are based in particular on market practices and a survey of the remuneration of corporate officers of companies with a comparable turnover and market capitalisation to that of the Group. The fixed portion of Patrick Buffet's remuneration has remained unchanged since 1 January 2013; it has been paid *pro rata temporis* until 23 May 2017. The fixed remuneration of C. Bories was defined as part of her corporate officer contract in respect of her appointment as Deputy CEO on 23 February 2017, and then as Chairman and Chief Executive Officer on 23 May 2017.

  The annual variable remuneration of the Chairman and Chief Executive Officer is determined as follows:

  - 60% based on quantitative objectives relating to safety and working conditions and economic performance: current operating income and operating cash flow;
  - 40% based on qualitative objectives.

  This annual variable remuneration structure is applied to Group executives.

  For quantitative safety and economic performance objectives, the weighting is as follows:

  - 10% on Safety (accident frequency rate);
  - 50% on the Group's financial results.

  The objectives achieved (100%) correspond to the budget figures.

  If the net income attributable to the Group for the year in question is negative, a reduction of 50% will be applied to the amount of the variable portion due under the economic performance objective.

  The qualitative objectives are determined by the Board of Directors, on the recommendation of the Compensation and Governance Committee; they cover strategic, business and managerial issues specific to the upcoming financial year. They may include the implementation of strategic orientations validated by the Board of Directors, major industrial and commercial developments and programmes, actions of organisations and management, and achievements that are part of the Group's commitment to corporate social responsibility (CSR) and sustainable development. These are not routine tasks, but specific actions on which the Board expects to see specific performance.

  The target-based annual variable portion is set at 100% of gross annual fixed remuneration and can vary from 0% to 150% of gross annual fixed remuneration depending on the level of achievement of the various objectives, with 100% of the fixed rate corresponding to 100% of the objectives achieved. It may not exceed 150% of gross annual fixed remuneration. The variable portion for objectives achieved and the maximum variable portion are reviewed each year by the Remuneration Committee in relation to market practice, as part of remuneration surveys conducted annually.

- Full details are set out in the section on remuneration items falling due or granted to each executive corporate officer of the Company for the financial year ended and submitted to a vote at the General Shareholders' Meeting.

  In 2017, for Patrick Buffet the variable portion was based on four objectives whose selection and weighting were proposed by the Remuneration Committee and approved by the Board of Directors on 20 March 2017. These objectives were, until 23 May 2017, based on full-year 2017 results:

  (i) improving the cash-cost of SLN;

  (ii) the Company's financial position (current operating income and net cash);

  (iii) safety results (accident frequency rate);

  (iv) "managerial" results linked to the transition period from 23 February 2017 to 23 May 2017 to ensure a smooth handover to the Deputy CEO.

  The level of accomplishment required, for each of these criteria, is precisely established at the start of the financial year but cannot be disclosed to the general public for reasons related to trade secrets and confidentiality.

  The variable portion may not exceed 140% of gross annual fixed remuneration for the Chairman and CEO.

  In 2017, the portion related to quantitative objectives represented 60% of maximum annual variable remuneration.

- In addition, in respect of stock-based compensation plans, executive corporate officers may benefit from performance share plans or share subscription or purchase option plans, the terms and conditions of which are decided upon by the Board of Directors, at the recommendation of the Remuneration Committee. Since the Board meeting of 23 July 2007, executive corporate officers are required to retain 20% of shares acquired under performance share plans throughout their entire term of office. Share grants are awarded annually at the same time of year and are not discounted. Since these concern existing shares as opposed to new shares, there is no share dilution. With regard to the dilution of voting rights, the allocation of existing shares only has a marginal impact, given the composition of ERAMET's equity, on one hand, and the selectivity of the criteria established for these plans, on the other. The share plan regulations prohibit hedging operations and executive corporate officers give a formal undertaking in this respect. In 2017, Patrick Buffet, Chairman and CEO, did not receive any performance shares until 23 May 2017; a total of 12,500 performance shares, in the form of existing shares, all conditional upon the fulfilment of specific performance conditions, were granted to Christel Bories, Chairman and CEO as of 23 May 2017. The performance conditions are calculated over a three-year period, as follows: the relative performance of ERAMET shares for one-third of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel of around sixty comparable companies from two industry panels, namely “diversified metals and mining” and “steel”, and the Euromoney Mining Index, with the performance conditions being fully achieved if the ERAMET share is ranked among the top 15% of the panel) and the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for two-thirds of the share grant (50% of the current operating income and 50% of the operating cash-flow from operating activities, the annual objectives referring to the Company’s budgetary targets, with no adjustment but excluding exogenous tax or policy factors and excluding any other item submitted by Management, as determined by the Remuneration Committee, with performance conditions only being fully achieved when these targets are significantly out-performed). No share subscription or purchase options were granted during the financial year to these same beneficiaries.

- Up until 23 May 2017, executive corporate officers were eligible for the existing defined benefit supplementary pension plan for ERAMET executives, with new arrangements applicable as from 1 July 2008. In the event of settlement of their pension rights vis-à-vis social security, they may be entitled to a supplementary pension that may not exceed 35% of the reference salary defined in the plan's internal regulations, with said reference salary being capped, in the same regulations, at twenty-five times the annual social security ceiling. The overall remuneration of corporate officers takes into account the benefit represented by the supplementary pension plan. People who have completed at least two years' service with the Company are eligible for this plan. The reference period used to calculate the reference salary is twelve months for the annual fixed portion and the average of the three last variable remunerations, calculated on the basis of full years, for the variable portion. The arrangement does not provide for any annual rate of increase of potential pension entitlements. All these arrangements, combined with the overall limit of 35% of the reference salary, which is itself limited to 25 times the annual social security ceiling[1] give the whole pension plan quite a balanced structure. The total commitments in respect of the past service of all beneficiaries of this supplementary pension plan were measured under IFRS at €41.2 million. Patrick Buffet benefited from this plan on 1 June 2017 in strict compliance with the rules mentioned above. Christel Bories does not benefit from this scheme.
- Following the reappointment of Patrick Buffet as Chairman and CEO, decided by the Board of Directors on 29 May 2015, and on the recommendation of the Remuneration Committee, on 29 May 2015 the Board of Directors, with the Chairman and CEO abstaining, voted unanimously to retain all elements of the remuneration of the Chairman and CEO and all the provisions of his corporate officer contract dated 20 February 2008 (incorporating all the amendments decided since by the Company’s Board of Directors at the recommendation of the Remuneration Committee). However, two changes were made to the severance pay falling due to the Chairman and CEO in the event of his departure from the Company (as a result of forced resignation, cancellation or non-renewal of his term of office or modification of the conditions under which he originally joined the ERAMET group):
  - The amount of severance pay which may fall due is equal to twice (instead of three times, as it was previously) the last gross annual fixed remuneration plus twice (instead of three times) the average gross annual variable remuneration received in the last three complete years prior to his departure.
  - The severance pay benefit specified in his corporate officer contract is conditional upon the fulfilment of performance conditions: the total gross variable remuneration amount (itself subject to specific performance conditions) received over the final three full financial years of his term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period—instead of 20% as it was previously. Consequently, these arrangements rule out the payment of such a benefit should the Chairman and CEO fail to achieve his or her objectives.

In accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, these modified arrangements were the subject of a resolution put before the annual General Shareholders’ Meeting of 27 May 2016.

The termination-of-service allowance that was paid to Patrick Buffet as part of his forced departure on 23 May 2017 is in all respects in accordance with the provisions listed above. The details have been published in the legal and regulatory conditions.

In addition, in accordance with AFEP/MEDEF Code recommendations, Patrick Buffet did not hold a contract of employment binding him with the Company.

The corporate officer contract of Christel Bories specifies that in case of dismissal (except for gross misconduct) or forced resignation, particularly following a change of control of the Company or substantial imposed changes to the scope of responsibility, Christel Bories will be awarded severance pay equal to one year of her gross fixed and variable remuneration for departure up until 1 January 2019, and two years as from 1 January 2019.

This benefit is subject to the condition that the sum of gross variable remuneration received over the last three complete years of her term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period. In the event that the number of full years is less than three, the performance will be assessed based on the actual duration of the term of office, at the discretion of the Board of Directors on the proposal from the Remuneration Committee.

(1) The annual social security ceiling in 2017 was €39,228.

In accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, these modified arrangements will be the subject of a resolution put before the annual General Shareholders' Meeting of 24 May 2018.

In addition, in accordance with AFEP/MEDEF Code recommendations, Christel Bories does not hold a contract of employment binding her with the Company.

There is no provision for corporate officers to receive payment in respect of a non-competition commitment upon conclusion of their respective terms of office.

In the event of a change in control of ERAMET and the termination of an employment contract that is considered to be attributable to the employer, a specific guarantee, which may not be combined with other indemnities applicable under contracts or collective bargaining agreements, was decided in 2005 and implemented. At 31 December 2017, this guarantee applied to 10 of the Group's senior executives (certain members of the Group Executive Committee who are not corporate officers and members of the Divisional Executive Committees). This guarantee, which represents an indemnity of three years' remuneration (fixed plus variable) for each executive concerned, was estimated at a total of €5.2 million at 31 December 2017. Patrick Buffet did not benefit from this guarantee. Christel Bories does not benefit from this guarantee.

- Corporate officers also benefit from a supplementary healthcare plan and a supplementary disability and life insurance scheme, offered to all ERAMET group employees.

The table below sets out an individual breakdown of gross remuneration due to corporate officers in 2017:

TABLE 1—SUMMARY TABLE OF THE REMUNERATION, SHARES AND OPTIONS GRANTED TO EACH EXECUTIVE CORPORATE OFFICER

	REMUNERATION DUE IN THE YEAR(3)		VALUE OF PERFORMANCE SHARES GRANTED DURING THE YEAR(2)		TOTAL	TOTAL
(€)	2017	2016	2017	2016	2017	2016
Patrick Buffet (until 23/05/2017) Chairman and CEO	3,792,889	1,831,654	0	515,539	3,792,889	2,347,193
Christel Bories Chairman and CEO (since 23/05/2017)	1,803,436		433,375		2,236,811	
Philippe Vecten(1) (until 22/04/2016) Deputy CEO		115,457				115,457
Total corporate officers	**5,596,325**	**1,947,111**	**433,375**	**515,539**	**6,029,700**	**2,462,650**
Michel Carnec Human Resources Director	594,266	457,650	219,739	98,828	814,005	556,478
Thomas Devedjian Deputy CEO Group Finance	758,759	679,955	278,875	126,555	1,037,634	806,510
Philippe Gundermann (since 23/05/2017) Director Strategy & Financial Communication	319,105		152,155		471,260	
Denis Hugelmann Deputy CEO Alloys Division	524,437	382,669	278,875	382,669	803,312	765,338
Jean de L'Hermite (since 23/05/2017) Director Group Legal	204,686		90,907		295,593	
Catherine Tissot-Colle Director of Communications & Sustainable Development	377,703	289,400	152,155	69,030	529,858	358,430
Philippe Vecten Deputy CEO Mining Divisions	800,027	658,843	278,875	126,555	1,078,902	785,398
Total corporate officers and executive committees	9,175,308	4,415,628	1,884,957	1,319,176	11,060,265	5,734,804

(1) Until 22 April 2016 (PV).
(2) Calculated according to the fair value per share on the day of granting by the Board of Directors, namely €34.67 at 23 May 2017, €42.24 at 23 February 2017 and €23.01 at 27 May 2016—no options were granted during the financial year.
(3) The valuation method used to calculate the value of performance shares does not permit the actual remuneration of executives to be extrapolated from these figures for the years in question.

VALUATION OF OTHER LONG-TERM REMUNERATION PLANS

There is no long-term remuneration plan.

TABLE 2—SUMMARY OF THE REMUNERATION OF EACH EXECUTIVE CORPORATE OFFICER

SUMMARY OF THE REMUNERATION OF EACH EXECUTIVE CORPORATE OFFICER AND/OR EXECUTIVE COMMITTEE MEMBER

	AMOUNT FOR 2017		AMOUNT FOR 2016	
(€)	DUE	PAID	DUE	PAID
Christel Bories **Chairman and CEO[2]**				
Fixed remuneration	652,836	652,836		
Annual variable remuneration	854,600			
Pension plan contribution Art. 82	296,000	296,000		
Total	**1,803,436**	**948,836**		
Patrick Buffet **Chairman and CEO[3]**				
Fixed remuneration	318,053	318,053	807,365	807,365
Annual variable remuneration[4]	452,124	938,384	938,384	377,921
Retirement package	2,991,860	2,991,860		
Directors' fees	27,420	77,129	77,129	65,222
Benefits in kind[1]	3,432	3,432	8,686	8,686
Total	**3,792,889**	**4,328,858**	**1,831,564**	**1,259,194**
Philippe Vecten **Deputy CEO[8]**				
Fixed remuneration				113,224
Annual variable remuneration				
Directors' fees				
Benefits in kind[1]				2,233
Total	**0**	**0**	**0**	**115,457**
Sub-total corporate officers	**5,596,325**	**5,277,694**	**1,831,564**	**1,259,194**
Michel Carnec **Human Resources Director**				
Fixed remuneration	315,300	315,300	278,615	278,615
Annual variable remuneration	273,404	136,788	136,788	117,565
Directors' fees			25,500	17,000
Benefits in kind[1]	5,562	5,562	5,756	5,756
Total	**594,266**	**457,650**	**446,659**	**418,936**
Thomas Devedjian **Deputy CEO Group Finance**				
Fixed remuneration	401,650	401,650	370,000	370,000
Annual variable remuneration	352,501	292,877	292,877	86,383
Directors' fees			12,470	
Benefits in kind[1]	4,608	4,608	4,608	4,608
Total	**758,759**	**699,135**	**679,955**	**460,991**
Philippe Gundermann[7] **Director Strategy & Financial Communication**				
Fixed remuneration	161,117	161,117		
Annual variable remuneration	154,933			
Benefits in kind[1]	3,055	3,055		
Total	**319,105**	**164,172**		
Jean de L'Hermite[7] **Director Group Legal**				
Fixed remuneration	109,438	109,438		
Annual variable remuneration	93,364			
Benefits in kind[1]	1,884	1,884		
Total	**204,686**	**111,322**		

	AMOUNT FOR 2017		AMOUNT FOR 2016	
Denis Hugelmann[5] [6] **Deputy CEO Alloys Division**				
Fixed remuneration	386,334	386,334	264,150	264,150
Annual variable remuneration	131,837	114,170	114,170	
Benefits in kind[1]	6,266	6,266	4,349	
Total	**524,437**	**506,770**	**382,669**	**264,150**
Catherine Tissot-Colle **Director of Communications & Sustainable Development**				
Fixed remuneration	200,000	200,000	187,250	187,250
Annual variable remuneration	172,725	97,081	97,081	77,365
Benefits in kind[1]	4,978	4,978	5,069	5,069
Total	**377,703**	**302,059**	**289,400**	**269,684**
Philippe Vecten[2] **Deputy CEO Mining Divisions**				
Fixed remuneration	413,838	413,898	256,776	256,776
Annual variable remuneration	379,491	333,789	333,789	
Directors' fees			63,813	
Benefits in kind[1]	6,698	6,698	4,465	
Total	**800,027**	**754,385**	**658,843**	**256,776**
Total corporate officers and executive committees	9,175,308	8,273,187	4,289,090	2,929,731

(1) This relates to the provision of a Company car.
(2) Appointed Delegate CEO on 23 February 2017 and CEO on 23 May 2017.
(3) Term of office ended on 23 May 2017.
(4) 2016: in view of the Group's financial situation, the corporate officers have voluntarily waived 20% of their variable portion as validated by the Board of Directors.
(5) Appointed Delegate CEO of the Alloys Division as of 22 April 2016.
(6) Variable remuneration paid pro rata from 22 April 2016 to 31 December 2016. Left the Group on 31 December 2017.
(7) Appointed member of the Executive Committee on 23 May 2017.
(8) Corporate Officer up until 22 April 2016.

No multi-year variable remuneration fell due or was paid out during the financial year.

The combined total remuneration received by the top ten earners at ERAMET in respect of 2017 was €9,656,029.82, which has been certified by the Statutory Auditors.

TABLE 3—DIRECTORS' FEES AND OTHER REMUNERATION RECEIVED BY NON-EXECUTIVE CORPORATE OFFICERS

The amount of Directors' fees paid to ERAMET's Board members in January 2018 in respect of 2017 was €788,627 (€771,500 in 2016). The total sum allocated to the Board of Directors was set at €950,000 at the General Shareholders' Meeting of 23 May 2017 (17th resolution), to be distributed freely among the directors by the Board of Directors.

From 2017 onwards, and in accordance with recommendation 20.1 of the AFEP/MEDEF code, in order to have a predominant variable portion, the distribution rules for Directors' fees are as follows:

- an annual fixed amount of €10,000 for each member of the Board of Directors;
- an annual lump sum of €5,000 for each member of the Appointments Committee, no annual lump sum for members of the Strategy and CSR Committee, members of the Audit, Risks and Ethics Committee or members of the Compensation and Governance Committee;
- a sum of €2,500 for each Board of Directors meeting attended, for each Strategy and CSR Committee meeting attended and for each Compensation and Governance Committee meeting attended. This amount is increased to €5,000 for the Chairman of each of these two committees;
- a lump sum of €3,000 for each Audit, Risks and Ethics Committee meeting attended. This amount is increased to €6,000 for the Chairman of the Committee;
- no fees are paid for attendance of Appointments Committee meetings;
- there is no annual limit per Board or Committee;
- a travel allowance of €1,525 is paid to each director living outside Europe for each trip to attend a Board or Committee meeting.

The Directors' fees paid to ERAMET directors by other companies in the Group amounted to an overall total of €39,754 in 2017 (€71,500 in 2016).

No other remuneration was paid to non-executive corporate officers, with the exception of the remunerations specified below.

The distribution of Directors' fees at the beginning of 2018 in respect of 2017 was as follows (in euros, before deductions):

	ERAMET	OTHER COMPANIES	TOTAL 2017	TOTAL 2016
Michel Antsélévé	36,650	-	36,650	34,128
Valérie Baudson(3)	-	-	-	7,429
Christel Bories(1)(2)	-	-	-	-
Patrick Buffet(1)(2)	11,666	15,754	27,420	77,129
Christine Coignard(12)	24,333	-	24,333	-
Cyrille Duval (SORAME)	40,000	17,000	57,000	51,629
Édouard Duval	40,000	-	40,000	49,629
Georges Duval	35,000	-	35,000	29,215
Nathalie de La Fournière (CEIR)	25,000	-	25,000	23,621
Marie Axelle Gautier(8)	44,500	-	44,500	30,986
Other remuneration €91,688				
Jean Yves Gilet(4)	32,500	-	32,500	35,629
Philippe Gomès	28,600	-	28,600	34,128
Caroline Grégoire-Sainte-Marie(5)	-	-	-	15,796
Thierry Le Hénaff(6)	-	-	-	3,182
Manoelle Lepoutre	52,500	-	52,500	47,637
Miriam Maes(11)	29,000	-	29,000	32,774
Ferdinand Poaouteta(10)	12,500	7,000	20,000	13,147
Pia Older(7)	30,000	-	30,000	29,215
Other remuneration €52,777				
Catherine Ronge(6)	25,500	-	25,500	32,037
Sonia Sikorav(5)	41,000	-	41,000	25,737
Claude Tendil	69,583	-	69,583	35,629
Frédéric Tona(12)	26,666	-	24,666	49,408
Antoine Treuille	94,375	-	94,375	70,421
Bruno Vincent(9)	51,500	-	51,500	42,994
Total	748,873	39,754	788,627	771,500

(1) Other remuneration: see other tables related to corporate officers' remuneration.
(2) Christel Bories was appointed Director and Chairman of the Board of Directors on 23 May 2017, replacing Patrick Buffet.
(3) Appointment of Valérie Baudson by the General Shareholders' Meeting of 29 May 2015, replacing Michel Somnolet who resigned with effect from 31 March 2016.
(4) Amount paid to FSI Equation up until 22 September 2016. In September 2016, Jean-Yves Gilet, previously permanent representative of FSI Equation, was co-opted as director, replacing Alexis Zajdenweber.
(5) Appointment of Sonia Sikorav by the General Shareholders' Meeting of 27 May 2016, replacing Caroline Grégoire-Sainte-Marie.
(6) Co-option of Catherine Ronge, replacing Thierry Le Hénaff who resigned with effect from 17 February 2016.
(7) Director representing employees—Appointment 23 June 2014.
(8) Director representing employees—Appointment 12 November 2014.
(9) Amount paid to the Ministry of Finance—In September 2016, Alexis Zajdenweber, previously director representing the State, was appointed permanent representative of FSI Equation. On 26 July 2017, Bruno Vincent replaced Alexis Zajdenweber as permanent representative of FSI Equation.
(10) Appointment of Ferdinand Poaouteta by the General Shareholders' Meeting of 27 May 2016, replacing Louis Mapou.
(11) Appointment of Miriam Maes by the General Shareholders' Meeting of 27 May 2016, replacing Valérie Baudson.
(12) Appointment of Christine Coignard by the General Shareholders' Meeting of 23 May 2017, replacing Frédéric Tona.

TABLES 4 AND 5—NOT APPLICABLE

No share purchase or subscription options were granted to executive corporate officers during the financial year. No share purchase or subscription options were exercised by executive corporate officers during the financial year.

TABLE 6—PERFORMANCE SHARES GRANTED TO EACH EXECUTIVE CORPORATE OFFICER DURING THE YEAR

	PLAN NO. AND DATE	NUMBER OF SHARES GRANTED	VALUE OF SHARES(1)	ACQUISITION DATE	DATE AVAILABLE	PERFORMANCE CONDITIONS
						Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Euromoney Global Mining index and Diversified Metals & Mining, Steel index (1/3) and the intrinsic performance of financial indicators (2/3) (current operating income/revenue and operating cash flow); progressive acquisition over three years
C. Bories	Plan of 23/05/2017	12,500	433,375	23/05/2020	23/05/2022	as above
Total		12,500	433,375			

(1) Calculated according to the fair value per share on the day of granting by the Board of Directors, namely €34.67 at 23 May 2017.

TABLE 7—PERFORMANCE SHARES THAT BECAME AVAILABLE DURING THE FINANCIAL YEAR FOR EACH EXECUTIVE CORPORATE OFFICER

	PLAN NO. AND DATE	NUMBER OF SHARES THAT BECAME AVAILABLE DURING THE FINANCIAL YEAR (PLAN HOLDING PERIOD ENDED ON 15 FEBRUARY 2012)	VESTING CONDITIONS (NUMBER OF SHARES TO BE VESTED UPON AVAILABILITY IN THE EVENT THAT ALL PERFORMANCE CONDITIONS ARE MET, ACCORDING TO THE TERMS SET BY THE BOARD UPON GRANTING)
P. Buffet	Plan of 15/02/2012	2,410	10,755
Total		2,410	10,755

Taking into consideration the performance conditions, the vesting rate as a percentage of shares awarded from the plan of 15 February 2012 is 22.4%.

Since the Board meeting of 23 July 2007, corporate officers are required to retain 20% of shares acquired under performance share plans throughout their entire term of office.

TABLE 8—NOT APPLICABLE

There is no share purchase or subscription option plan currently in operation.

TABLE 9—HISTORY OF PERFORMANCE SHARE GRANTS—INFORMATION ON PERFORMANCE SHARES

	2011 PLAN	2012 PLAN	2013 PLAN	2014 PLAN	2015 PLAN	2016 PLAN	2017 PLAN[1]	23/05/2017 PLAN
Date of Shareholders' Meeting	20/05/2010	20/05/2010	15/05/2012	15/05/2012	15/05/2012	27/05/2016	27/05/2016	27/05/2016
Date of Board Meeting	16/02/2011	15/02/2012	21/03/2013	20/02/2014	19/02/2015	27/05/2016	23/02/2017	23/05/2017
Total no. of shares granted, of which number granted to (total)	71,665	89,885	145,040	143,510	132,680	134,327	142,546	12,500
Corporate officers								
P. Buffet (until 23/05/2017)	8,605	10,755	22,405	22,405	22,405	22,405	0	0
C. Bories								12,500
Date of vesting of France Plan shares	16/02/2014	15/02/2015	21/03/2016	20/02/2017	19/02/2018	27/05/2019	23/02/2020	23/05/2020
End date of holding period for France Plan	16/02/2016	15/02/2017	21/03/2018	20/02/2019	19/02/2020	27/05/2021	23/02/2022	23/05/2022
End date of vesting and holding period for International Plan shares	16/02/2015	15/02/2016	21/03/2017	20/02/2018	19/02/2019	27/05/2020	23/02/2021	
Performance conditions	Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Stoxx 600 Basic Resources index (50%) and the intrinsic performance of financial indicators (50%) (operating margin (current operating income/ revenue) and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price in relation to that of comparable companies listed on the Stoxx 600 Basic Resources index (50%) and intrinsic performance according to financial indicators (50%) (operating margin (current operating income/ revenue) and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price in relation to that of comparable companies listed on the Stoxx 600 Basic Resources index (1/3) and intrinsic performance of financial indicators (2/3) (operating margin (current operating income/ revenue) and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price in relation to that of comparable companies listed on the Stoxx 600 Basic Resources index (1/3) and intrinsic performance of financial indicators (2/3) (operating margin (current operating income/ revenue) and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Euromoney Global Mining index: diversified metals & mining, steel (1/3) and the intrinsic performance of financial indicators (2/3) (current operating income/revenue and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Euromoney Global Mining index: diversified metals & mining, steel (1/3) and the intrinsic performance of financial indicators (2/3) (current operating income/revenue and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Euromoney Global Mining index: diversified metals & mining, steel (1/3) and the intrinsic performance of financial indicators (2/3) (current operating income/revenue and operating cash flow); progressive acquisition over 3 years	Performance of the ERAMET share price (total shareholder return or TSR) in relation to that of comparable companies listed on the Euromoney Global Mining index: diversified metals & mining, steel (1/3) and the intrinsic performance of financial indicators (2/3) (current operating income/revenue and operating cash flow); progressive acquisition over 3 years
Number of shares vested at 31 December 2017 (International Plan)	3,545	6,745	5,209					
Number of shares vested at 31 December 2017 (France Plan)	8,008	13,836	18,165	34,626				
Cumulative number of cancelled or lapsed shares	63,256	69,304	121,666	77,789				
Performance shares remaining at financial year end	0	0	0	31,095				

(1) No corporate officer is the beneficiary of this plan.

The performance conditions, calculated over a three-year period, for the 2011 and 2012 performance share plans are as follows: the relative performance of ERAMET shares for 50% of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel of around 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions being fully achieved if the ERAMET share is ranked among the top 15% of the panel) and the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for 50% of the share grant (25% of the current operating income and 25% of the operating cash-flow from operating activities, the annual objectives referring to the Company's budgetary targets, with performance conditions only being fully achieved when these targets are significantly out-performed). Taking into consideration the performance conditions, the vesting rate as a percentage of shares awarded is as follows: 2011: 15.6%; 2012: 22.4%.

For the 2013 and 2014 plans, the performance conditions are calculated over a three-year period, as follows: the relative performance of ERAMET shares for one-third of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel of around 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions being fully achieved if the ERAMET share is ranked among the top 15% of the panel) and the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for two-thirds of the share grant (one-third of the current operating income and one-third of the operating cash-flow from operating activities, the annual objectives referring to the Company's budgetary targets, with performance conditions only being fully achieved when these targets are significantly out-performed). Taking into consideration the performance conditions, the vesting rate as a percentage of shares awarded is as follows: 2013: 16.37%; 2014: 32.19%.

For the 2015, 2016 and 2017 plans, the performance conditions are calculated over a three-year period, as follows: the relative performance of ERAMET shares for one-third of the share grant (this involves comparing the change in total shareholder return (TSR) over a three-year period with that of a panel of around 50 comparable companies on the indices (Euromoney Global Mining Index; Diversified Metals & Mining, Steel), with the performance conditions being fully achieved if the ERAMET share is ranked among the top 15% of the panel) and the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for two-thirds of the share grant (one-third of the current operating income and one-third of the operating cash-flow from operating activities, the annual objectives referring to the Company's budgetary targets, with performance conditions only being fully achieved when these targets are significantly out-performed).

TABLE 10—NOT APPLICABLE

There is no multi-year variable remuneration for executive corporate officers.

TABLE 11—SUMMARY BY CORPORATE OFFICER

COMPANY OFFICERS	EMPLOYMENT CONTRACT	SUPPLEMENTARY PENSION PLAN	COMPENSATION OR BENEFITS FALLING DUE OR WHICH MAY FALL DUE, AS THE RESULT OF DEPARTURE OR A CHANGE OF POSITION	COMPENSATION RELATED TO A NON-COMPETE CLAUSE
Patrick Buffet Chairman and CEO Start of term of office: 25/04/2007 End of term of office as Director: 23/05/2017	No	Yes, Article 39, defined benefit	Yes	No
Christel Bories Deputy CEO up until 23/02/2017, Chairman and CEO: 23/05/2017 Term of office as Director expires at the General Shareholders' Meeting convened to approve the financial statements for 2018	No	No, but Company financing of a life insurance policy	Yes	No

7.2 ARTICLE L. 225-37-2 OF THE FRENCH COMMERCIAL CODE—REPORT ON THE PRINCIPLES AND CRITERIA FOR DETERMINATION, DISTRIBUTION AND ALLOCATION OF THE FIXED, VARIABLE AND EXCEPTIONAL ELEMENTS THAT MAKE UP THE TOTAL REMUNERATION AND BENEFITS OF ANY KIND ATTRIBUTABLE TO THE CHAIRMAN AND CEO, SUBJECT TO SHAREHOLDER APPROVAL

By voting on the **6th resolution**, shareholders are asked to approve, pursuant to Article L. 225-37-2 of the Commercial Code (laid down by Law 2016-1691, known as "Sapin II"), the principles and criteria for the determination, distribution and allocation of the fixed, variable and exceptional elements that make up the total remuneration and benefits of any kind attributable to the Chairman and CEO.

In accordance with the wording of Article L. 225-37-2, the General Shareholders' Meeting is required to approve any change to the above elements, including at each renewal of the term of office. If the General Shareholders' Meeting does not approve the resolution, the principles and criteria previously approved by shareholders continue to apply. In the absence of principles and criteria approved by the General Shareholders' Meeting, the remuneration is determined in accordance with the remuneration assigned in the previous year, or, in the absence of remuneration assigned in the previous year, in accordance with existing practices within the Company.

CHRISTEL BORIES, CHAIRMAN AND CEO FROM 23 MAY 2017

ARTICLE L. 225-37-2 OF THE FRENCH COMMERCIAL CODE—PRINCIPLES AND CRITERIA FOR DETERMINATION, DISTRIBUTION AND ALLOCATION OF THE FIXED, VARIABLE AND EXCEPTIONAL ELEMENTS THAT MAKE UP THE TOTAL REMUNERATION AND BENEFITS OF ANY KIND ATTRIBUTABLE TO CHRISTEL BORIES, CHAIRMAN AND CEO FROM 23 MAY 2017, SUBJECT TO SHAREHOLDER APPROVAL

	PRESENTATION
	No suspended contract of employment; Christel Bories has a corporate officer contract
Fixed remuneration	The gross fixed remuneration for C. Bories is reviewed annually by the Remuneration Committee. The Remuneration Committee assesses the situation and makes recommendations, which are then submitted to the Board of Directors for approval. These recommendations are based in particular on market practices and a survey of the remuneration of corporate officers of companies with a comparable turnover and market capitalisation to that of the ERAMET group.
Annual variable remuneration	The annual variable remuneration of the Chairman and Chief Executive Officer is determined as follows: • 60% based on quantitative objectives relating to safety and working conditions and economic performance: current operating income and operating cash flow; • 40% based on qualitative objectives. This annual variable remuneration structure is applied to Group executives. For quantitative safety and economic performance objectives, the weighting is as follows: • 10% Safety (accident frequency rate); • 25% Current operating income; • 25% Operating cash flow. The objectives achieved (100%) correspond to the budget figures. If the net income attributable to the Group for the year in question is negative, a reduction of 50% will be applied to the amount of the variable portion due under the economic performance objective (current operating income and operating cash flow). The qualitative objectives are determined by the Board of Directors, on the recommendation of the Compensation and Governance Committee; they cover strategic, business and managerial issues specific to the upcoming financial year. They may include the implementation of strategic orientations validated by the Board of Directors, major industrial and commercial developments and programmes, actions of organisations and management, and achievements that are part of the Group's commitment to corporate social responsibility (CSR) and sustainable development. These are not routine tasks, but specific actions on which the Board expects to see specific performance. The target-based annual variable portion is set at 100% of gross annual fixed remuneration and can vary from 0% to 150% of gross annual fixed remuneration depending on the level of achievement of the various objectives, with 100% of the fixed rate corresponding to 100% of the objectives achieved. It may not exceed 150% of gross annual fixed remuneration. The variable portion for objectives achieved and the maximum variable portion are reviewed each year by the Remuneration Committee in relation to market practice, as part of remuneration surveys conducted annually.
Deferred variable remuneration	Christel Bories does not receive any deferred variable remuneration.
Multi-year variable remuneration	Christel Bories does not receive any multi-year variable remuneration.
Exceptional remuneration	Christel Bories does not receive any exceptional remuneration.

	PRESENTATION
Performance shares or stock options, or any other long-term remuneration item	In respect of stock-based compensation plans, Christel Bories may benefit from performance share plans or share subscription or purchase option plans, the terms and conditions of which are decided upon by the Board of Directors. In 2010, ERAMET implemented an annual international performance share award programme, in compliance with AFEP-MEDEF recommendations and developed based on the best practices of comparable companies. The objective of this programme is to provide a sustainable link between management and the Group's share performance, as well as to attract and retain talent through a competitive remuneration package. It covers more than 200 of the Group's managers and high-potential employees every year. This programme is in addition to the worldwide bonus share policy attributable to all ERAMET group employees, in place since 2009. The performance share plan provides for the allocation of a volume of shares according to the level of responsibility. For 2018 and 2019, 10,000 performance shares will be awarded to Christel Bories in accordance with the terms of her corporate officer contract and in strict compliance with the provisions of the plans in force. The award of shares is subject to very rigorous performance conditions. They are calculated over three years, as follows: • the relative performance of ERAMET shares for one-third of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel of around 40 comparable companies on the comparable companies on the Euromoney Global Mining Index; Diversified Metals & Mining, Steel; with the performance conditions being met at 150% if the ERAMET share is ranked among the top 15% of the panel); and • the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for two-thirds of the share grant—one-third for the EBITDA (Earnings before interest, taxes, depreciation and amortisation) and one-third for the ROCE (Return on capital employed), with the annual targets referring to the Group's budget objectives. This performance condition is only met at 150% if these objectives are significantly exceeded. These performance shares are subject to an additional two-year holding period and 20% of these shares are prohibited from sale until the end of the corporate officer's term of office.
Directors' fees	Christel Bories does not receive Directors' fees for the offices she holds at ERAMET and its subsidiaries.
Benefits of any kind	Christel Bories does not have a Company car.
Compensation related to taking up or leaving a post	In case of dismissal (except for gross misconduct) or forced resignation, particularly following a change of control of the Company or substantial imposed changes to the scope of responsibility, Christel Bories will be awarded severance pay equal to one year of her gross fixed and variable remuneration for departure up until 1 January 2019, and two years as from 1 January 2019. This benefit is subject to the condition that the sum of gross variable remuneration received over the last three complete years of her term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period. In the event that the number of full years is less than three, the performance will be assessed based on the actual duration of the term of office, at the discretion of the Board of Directors on the proposal from the Remuneration Committee.
Non-competition compensation	Christel Bories is not bound by a non-compete clause.

	PRESENTATION
"Article 82" plan	Christel Bories benefits from a life insurance contract under Article 82 of the French Tax Code The annual amount of this remuneration is 30.39% of the gross total annual remuneration (fixed remuneration + variable remuneration subject to performance conditions) paid to Christel Bories during the reference year. The amount thus determined is paid in two instalments: • payment by the Company to an insurer of an annual subscription of up to 50% of the total amount of the additional remuneration; • annual payment by the Company to Christel Bories of a sum in cash of up to 50% of the total amount of the additional remuneration to finance the corresponding social and tax charges. The purchase of the life insurance policy was authorised by the Board of Directors on 26 July 2017 and will be submitted to the General Shareholders' Meeting for approval in the context of the procedure for related-party agreements (Article L. 225-38 *et seq.* of the French Commercial Code). The basis for calculating this additional remuneration includes fixed and variable remuneration and is therefore subject to performance conditions.
Supplementary insurance scheme and healthcare plan	Christel Bories benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group. In accordance with the procedures related to regulated agreements and commitments, this commitment was authorised by the Board of Directors on 23 February 2017 and will submitted to the General Shareholders' Meeting of 24 May 2018 for approval.
ASSEDIC entitlement	Christel Bories does not benefit from this entitlement.
Customary severance pay	Christel Bories does not benefit from any customary severance pay, whether upon retirement or upon departure for any other reason.

The payment of the variable and exceptional remuneration elements related to financial year 2018 is subject to approval by a General Shareholders' Meeting to be held in 2019 of the remuneration elements of the person concerned, in accordance with the new wording of Article L. 225-100 of the French Commercial Code laid down by Law 2016-1691.

7.3 ARTICLE L. 225-100 PARAGRAPH 9 OF THE FRENCH COMMERCIAL CODE—FIXED, VARIABLE AND EXCEPTIONAL ELEMENTS THAT MAKE UP THE TOTAL REMUNERATION AND BENEFITS OF ANY KIND ATTRIBUTABLE TO THE EXECUTIVE CORPORATE OFFICERS IN RESPECT OF FINANCIAL YEAR 2017, SUBJECT TO SHAREHOLDER APPROVAL

By voting on the **7th and 8th resolutions**, shareholders are asked to approve, pursuant to Article L. 225-100 paragraph 9 of the Commercial Code (laid down by Law 2016-1691, known as “Sapin II”), the fixed, variable and exceptional elements that make up the total remuneration and benefits of any kind attributable to Patrick Buffet, Chairman and CEO until 23 May 2017, and Christel Bories, Deputy CEO from 23 February 2017 to 23 May 2017 and Chairman and CEO from 23 May 2017.

The payment of the variable and exceptional remuneration elements related to financial year 2017 is subject to approval by a General Shareholders’ Meeting to be held in 2018 of the remuneration elements of the person concerned, in accordance with the new wording of Article L. 225-100 paragraph 10 of the French Commercial Code laid down by Law 2016-1691.

7.3.1 CHRISTEL BORIES, DEPUTY CEO FROM 23 FEBRUARY 2017 TO 23 MAY 2017 AND CHAIRMAN AND CEO FROM 23 MAY 2017

REMUNERATION ITEMS FALLING DUE OR GRANTED FOR THE FINANCIAL YEAR ENDED

	AMOUNT OR CARRYING VALUE SUBJECT TO SHAREHOLDER VOTE	PRESENTATION
		No suspended contract of employment; Christel Bories has a corporate officer contract
Fixed remuneration	€652,836 (amount paid)	Gross fixed remuneration, paid *pro rata temporis* for financial year 2017 in accordance with the provisions approved by the Board of Directors of ERAMET SA on 23 February 2017 broken down as follows: • from 23 February 2017 to 22 May 2017 on the basis of €700,000 per year as Deputy Chief Executive Officer; • from 23 May 2017 to 31 December 2017 on the basis of €800,000 per year as Chairman and Chief Executive Officer.
Annual variable remuneration	€854,600 (amount approved for 2017)	At its meeting of 20 February 2018, the Board of Directors, based on the recommendation of the Remuneration Committee and following validation of the financial items by the Audit Committee, approved the amount of variable remuneration for Christel Bories, paid *pro rata temporis* from 23 February 2017 for the financial year 2017 at €854,600 (129.8% of the maximum permitted variable remuneration). The variable portion is based on quantitative and qualitative objectives, whose selection and weighting are proposed by the Remuneration Committee and approved by the Board of Directors. These objectives are based on safety and working conditions and the quantitative objectives of economic performance for 60%, and qualitative objectives for 40%: **Quantitative objectives (60%):** • 22.5% on current operating income; • 22.5% on net cash; • 15% on safety (accident frequency rate). The objectives achieved (100%) correspond to the budget figures. **Qualitative objectives (40%):** • finalisation of an industrial partnership agreement; • proposal of strategic options to the Board; • the evolution of governance in accordance with the decisions of the Board of Directors. The level of accomplishment required, for each of these criteria, is precisely established at the start of the financial year but cannot be disclosed to the general public for reasons related to trade secrets and confidentiality. The target-based annual variable portion is set at 100% of gross annual fixed remuneration based on the achievement rate of various goals. This remuneration may vary from 0 to 150% of gross annual fixed remuneration, 100% of fixed remuneration corresponding to 100% of objectives achieved. It may not exceed 150% of gross annual fixed remuneration. The variable portion for objectives achieved and the maximum variable portion are reviewed each year by the Remuneration Committee in relation to market practice, as part of remuneration surveys conducted annually.
Deferred variable remuneration	N/A	Christel Bories does not receive any deferred variable remuneration.
Multi-year variable remuneration	N/A	Christel Bories does not receive any multi-year variable remuneration.
Exceptional remuneration	N/A	Christel Bories does not receive any exceptional remuneration.

	AMOUNT OR CARRYING VALUE SUBJECT TO SHAREHOLDER VOTE	PRESENTATION
Performance shares or stock options, or any other long-term remuneration item	12,500 performance shares = €433,375 (applying the method used in the consolidated financial statements, fair value of the share on the day of granting by the Board of Directors) Options = N/A Other items = N/A	In accordance with the provisions of the corporate officer contract and the appointment of Christel Bories as Chairman and Chief Executive Officer, on 23 May 2017, following the approval of the Shareholders' Meeting of 27 May 2016 (14th resolution), the Board of Directors granted Christel Bories 12,500 performance shares (or 0.05% of share capital), for a value of €433,375, applying the method used in the consolidated financial statements (fair value of the share on the day of granting by the Board of Directors). The number of shares granted, as specified above, corresponds to the maximum number of shares that may be vested, fully or partially, three years following granting provided that the performance conditions are fully or partially met. The performance conditions are only considered to be fully achieved when these objectives are significantly out-performed. Furthermore, these performance shares are subject to an additional two-year holding period and 20% of these shares are prohibited from sale until the end of the corporate officer's term of office. These very rigorous performance conditions are calculated over a three-year period, as follows: • the relative performance of ERAMET shares for one-third of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel of around 58 comparable companies on the Euromoney Global Mining Index; Diversified Metals & Mining, Steel; with the performance conditions being fully achieved if the ERAMET share is ranked among the top 15% of the panel); and • the intrinsic performance of certain financial indicators achieved in three instalments over a three year period for two-thirds of the share grant (one-third of the current operating income and one-third of the operating cash-flow from operating activities, the annual objectives referring to the Company's budgetary targets); these performance conditions are only considered to be fully achieved when the targets are significantly out-performed). Christel Bories was not granted any stock options or any other long-term remuneration item during the financial year ended 31 December 2016.
Directors' fees	N/A	Christel Bories does not receive Directors' fees for the offices she holds at ERAMET and its subsidiaries.
Benefits of any kind	N/A	Christel Bories does not have a Company car.

REMUNERATION ITEMS FALLING DUE OR GRANTED FOR THE FINANCIAL YEAR ENDED WHICH HAVE BEEN OR ARE SUBJECT TO SHAREHOLDER APPROVAL PURSUANT TO THE PROCEDURES RELATED TO REGULATED AGREEMENTS AND COMMITMENTS

	AMOUNT SUBJECT TO SHAREHOLDER VOTE	PRESENTATION
Compensation related to taking up or leaving a post	No payment	In case of dismissal (except for gross misconduct) or forced resignation, particularly following a change of control of the Company or substantial imposed changes to the scope of responsibility, Christel Bories will be awarded severance pay equal to one year of her gross fixed and variable remuneration for departure up until 1 January 2019, and two years as from 1 January 2019. This benefit is subject to the condition that the sum of gross variable remuneration received over the last three complete years of her term of office must be 35% or more of the total gross annual fixed remuneration received during the same three-year period. In the event that the number of full years is less than three, the performance will be assessed based on the actual duration of the term of office, at the discretion of the Board of Directors on the proposal from the Remuneration Committee. In accordance with the procedures in respect of related-party agreements and commitments and the provisions of Article L. 225-42-1 of the French Commercial Code, this commitment was authorised by the Board of Directors on 23 February 2017 and will submitted to the General Shareholders' Meeting of 24 May 2018 for approval.
Non-competition compensation	N/A	Christel Bories is not bound by a non-compete clause.
Contribution to "Article 82" plan	€297,600	Christel Bories benefits from a life insurance contract under Article 82 of the French Tax Code. On 26 July 2017, the Board of Directors, based on the recommendation of the Remuneration Committee, authorised the implementation of the plan under the following conditions: The annual amount of this additional remuneration is 30.39% of the gross total annual remuneration (fixed + variable) paid to Christel Bories during the reference year. The basis for calculating this additional remuneration includes fixed and variable remuneration. This additional remuneration is therefore subject to performance conditions. The additional remuneration, determined in accordance with the foregoing provisions, shall give rise to the following two payments: • The financing of a life insurance contract: The Company has taken out a life insurance contract for Christel Bories with an authorised insurer. This "Article 82" contract is an individual life insurance policy. The policy is financed entirely by the Company and represents 50% of the additional remuneration determined in accordance with the foregoing. It does not constitute a pension commitment. • Annual payment in cash: Each year, the Company pays a cash sum equal to 50% of the additional remuneration determined in accordance with the foregoing provisions to cover the related social and tax charges. The benefit of the plan is not subject to performance conditions in 2017. The amount of the employer's contribution amounts to a lump sum of €297,600 distributed in the proportions mentioned above. The Company's commitment is limited to the payment of the contribution mentioned above and it remains free to terminate the contract at any time.
Supplementary insurance scheme and healthcare plan		Christel Bories benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group. In accordance with the procedures related to regulated agreements and commitments, this commitment was authorised by the Board of Directors on 23 February 2017 and will submitted to the General Shareholders' Meeting of 24 May 2018 for approval.
ASSEDIC entitlement	N/A	Christel Bories does not benefit from this entitlement.
Customary severance pay	N/A	Christel Bories does not benefit from any customary severance pay, whether upon retirement or upon departure for any other reason.

7.3.2 PATRICK BUFFET, CHAIRMAN AND CEO UNTIL 23 MAY 2017

REMUNERATION ITEMS FALLING DUE OR GRANTED FOR THE FINANCIAL YEAR ENDED

	AMOUNT OR CARRYING VALUE SUBJECT TO SHAREHOLDER VOTE	PRESENTATION
		No suspended contract of employment; Patrick Buffet has a straightforward corporate officer contract
Fixed remuneration Until 23/05/2017	€318,053 (amount paid)	Gross fixed remuneration for the financial year 2017 approved by the Board of Directors on 22 December 2015 at the recommendation of the Remuneration Committee, paid *pro rata temporis* until 23 May 2017.
Annual variable remuneration	€452,124 (amount approved for 2017)	At its meeting of 20 February 2018, the Board of Directors, based on the recommendation of the Remuneration Committee and following validation of the financial items by the Audit Committee, approved the amount of variable remuneration for Patrick Buffet paid on a *pro rata temporis* basis (5/12ths) for the financial year 2017 at €452,124 (96% of his maximum permitted variable remuneration). The variable portion is based on four objectives whose selection and weighting were proposed by the Remuneration Committee and approved by the Board of Directors on 20 March 2017. These objectives were, until 23 May 2017, based on full-year 2017 results: (i) improving the cash-cost of SLN; (ii) the Company's financial position (current operating income and net cash); (iii) safety results (accident frequency rate); (iv) "managerial" results linked to the transition period from 23 February 2017 to 23 May 2017 to ensure a smooth handover to the Deputy CEO. The level of accomplishment required, for each of these criteria, is precisely established at the start of the financial year but cannot be disclosed to the general public for reasons related to trade secrets and confidentiality. The variable portion may not exceed 140% of gross annual fixed remuneration for the Chairman and CEO. In 2017, the portion related to quantitative objectives represented 60% of maximum annual variable remuneration.
Deferred variable remuneration	N/A	Patrick Buffet did not receive any deferred variable remuneration.
Multi-year variable remuneration	N/A	Patrick Buffet did not receive any multi-year variable remuneration.
Exceptional remuneration	N/A	Patrick Buffet did not receive any exceptional remuneration.
Performance shares or stock options, or any other long-term remuneration item	N/A	No performance shares were awarded to Patrick Buffet in 2017.
Directors' fees (until 23/05/2017)	€27,240 (gross amount before deductions)	In accordance with the rules for the allocation of Directors' fees applicable to all ERAMET Directors, Patrick Buffet received ERAMET Directors' fees. He also received a gross amount of €10,836 from COMILOG and €4,918 from SLN, in accordance with the rules applicable to all directors of those companies.
Benefits of any kind (Until 23/05/2017)	€3,432 (carrying value)	Patrick Buffet had a Company car.

REMUNERATION ITEMS FALLING DUE OR GRANTED FOR THE FINANCIAL YEAR ENDED WHICH HAVE BEEN OR ARE SUBJECT TO SHAREHOLDER APPROVAL PURSUANT TO THE PROCEDURES RELATED TO REGULATED AGREEMENTS AND COMMITMENTS

	AMOUNT SUBJECT TO SHAREHOLDER VOTE	PRESENTATION
Compensation related to taking up or leaving a post	€2,991,860	On 23 February 2017, the Board of Directors took note of the forced departure of Patrick Buffet, Chairman and Chief Executive Officer and Director of the Company, from all his offices with effect from 23 May 2017. The Board decided on the financial conditions of his departure, it being specified that the allowances and/or benefits granted are part of the execution of pre-existing agreements or commitments, previously authorised by the Board of Directors and/or the General Meeting of Shareholders of the Company and published annually in ERAMET's Registration Documents, namely: payment of a severance payment of €2,991,860, equal to twice the last gross annual fixed remuneration plus twice the average gross annual variable remuneration received in the last three complete years prior to his departure. This indemnity, in accordance with the ceiling provided for in Article 24.5.1 of the AFEP-MEDEF code, was authorised by the Board of Directors on 29 May 2015 and approved by the General Shareholders' Meeting on 27 May 2016. Based on the report of the Remuneration Committee, the Board of Directors noted that P. Buffet had met the conditions for granting and performance of this benefit, of which it therefore authorised the payment as of 24 May 2017.
Non-competition compensation	N/A	Patrick Buffet was not bound by a non-compete clause.
Supplementary pension plan as at 1 June 2017	No payment	Patrick Buffet benefitted from the existing defined benefit supplementary pension plan for ERAMET executives, entitling him to a supplementary pension that may not exceed 35% of the reference salary defined in the plan's internal rules, with said reference salary being capped at twenty-five times the annual social security ceiling (ASSC). The reference period used to calculate the reference salary is twelve months for the annual fixed portion and the average of the three last variable remunerations, calculated on the basis of full years, for the variable portion. In Patrick Buffet's case, supplementary pension income was capped at 35% of 25 times the ASSC. This arrangement was authorised by the Board of Directors on 30 July 2008 and approved by the General Shareholders' Meeting of 13 May 2009 (3rd resolution). By way of illustration, the calculation made for Patrick Buffet based on the reference remuneration as set out above (fixed + average variable for the last three years) amounted to an annual gross income of €317,501.60 as at 1 June 2017, or 19.94% of his global gross remuneration (gross annual fixed remuneration + average gross annual variable remuneration for the last three years, including the year 2016). A reduction (from 35% to 32.375%) was applied for the early draw down of pension benefits as of 1 June 2017 at 63 years and six months.
Supplementary insurance scheme and healthcare plan Until 23/05/2017		Patrick Buffet benefitted from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group. In accordance with the procedures related to regulated agreements and commitments, this commitment was authorised by the Board of Directors on 17 February 2010 and approved by the General Shareholders' Meeting of 20 May 2010 (3rd resolution).
ASSEDIC entitlement	N/A	Patrick Buffet did not benefit from this entitlement.
Customary severance pay	N/A	Patrick Buffet did not benefit from any customary severance pay, whether upon retirement or upon departure for any other reason.

7.4 INFORMATION RELATING TO PENSION COMMITMENTS FOR CORPORATE OFFICERS

ARTICLE D. 225-104-1 OF THE FRENCH COMMERCIAL CODE LAID DOWN BY DECREE NO. 2016-182 OF 23 FEBRUARY 2016

PENSION OBLIGATION APPLICABLE TO PATRICK BUFFET, CHAIRMAN AND CHIEF EXECUTIVE OFFICER UNTIL 23 MAY 2017

a) Name of the commitment concerned	Corporate officers are eligible for the existing defined benefit supplementary pension plan for ERAMET executives
b) Reference to legal provisions identifying the corresponding scheme	Article 39-5° of the French Tax code
c) Conditions for joining the scheme and other eligibility conditions to benefit from the scheme	People who have completed at least two years' service with the Company and whose annual remuneration (fixed and variable) exceeds five times the annual social security ceiling are eligible for this plan. Eligibility conditions: be at least 60 years old, have ended his/her professional career at ERAMET or one of the ERAMET group companies and fulfil the eligibility criteria for pension benefits under the basic social security pension scheme.
d) Terms and conditions for determining the reference salary determined by the scheme in question and used to calculate the rights of beneficiaries	The reference period used to calculate the reference salary is twelve months for the annual fixed portion and the average of the three last variable remunerations, calculated on the basis of full years, for the variable portion. There is no automatic re-evaluation factor in the scheme.
e) Pattern of vesting of rights	The arrangement does not provide for any specific annual rate of increase of potential pension entitlements
f) Existence of a ceiling and the amount and terms and conditions for determining the ceiling	In the event of settlement of their pension rights vis-à-vis social security, they may be entitled to a supplementary pension that may not exceed 35% of the reference salary defined in the plan's internal rules, with said reference salary being capped, in the same regulations, at twenty-five times the annual social security ceiling. A significant reduction rate applies on the annual amount paid (reduction from 35% to 26.25%) in the event of an early draw down of pension benefits between 60 and 65 years of age.
g) Terms and conditions for funding the benefit	ERAMET has subscribed to an insurance plan with an authorised company. Contributions are entirely financed by ERAMET, they are globalised, do not create any individual right prior to eligibility to the supplementary pension plan and are not allocated to an individual account opened in the names of potential beneficiaries.
h) The pension amount paid on 1 June 2017	Gross annual pension amount before taxes and charges for the executive corporate officer, P. Buffet: €317,501.60 gross, which amounts to 19.94% of his global gross remuneration (gross annual fixed remuneration and the average variable remuneration for the last three years, including the year 2016) for a pension entitlement as of 1 June 2017.
i) Related tax and social security charges payable by the Company	The estimated amount as at 31 December 2017 excludes tax and social security charges. ERAMET has opted for a tax on premiums paid to the insurer; a premium of €7.3 million was paid in 2017. Tax at 24% is added to this amount, giving a total of €9.052 million.

Christel Bories does not benefit from this pension scheme.

7.5 SHARES HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Some directors have a material interest in the share capital of the Company.

INDIRECT INTEREST

Georges, Édouard and Cyrille Duval are shareholders of SORAME and CEIR and Chairs or CEOs of SORAME and CEIR.

DIRECT INTEREST

No director has a direct material interest in any of our subsidiaries.

LOANS AND GUARANTEES GRANTED OR PROVIDED

The Company has not granted or provided any loans or guarantees to members of the administrative, management or supervisory bodies.

SHARES HELD AT 31 DECEMBER 2017	SHARES	VOTING RIGHTS
Michel Antsélévé	100	200
Christel Bories	100	100
Christine Coignard	50	50
SORAME	8,051,838	16,103,676
Cyrille Duval	6,041	6,937
Édouard Duval	1,391	2,340
Georges Duval	4,659	6,848
CEIR	1,783,996	3,567,992
Nathalie de La Fournière	100	200
Marie Axelle Gautier	130	134
Jean-Yves Gilet	100	100
Philippe Gomes	101	102
Manoelle Lepoutre	100	200
Miriam Maës	100	100
Ferdinand Poaouteta	3	3
Pia Olders	17	30
Catherine Ronge	100	100
Sonia Sikorav	100	100
Claude Tendil	100	200
Antoine Treuille (also holds 1,078 ERAMET 2017 bonds)	710	870
FSI Equation	6,810,317	13,620,634
Bruno Vincent	N/A	N/A

7.6 SPECIAL REPORT ON BONUS SHARE GRANTS

Financial Year 2017

Dear Shareholders,

Pursuant to the provisions of Article L. 225-197-4 of the French Commercial Code, this report is presented to the General Shareholders' Meeting.

7.6.1 GRANTS TO CORPORATE OFFICERS OF THE COMPANY

PLAN OF 23 MAY 2017	NUMBER OF SHARES	VALUE
Christel Bories	12,500	433,375

No performance shares were awarded to Patrick Buffet in 2017.

7.6.2 GRANTS TO NON-CORPORATE OFFICER EMPLOYEES OF THE COMPANY AND ITS SUBSIDIARIES

PLAN OF 23 FEBRUARY 2017	NUMBER OF SHARES	VALUE
Philippe Vecten	6,600	278,784
Thomas Devedjian	6,600	278,784
Denis Hugelmann	6,600	278,784
Michel Carnec	5,200	219,648
Catherine Tissot-Colle	3,600	152,064
Philippe Gundermann	3,600	152,064
Jean de L'Hermite	2,150	90,816
Jérome Fabre	2,150	92,579
Hervé Montégu	2,150	92,579
Martin Cézard	2,150	92,579

7.6.3 GRANTS TO ALL BENEFICIARY EMPLOYEES

Each employee on the payroll received two bonus shares, subject to length of service conditions, as part of the bonus share plan of 23 February 2017.

Board of Directors

8

ERAMET AND ITS SHAREHOLDERS

8.1 COMPANY'S MARKET SHARES

8.1.1 LISTING MARKET

The Company's shares are traded at Euronext on the Euronext Paris market (ISIN code: FR0000131757, LEI code 549300LUH78PG2MP6N64).

No shares of another Group company are admitted for trading on another stock exchange.

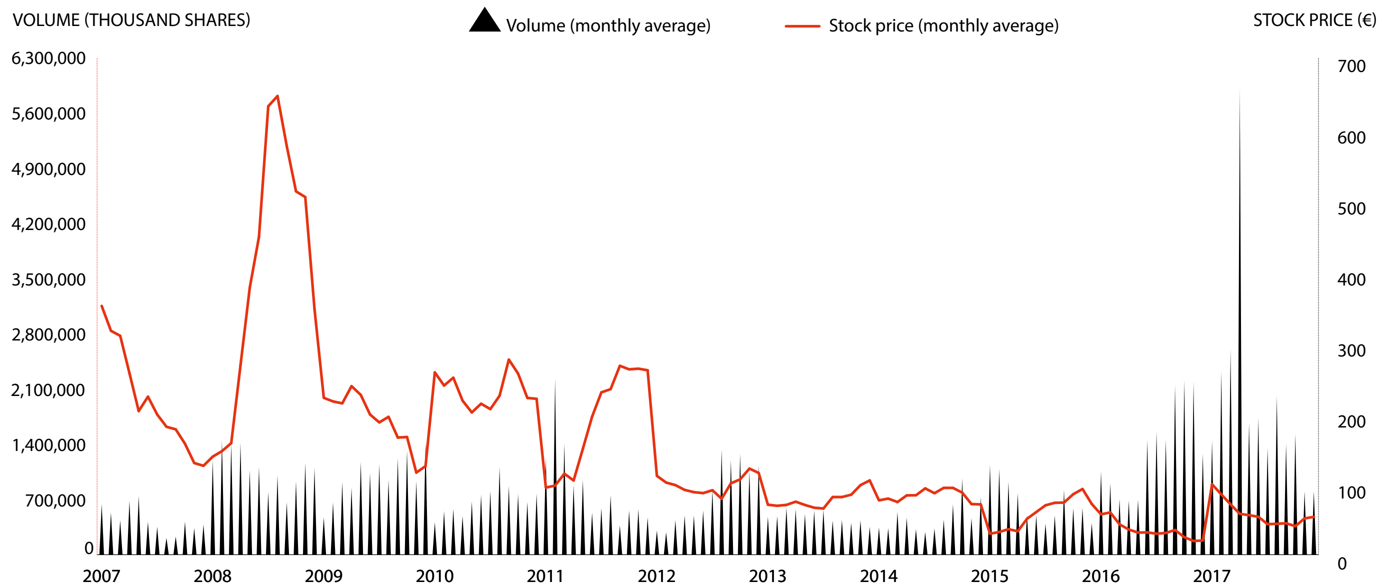
8.1.2 PRICE TRENDS

The ERAMET share closed at €99.0 per share at the end of 2017, a remarkable stock market performance with an increase of 76% over the year, reflecting investors' confidence in the Group's outlook. At the beginning of 2018, market capitalisation exceeded €3 billion, resulting in ERAMET's inclusion in the SBF 120 index at the end of the year. The performance of the share price was positively impacted by a particularly favourable market environment, especially as regards manganese ore prices, which remained historically high in 2017 (the average of CRU 44% CIF China ore prices stands at USD 5.97/dmtu over 2017, compared to USD 4.30/dmtu over 2016).

In parallel with this strong rebound in the share price, volumes traded increased significantly, rising from 16,346,892 shares in 2016 to 23,600,088 shares in 2017, i.e. approximately 92,550 shares traded per session (compared to 64,000 shares/session in 2016).

TRENDS IN VOLUMES AND THE ERAMET SHARE PRICE

Volume in thousands of share/price in €



STOCK MARKET DATA

	PRICE (€)			MARKET CAPITALISATION AS AT 31/12	VOLUME
	PERIOD EXTREMES				
	UPPER	LOWER	CLOSING AT 31/12	(€ MILLION)	(AVG./DAY)
2007	391.26	114.00	350.00	9,067	24,022
2008	669.98	96.06	138.00	3,618	52,945
2009	272.30	108.00	220.75	5,821	47,589
2010	298.40	193.70	256.50	6,801	33,419
2011	276.65	80.05	94.50	2,505	46,402
2012	139.90	75.95	110.95	2,944	36,742
2013	116.00	63.76	70.29	1,866	22,927
2014	102.00	65.85	76.50	2,031	22,980
2015	94.390	23.05	29.50	783	32,166
2016	66.720	15.36	56.74	1,506	63,607
2017	99.81	36.43	99.03	2,640	92,549

	PRICE (€)			VOLUME (X 1,000)
2017	LOWER	UPPER	AVERAGE (CLOSING)	(AVG./MONTH)
December	78.01	99.81	88.679	1,445.8
November	72.02	90.62	83.336	2,325.0
October	57.76	75.41	67.687	2,604.3
September	54.79	65.92	57.279	5,911.1
August	52.83	60.00	56.166	1,672.4
July	42.18	58.77	48.965	1,734.5
June	39.52	45.68	42.672	1,353.6
May	38.15	45.95	41.763	2,011.3
April	36.43	44.50	39.588	1,405.3
March	37.41	53.28	44.776	1,528.6
February	49.40	58.50	53.509	802.3
January	52.63	59.75	56.301	805.7

Source: Euronext.

8.1.3 SHARE SERVICE

The Company's share register is maintained by:

BNP Paribas Securities Services

GCT—Issuer Services

Grands Moulins de Pantin—9, rue du Débarcadère—93761 Pantin Cedex

The implementation of the liquidity agreement was entrusted to Exane BNP Paribas.

8.2 SHARE CAPITAL

8.2.1 SUBSCRIBED CAPITAL

8.2.1.1 REPRESENTATIVE AMOUNT AND SHARES

The share capital, as of at December 2017 amounted to €81,232,663, represented by 26,633,660 shares with a nominal value of €3.05, all of the same class and fully paid up.

8.2.1.2 RIGHTS ATTACHED TO THE SHARES

Each share entitles the holder, in the ownership of the Company's assets and in the sharing of profits, to a share equal to the portion of the share capital it represents, taking into account, where appropriate, the amortised and unamortised capital, paid and unpaid, of the nominal amount and the rights of the shares of different classes.

Each share shall give the right, during the Company's life and in the event of liquidation, to payment of the same net amount in any allocation or redemption, such that all shares shall be considered together, where applicable, regardless of any tax exemptions or any taxation likely to be assumed by the Company.

8.2.1.3 SUBSCRIBED CAPITAL NOT YET PAID

None.

8.2.2 SECURITIES NOT REPRESENTING CAPITAL

8.2.2.1 FOUNDERS' SHARES, VOTING CERTIFICATES

None.

8.2.2.2 OTHER SECURITIES—POTENTIAL CAPITAL

The potential capital consists of ODIRNAN.

On 5 October 2016, the Company issued 2,158,428 perpetual bonds with an option to repay in cash and/or new shares (ODIRNAN) for a total amount of €99,999,969.24.

Total amount of the issue	€100 million
Maturity	Indefinite
Number of bonds issued	2,158,428
Number of bonds at 31 December 2017	2,067,985
Nominal value (with a 30% premium based on the reference price of €35.64)	€46.33
Fixed interest rate until 4 October 2022	4%

The ODIRNANs are admitted to trading on the regulated market of Euronext Paris (ISIN code FR0013204492).

The purpose of the ODIRNAN issue was to strengthen ERAMET's balance sheet structure by accounting treatment of shareholders' equity and the proceeds from the issue will be used to finance the Group's general needs.

The nominal unit value of the ODIRNANs was set at €46.33, showing a conversion premium of 30% over the reference price of the Company's share at €35.64 on the Euronext Paris regulated market.

The ODIRNANs were issued at par on 5 October 2016, the settlement date. The bonds constitute direct, general, unconditional, non-subordinated and unsecured obligations.

From the date of issue until 4 October 2022, the ODIRNANs will bear interest at the annual nominal rate of 4%, payable semi-annually in arrears on 5 October and 5 April of each year, and for the first time on 5 April 2017, subject to suspension of interest payment. Effective from 5 October 2022, the ODIRNANs will bear interest at a rate deducted on the basis of the six-month EURIBOR variable interest rate plus 1,000 basis points, expressed on an annual basis, payable semi-annually in arrears on 5 October and 5 April of each year, and for the first time on 5 April 2023, subject to a suspension of interest payment.

Subject to early amortisation at the option of the Company, the ODIRNANs will only be redeemable in the event of liquidation of the Company or at the end of the lifetime specified in the Company's Articles of Association (23 September 2062), unless this period of life is extended under the conditions provided for by the applicable legislation. The refund will be, in both cases, equal to par.

The ODIRNAN holders may exercise their share allotment right at any time from the date of issue (inclusive) until the 18th trading day (excluded) before 5 October 2022, or any earlier date of early redemption. In the event of the exercise of the share allotment right, the ODIRNAN holders will receive, at the option of the Company, either an amount in cash, or a combination of an amount in cash and new shares, or new shares only.

The *Autorité des marchés financiers* has affixed to the prospectus visa No. 16-448 dated 26 September 2016.

The Company has not issued any other currently valid financial instruments—that do not represent a share in capital—but are likely to give access to capital in the future or by option.

However, authorisations exist to do so, by decision of the Board. This has not been used to date.

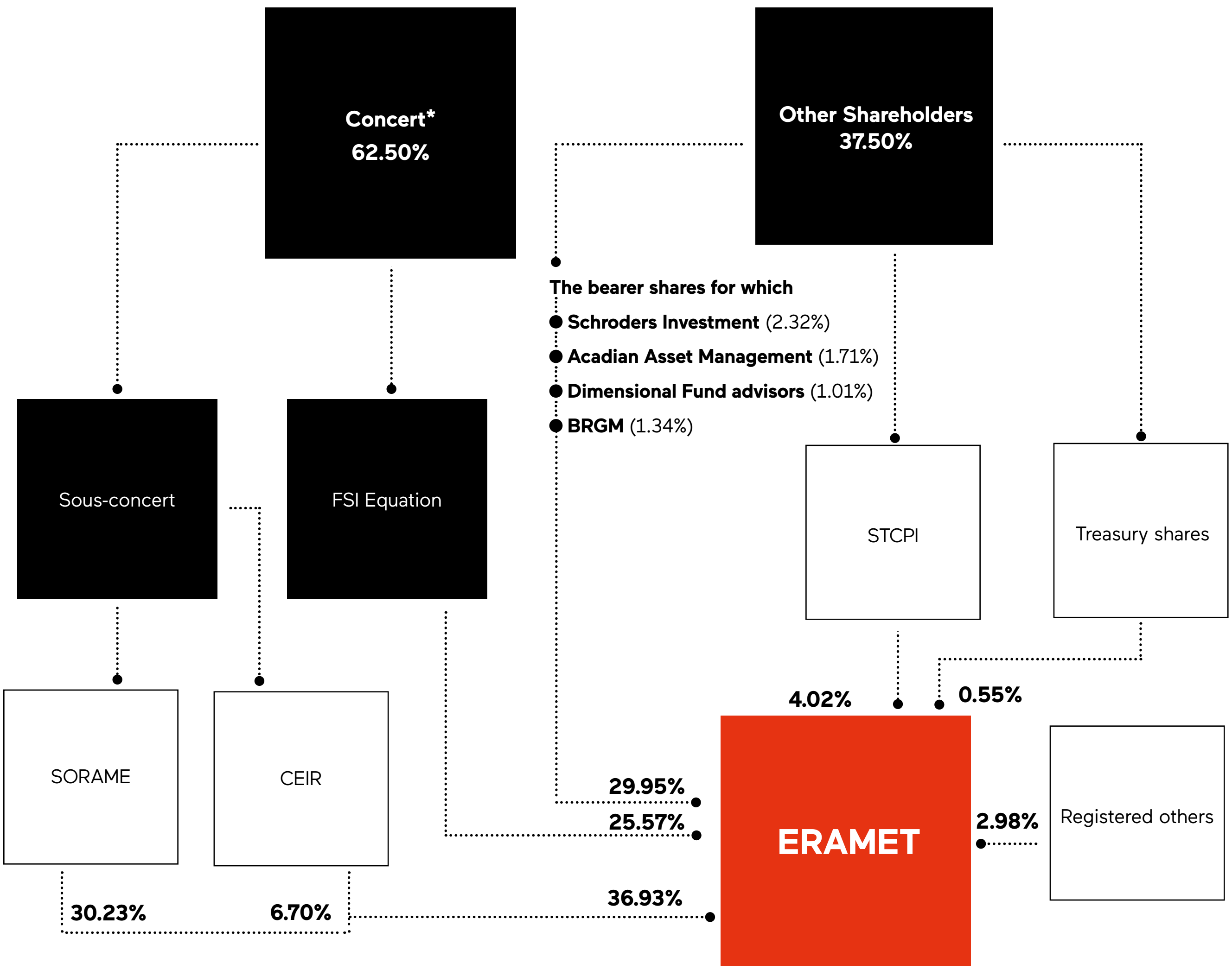
8.2.3 RECENT CHANGES IN SHARE CAPITAL AND ITS DISTRIBUTION

Since the close of the financial year, the Company has not been informed of any significant change in shareholding

8.2.4 DISTRIBUTION OF SHARE CAPITAL

8.2.4.1 CONTROL ORGANISATION CHART

SHAREHOLDERS OF THE COMPANY AS AT 31 DECEMBER 2017 (IN % OF SHARES)



* Pursuant to a Shareholders' Agreement which was the subject of a decision and information from the AMF published on 12 April 2012 under the No. 212C0486 at the time of its conclusion and a decision and information of the AMF published on 28 July 2016 under the No. 216C1753, relating to the changes in the Group at the time of the acquisition of the entire FSI Equation capital by the Agence de participations de l'État (APE).

8.2.4.2 AS AT 31 DECEMBER 2017 (INCLUDING SHAREHOLDERS HOLDING—OR THOSE LIKELY TO HOLD—AT LEAST 1% OF CAPITAL OR VOTING RIGHTS, AND KNOWN TO THE COMPANY)

MAJOR SHAREHOLDERS	SHARES	PERCENTAGE OF CAPITAL	THEORETICAL VOTING RIGHTS	PERCENTAGE OF THEORETICAL VOTING RIGHTS	VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING	PERCENTAGE OF VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING
SORAME[(1)]	8,051,838	30.23%	16,103,676	35.86%	16,103,676	35.97%
CEIR[(1)]	1,783,996	6.70%	3,567,992	7.94%	3,567,992	7.97%
Total for the SORAME/CEIR subgroup[(1)]	**9,835,834**	**36.93%**	**19,671,668**	**43.80%**	**19,671,668**	**43.94%**
FSI Equation (held by the French State)[(1)]	6,810,317	25.57%	13,620,634	30.33%	13,620,634	30.43%
State (direct ownership)	100	not significant	200	not significant	200	not significant
Group total (SORAME/CEIR/FSI)[(1)]	**16,646,251**	**62.50%**	**33,292,502**	**74.13%**	**33,292,502**	**74.37%**
Schroders plc[(2)]	619,137	2.32%	619,137	1.38%	619,137	1.38%
Acadian Asset Man. llc[(2)]	454,540	1.71%	454,540	1.01%	454,540	1.02%
Dimensional Fund Advisors lp[(2)]	267,807	1.01%	267,807	0.60%	267,807	0.60%
STCPI	1,070,587	4.02%	2,141,174	4.77%	2,141,174	4.78%
BRGM[(2)]	356,044	1.34%	356,044	0.79%	356,044	0.80%
Employees (ERAMET share fund)[(3)]	132,165	0.50%	184,538	0.41%	184,538	0.41%
Corporate officers	14,002	not significant	18,614	not significant	18,614	not significant
ERAMET treasury shares	147,642	0.55%	147,642	0.33%	0	0.00%
Other	6,925,485	26.06%	7,799,143	16.59%	7,430,067	16.64%
Total Shares	26,633,660	100.00%	44,912,065	100.00%	44,764,423	100.00%
Total Registered Shares	**18,509,540**	**69.50%**	**36,663,450**	**81.63%**	**36,640,303**	**81.85%**
Total Bearer Shares	**8,124,120**	**30.50%**	**8,124,120**	**18.09%**	**8,124,120**	**18.15%**

(1) The companies SORAME, CEIR and FSI Equation are signatories to a Shareholders' Agreement constituting a joint action and have been the subject of a decision and information of the Autorité des marchés financiers under the No. 212C0486.
(2) Estimate based on last TPI survey.
(3) According to the new drafting of Article L. 225-102 of the French Commercial Code, issued after Article 135 of the Law 2015-990 of 6 August 2015 (Macron law), the share of capital held by employees on the last day of the year includes, in addition to the shares allocated to a salary savings plan or an FCPE, free registered shares issued from bonus share plans authorised by a general meeting subsequent to the entry into force of the law, i.e. from 8 August 2015. As at 31 December 2017, there are no bonus shares corresponding to this definition. The share capital held by employees as at 31 December 2017 is therefore equal to 132,165 shares, corresponding to 0.50% of the share capital.

8.2.4.3 AS AT 31 DECEMBER 2016 (INCLUDING SHAREHOLDERS HOLDING—OR THOSE LIKELY TO HOLD—AT LEAST 1% OF CAPITAL OR VOTING RIGHTS, AND KNOWN TO THE COMPANY)

MAJOR SHAREHOLDERS	SHARES	PERCENTAGE OF CAPITAL	THEORETICAL VOTING RIGHTS	PERCENTAGE OF THEORETICAL VOTING RIGHTS	VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING	PERCENTAGE OF VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING
SORAME(1)	8,051,838	30.33%	16,103,676	35.95%	16,103,676	36.04%
CEIR(1)	1,783,996	6.72%	3,567,992	7.97%	3,567,992	7.98%
Total for the SORAME/CEIR subgroup(1)	**9,835,834**	**37.05%**	**19,671,668**	**43.92%**	**19,671,668**	**44.02%**
FSI Equation (held by the French State)(1)	6,810,317	25.65%	13,620,634	30.41%	13,620,634	30.48%
State (direct ownership)	100	not significant	200	not significant	200	not significant
Group total (SORAME/CEIR/ISP)(1)	**16,646,251**	**62.70%**	**33,292,502**	**74.33%**	**33,292,502**	**74.51%**
Intesa SanPaolo(2)	2,094,146	7.89%	2,094,146	4.68%	2,094,146	4.69%
UniCredit(2)	1,080,000	4.07%	1,080,000	2.41%	1,080,000	2.42%
STCPI	1,070,587	4.03%	2,141,174	4.78%	2,141,174	4.79%
BRGM(3)	356,044	1.34%	356,044	0.79%	356,044	0.80%
Employees (ERAMET share fund)(4)	52,373	0.20%	104,746	0.23%	104,746	0.23%
Corporate officers	30,786	not significant	48,765	not significant	48,765	not significant
ERAMET treasury shares	105,801	0.40%	105,801	0.24%	0	0.00%
Other	5,114,455	19.38%	5,566,384	12.54%	5,566,384	12.57%
Total Shares	26,550,443	100.00%	44,789,562	100.00%	44,683,761	100.00%
Total Registered Shares	**18,375,085**	**69.21%**	**36,570,694**	**81.65%**	**36,508,403**	**81.70%**
Total Bearer Shares	**8,175,358**	**30.79%**	**8,175,358**	**18.25%**	**8,175,358**	**18.30%**

(1) The companies SORAME, CEIR and FSI Equation are signatories to a Shareholders' Agreement constituting a joint action and have been the subject of a decision and information of the Autorité des marchés financiers under the No. 212C0486.
(2) Since the last declaration concerning the crossing of Intesa SanPaolo thresholds No. 2016C2860 of 20 December 2016 and of Unicredit of 19 December 2016.
(3) Estimate based on last TPI survey.
(4) According to the new drafting of Article L. 225-102 of the French Commercial Code, issued after Article 135 of the Law 2015-990 of 6 August 2015 (Macron law), the share of capital held by employees on the last day of the year includes, in addition to the shares allocated to a salary savings plan or an FCPE, free registered shares issued from bonus share plans authorised by a general meeting subsequent to the entry into force of the law, i.e. from 8 August 2015. As at 31 December 2016, there are no bonus shares corresponding to this definition. The share capital held by employees as at 31 December 2016 is equal to 52,373 shares, corresponding to 0.20% of capital.

8.2.4.4 AS AT 31 DECEMBER 2015 (INCLUDING SHAREHOLDERS HOLDING—OR THOSE LIKELY TO HOLD—AT LEAST 1% OF CAPITAL OR VOTING RIGHTS, AND KNOWN TO THE COMPANY)

MAJOR SHAREHOLDERS	SHARES	PERCENTAGE OF CAPITAL	THEORETICAL VOTING RIGHTS	PERCENTAGE OF THEORETICAL VOTING RIGHTS	VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING	PERCENTAGE OF VOTING RIGHTS EXERCISABLE AT SHAREHOLDERS' MEETING
SORAME(1)	8,051,838	30.33%	16,103,676	35.98%	16,103,676	36.16%
CEIR(1)	1,783,996	6.72%	3,567,992	7.97%	3,567,992(5)	8.01%
Total for the SORAME/CEIR subgroup(1)	**9,835,834**	**37.06%**	**19,671,668**	**43.96%**	**19,671,668**	**44.17%**
FSI Equation (Bpifrance subsidiary)(1)	6,810,317	25.66%	13,620,634	30.44%	13,620,634(6)	30.58%
Group total (SORAME/CEIR/Bpifrance)(1)	**16,646,151**	**62.71%**	**33,292,302**	**74.39%**	**33,292,302(7)**	**74.76%**
Carlo Tassara France (company belonging to the Romain Zaleski group)(2)	3,394,146	12.79%	3,394,146	7.58%	3,394,146	7.62%
STCPI	1,070,587	4.03%	2,141,173	4.78%	2,141,173	4.81%
BRGM(3)	356,044	1.34%	356,044	0.80%	356,044	0.80%
BlackRock Investment Management UK Ltd(3)	541,866	2.04%	541,866	1.21%	541,866	1.22%
Employees (ERAMET share fund)(4)	52,373	0.20%	104,746	0.23%	104,746	0.24%
Corporate officers	27,504	not significant	44,536	not significant	44,536	not significant
ERAMET treasury shares	218,276	0.82%	218,276	0.49%	0	0.00%
Other	4,236,271	16.06%	4,659,155	10.51%	4,659,155	10.56%
Total Shares	26,543,218	100.00%	44,752,244	100.00%	44,533,968	100.00%
Total Registered Shares	**18,387,508**	**69.27%**	**36,596,534**	**81.78%**	**36,501,477**	**81.96%**
Total Bearer Shares	**8,155,710**	**30.73%**	**8,155,710**	**18.22%**	**8,032,491**	**18.04%**

(1) The companies SORAME, CEIR and FSI Equation are signatories to a Shareholders' Agreement constituting a joint action and have been the subject of a decision and information of the Autorité des marchés financiers under the No. 212C0486.
(2) Since the last threshold crossing statement of Carlo Tassara France, No. 207C0134 of 17 January 2007.
(3) Estimated in light of the latest Thomson Reuters survey.
(4) According to the new drafting of Article L. 225-102 of the French Commercial Code, issued after Article 135 of the Law 2015-990 of 6 August 2015 (Macron law), the share of capital held by employees on the last day of the year includes, in addition to the shares allocated to a salary savings plan or an FCPE, free registered shares issued from bonus share plans authorised by a general meeting subsequent to the entry into force of the law, i.e. from 8 August 2015. As at 31 December 2015, there are no bonus shares corresponding to this definition. The share capital held by employees as at 31 December 2015 is therefore equal to 52,373 shares, corresponding to 0.20% of the share capital.
(5) Of which 720,866 voting rights are not exercisable until 21 July 2016 (see AMF Decision 214C1461 of 21 July 2014).
(6) Of which 2,751,872 voting rights are not exercisable until 21 July 2016 (see AMF Decision 214C1461 of 21 July 2014).
(7) Of which, 3,472,738 voting rights are not exercisable until 21 July 2016 (see AMF Decision 214C1461 of 27 July 2014).

To the best of the Company's knowledge, there are no other shareholders directly or indirectly holding more than 1% of the Company's capital or voting rights and there are no pledged securities. Except for the treasury-held shares mentioned in the table above, there are no other treasury shares. The holding of shares by corporate officers is detailed in the Governance Chapter.

8.2.4.5 FORESEEABLE CHANGES TO VOTING RIGHTS

At 31 December 2017, 106,640 shares registered for less than two years in registered form do not benefit from the double voting right. Should these shares qualify for double voting rights, double voting rights would be increased to a total of approximately 36,770,090, to which the simple voting rights of the bearer shares should be added, i.e. 8,124,120 additional rights as at 31 December 2017.

8.2.5 STOCK OPTION PLANS AND BONUS SHARES

As at the date of this Registration Document, there are no other dilutive instruments (convertible or exchangeable negotiable securities or any negotiable securities with warrants) issued by the Company besides the ODIRNANs described in section 8.2 above.

The bonus shares allocated, including details of the granted and open plans as at 31 December 2017, are presented in the notes to the consolidated financial statements of ERAMET described in Section 3 of this document. There are no other stock-option plans in force.

8.2.6 SUMMARY OF FINANCIAL AUTHORISATIONS

AUTHORISED CAPITAL INCREASES	
A – By issuing shares, other securities and/or warrants, with preferential subscription rights for the shareholders. Art. L. 225-129 CC	
By the EGM for an amount of €24 million	23 May 2017 (19th resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
B – By issuing shares, various securities and/or warrants, without preferential subscription rights for part of a public offering	
By the EGM for an amount of €16 million	23 May 2017 (20th resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
C – By issuing shares, other securities and/or warrants, with the cancellation of the preferential subscription rights of the shareholders in the context of an offer referred to in II of Article L. 411-2 of the Monetary and Financial Code	
By the EGM for an amount of €16 million	23 May 2017 (21st resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
D – By issuing shares, with the cancellation of shareholders' preferential subscription rights, as a result of subsidiaries issuing securities which give access to the Company's capital	
By the EGM for an amount of €16 million	23 May 2017 (22nd resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
E – By incorporation of reserves, profits, premiums or otherwise, the capitalisation of which would be permitted	
By the EGM for an amount of €24 million	23 May 2017 (18th resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
F – By issuing shares, other securities, as compensation for contributions in kind granted to the Company, with cancellation of the preferential subscription rights of the shareholders. Art. L. 225-147 paragraph 6 CC	
By the EGM for an amount of 10% of the capital	23 May 2017 (23rd resolution)
Duration of the delegation	26 months until 22/07/2019
Use of authorisation	None
Limitation of the amount of issues (Total A+B+C+D+F)	
By the EGM	23 May 2017 (24th resolution)
Maximum amount	€24 million
Use of authorisations	None
Capital increase reserved for employees	
G – By the EGM	23 May 2017 (25th resolution)
Duration of the delegation	26 months until 22/07/2019
Maximum amount	€500,000
Use of authorisation	None
Capital reduction	
H – By the EGM	23 May 2017 (26th resolution)
Duration of the delegation	26 months until 22/07/2019
Maximum amount	10% of capital
Use of authorisation	None
Allocation of bonus shares (Art. L. 225-197-1 and L. 225-197-2 CC)	
I – By the EGM	27 May 2016 (14th resolution)
Maximum total number	550,000 shares
Duration of authorisation	38 months until 26/07/2019
Used in 2016 and 2017	312,599
Available balance	237,401

8.2.7 DESCRIPTION OF THE SHARE BUYBACK PROGRAMME

8.2.7.1 REVIEW OF THE 2017 BUYBACK PROGRAMME

The Combined General Meeting of 23 May 2017 authorised the Company to repurchase its own shares within the limit of 10% of the share capital and for a maximum purchase price of €300 per share, the maximum amount payable by the Company being €796,513,200. This authorisation expires at the Ordinary General Meeting called to approve the 2017 financial statements and has been given for the purpose of:

- supporting the share price via a liquidity agreement with a market maker, in accordance with the AMAFI code of conduct recognised by the AMF;
- the delivery of shares upon the exercise of rights attached to securities giving access to the share capital by redemption, conversion, exchange or otherwise;
- the implementation of any stock option plan of the Company pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- the allocation of bonus shares under the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- the allocation or the transfer of shares to the employees with respect to their participation in the benefits of the expansion of the Company, or the implementation of any employee savings plan under the conditions stipulated by the law, in particular, the Articles L. 3332-1 *et seq.* of the French Labour Code;
- their cancellation, in accordance with the 26th resolution of the Combined Shareholders' Meeting of 23 May 2017, authorising the reduction of the share capital of the Company for a period of twenty-six months.

8.2.7.2 DETAILS OF THE PURCHASE AND SALE OF TREASURY SHARES DURING THE YEAR (ARTICLE L. 225-211 OF THE FRENCH COMMERCIAL CODE)

The table below summarises the treasury share transactions that were made by the Company between 1 January and 31 December 2017.

		MARKET MAKER (1)	ALLOCATIONS TO EMPLOYEES	TOTAL
Position at 1 January 2016		**123,219**	**95,057**	**218,276**
As a percentage of capital	*26,543,218*	*0.46%*	*0.36%*	*0.82%*
Final allocation of bonus shares			(51,547)	(51,547)
Purchases		336,428		336,428
Sales		(397,356)		(397,356)
Position at 31 December 2016		**62,291**	**43,510**	**105,801**
As a percentage of capital	*26,550,443*	*0.23%*	*0.16%*	*0.40%*
Redemption mandate - March 2017			25,000	25,000
Redemption mandate - September 2017			120,000	120,000
Final allocation of bonus shares			(64,015)	(64,015)
Purchases		359,094		359,094
Sales		(398,238)		(398,238)
Position at 31 December 2017		23,147	124,495	147,642
As a percentage of capital	*26,633,660*	*0.09%*	*0.47%*	*0.55%*

(1) Liquidity contract signed with Exane BNP Paribas.

During the year, 359,094 shares were purchased at an average price of €55.53 and 398,238 shares were sold at an average price of €57.73.

The book value of the portfolio of 147,642 shares with a nominal value of €3.05 per share, held as at 31 December 2017, amounted to €14.4 million, with a market value, on the same date, of €99.03 per share, or €14.6 million.

The Company did not use derivatives during the year.

No Group company holds shares in the parent company ERAMET.

8.2.7.3 LIQUIDITY AGREEMENT

To ensure minimum liquidity at any time of its title, the Company entered into a liquidity agreement with Exane BNP Paribas on 18 July 2003. This liquidity agreement complies with the AMAFI charter. The summary of the stock market operations is given in the details of the purchase and sale transactions carried out above. With a close-out date of 31 December 2017, the following means were included in the liquidity account: 24,482 ERAMET shares and €7,553,243.

8.2.8 DESCRIPTION OF THE 2018 SHARE BUYBACK PROGRAMME

8.2.8.1 LEGAL FRAMEWORK

In accordance with the provisions of Article 241-2 of the general regulations of the *Autorité des marchés financiers*, the aim of this description is to state the purposes, terms and conditions of the Company's share buyback programme. This programme, which falls within the scope of Article L. 225-209 of the Commercial Code, will be subject to authorisation by the General Shareholders' Meeting of 24 May 2018, meeting the quorum and majority requirements in ordinary matters.

8.2.8.2 NUMBER OF SHARES AND PORTION OF CAPITAL HELD BY THE COMPANY

As at 31 December 2017, the share capital consisted of 26,633,660 shares.

On that date, the Company held 147,642 treasury shares, representing 0.55% of share capital.

8.2.8.3 BREAKDOWN BY EQUITY SECURITIES OBJECTIVES HELD BY THE COMPANY

As at 31 December 2017, 147,642 treasury shares held by the Company were distributed as follows by objective:

- Market maker (liquidity agreements): 23,147 shares;
- Allocation to employees: 124,495 shares.

8.2.8.4 OBJECTIVES OF THE NEW SHARE BUYBACK PROGRAMME

The objectives of this programme are:

- supporting the share price via a liquidity agreement with a market maker, in accordance with the AMAFI code of conduct recognised by the AMF;
- the delivery of shares upon the exercise of rights attached to securities giving access to the share capital by redemption, conversion, exchange or otherwise;
- the implementation of any stock option plan of the Company pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- the allocation of bonus shares under the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- the allocation or the transfer of shares to the employees with respect to their participation in the benefits of the expansion of the Company, or the implementation of any employee savings plan under the conditions stipulated by the law, in particular, the Articles L. 3332-1 *et seq.* of the French Labour Code;
- their cancellation, in accordance with the 26th resolution of the Combined Shareholders' Meeting of 23 May 2017, authorising the reduction of the share capital of the Company for a period of twenty-six months.

8.2.8.5 MAXIMUM SHARE OF CAPITAL, MAXIMUM NUMBER AND CHARACTERISTICS OF EQUITY SECURITIES

10% of the share capital as at 31 December 2017, or 2,663,366 shares, before deducting the shares held by the Company

The ERAMET shares are listed on Euronext Paris (ISIN code: FR0000131757).

The maximum purchase price would be €300 per share.

The maximum amount allocated to these acquisitions would be €799,009,800 for 2,663,366 shares representing 10% of the Company's share capital.

8.2.8.6 TERMS OF REPURCHASE

Shares, disposals, and transfers may be made by any means on the market or over the counter, including by transactions in blocks of securities or via derivatives, provided that the resolution proposed to the vote of the shareholders does not limit the part of the programme which can be realised by purchase of blocks of titles.

The Company specifies that in the event of the implementation of derivatives, the objective of the Company would cover optional positions taken by the issuer (purchase options or subscription of shares granted to Group employees, debt securities giving access to the capital of the issuer). The use of derivatives will more specifically consist of buying call options and the Company will not be required to use sales of put options.

8.2.8.7 DURATION OF THE BUYBACK PROGRAMME

The validity of the programme is limited to a period ending with the General Shareholders' Meeting convened to approve the financial statements for 2018.

8.3 INFORMATION ABOUT THE COMPANY

8.3.1 CORPORATE NAME (ARTICLE 2 OF THE ARTICLES OF ASSOCIATION)

ERAMET. In this document, the Company is called "the Company" or "the issuer"; the Group comprising ERAMET and its subsidiaries is referred to as "the Group".

8.3.2 REGISTRATION NUMBER OF THE COMPANY

The Company is registered in the Paris Trade and Companies Register under the No. 632 045 381 and under the SIRET No. 632 045 381 000 27. Its industry is research and exploitation of mineral deposits of any nature, metallurgy of all metals and alloys, and their trading.

8.3.3 DATE OF INCORPORATION AND DURATION OF THE COMPANY (ARTICLE 5 OF THE ARTICLES OF ASSOCIATION)

The Company has been incorporated for a period of 99 years commencing on 23 September 1963 and expiring on 23 September 2062, except in the case of early dissolution or extension.

8.3.4 HEADQUARTERS (ARTICLE 4 OF THE ARTICLES OF ASSOCIATION)

Tour Maine-Montparnasse

33, avenue du Maine
75015 Paris
Telephone: +33 (0)1 45 38 42 42
Fax: +33 (0) 1 45 38 41 28
Website: www.eramet.com

8.3.5 LEGAL FORM AND APPLICABLE LAW

ERAMET is a limited company under French law, with a Board of Directors, governed by the provisions of Articles L. 224-1 *et seq.* of the Commercial Code (Legislative and regulatory section) and the provisions of its Articles of Association.

8.3.6 LEGAL AUDIT OF THE COMPANY (ARTICLE 19 OF THE ARTICLES OF ASSOCIATION)

In accordance with the law, the legal audit of the Company is provided by two Statutory Auditors and two alternate Statutory Auditors.

According to Article 19 of the Articles of Association, the Auditors must be nationals of one of the states of the European Union.

8.3.7 CORPORATE PURPOSE (ARTICLE 3 OF THE ARTICLES OF ASSOCIATION)

"The objective of the Company in all countries is the research and exploitation of mineral deposits of all kinds, the metallurgy of all metals and alloys, and their trading.

To this end, it operates directly, or indirectly, by way of participation in the following activities:

- research, acquisition, leasehold, alienation, concession and operation of all mines and quarries of any nature whatsoever;
- treatment, processing and sale of all ores, mineral substances and metals, as well as their by-products, alloys and all derivatives;
- the manufacture and marketing of all products in the composition of which the aforesaid materials or substances are incorporated;
- more generally, all operations directly or indirectly related to the above items, or still to promote the development of corporate interests.

To achieve this objective, the Company may:

- create, acquire, sell, exchange, take or lease, with or without a promise to sell, manage and exploit directly or indirectly all industrial and commercial establishments, factories, sites, and premises, movable and immovable objects;
- obtain or acquire any patents, licences, processes and trademarks, use, assign or provide them, grant licences in any country;
- generally carry out all commercial, industrial, financial, movable or immovable transactions, which may relate, directly or indirectly, to the Company's objective or which may facilitate its implementation. It may act, directly or indirectly, on its own behalf or on behalf of third parties and either alone or in association, partnership, or Company, with any other companies or persons and carry out, directly or indirectly, in France or abroad, under whatever form it may be, the operations falling within its purpose. It may take, in any form, all interests and participations, in all companies or enterprises, French or foreign, such as to favour the development of its own affairs."

8.3.8 FISCAL YEAR (ARTICLE 23 OF THE ARTICLES OF ASSOCIATION)

The financial year, of twelve months, begins on 1 January and ends on 31 December of each year.

8.3.9 GENERAL SHAREHOLDERS' MEETING

8.3.9.1 CONVOCATION AND CONDITIONS FOR ADMISSION (ARTICLES 20 TO 22 OF THE ARTICLES OF ASSOCIATION)

COMPOSITION

The General Shareholders' Meeting is composed of all the shareholders of the Company, regardless of their number of shares.

CONVOCATION

The General Shareholders' Meeting is convened and deliberates in accordance with the provisions of the French Commercial Code and Articles 20 to 22 of the Articles of Association.

Meetings are held at the head office or any other place within the same department specified in the meeting notice.

CONDITIONS OF ADMISSION

Any shareholder has the right to participate in the Meetings, either by attending personally or by being represented by another shareholder, his spouse, the partner with whom he has entered into a civil union, or by any other natural or legal person of his choice under the conditions provided for by the regulations in force.

Holders of registered shares and holders of bearer shares must complete the formalities prescribed by the regulations in force. These formalities must have been completed no later than the second business day preceding the Meeting at midnight Paris time prior to the convening of the Meeting. Shareholders are also entitled to vote by correspondence in accordance with Articles L. 225-107 and R. 225-75 *et seq.* of the French Commercial Code, by means of a form to be sent to the Company at least three days before the meeting.

If the Board of Directors so decides at the time of convening the Meeting, participation in the Meeting by video conference or by any means of telecommunication and remote transmission, including the Internet, is authorised in accordance with the regulations. If applicable, this decision is communicated in the meeting notice published in the Bulletin of Mandatory Legal Notices.

UNDIVIDED, SPLIT, PLEDGED OR SEQUESTERED SHARES

In the absence of specific statutory provisions, and pursuant to the provisions of Article L. 225-110 of the Commercial Code, any holder of an undivided share, a split share (bare owner and beneficiary), a pledged share or a sequestered share, is called to the Meeting and may attend, subject to compliance with the legal or statutory provisions below with respect to the exercise of voting rights.

8.3.9.2 CONDITIONS FOR EXERCISE OF VOTING RIGHTS (ARTICLES 8 AND 20 OF THE ARTICLES OF ASSOCIATION)

Each shareholder has as many votes as the shares he owns or represents, subject to the double voting rights attached to certain shares. The Extraordinary Shareholders' Meeting convened on 21 July 1999 conferred a double voting right to each fully paid-up share for which a nominal registration has been valid for at least two years in the name of the same shareholder, with effect from 1 January 2002.

Shares granted free of charge, with respect to an incorporation of reserves, profits, or issue premiums, on the basis of old shares with double voting rights, also confer double voting rights at the end of a period of two years.

Double voting rights cease for any share which has been converted into bearer form or transferred, except, by law, any transfer by succession, liquidation of community property between spouses or family donation or a merger or division of the shareholding company.

In accordance with the law, double voting rights may only be abolished by a decision of the Extraordinary General Shareholders' Meeting and after ratification by the Special Shareholders' Meeting.

ELECTRONIC VOTING

Any shareholder may also, if the Board of Directors so decides at the time of the convening of the Meeting, transmit a vote by correspondence or proxy, by any means of remote transmission, including the Internet, in accordance with the regulations applicable at the time of use.

In the case of the use of an electronic form, the signature of the shareholder may take the form either of a secure signature or of a reliable identification process guaranteeing its connection with the act to which it relates, specifically consisting of an identifier and a password. If applicable, this decision is communicated in the meeting notice published in the Bulletin of Mandatory Legal Notices.

Proxies or votes expressed electronically in this way before the meeting, and the confirmation of receipt given in reply, shall be regarded as irrevocable written instructions enforceable on all parties, it being stipulated that if the shares are sold before midnight, Paris time, on the second business day preceding the meeting, the Company shall invalidate or amend, as the case may be, proxies or votes expressed before such date and time.

UNDIVIDED, SPLIT, PLEDGED OR SEQUESTERED SHARES

In the absence of specific statutory provisions and pursuant to the provisions of Article L. 225-110 of the Commercial Code, the voting right is exercised by the usufructuary at the Ordinary General Shareholders' Meeting, by the bare owner at the Extraordinary General Shareholders' Meeting, by one of the undivided co-owners or by a single representative in the case of co-owners of undivided shares and by the owner of securities pledged or under escrow.

8.3.10 TRANSMISSION OF SHARES

Since the elimination of the approval clause adopted by the Meeting of 15 June 1994, shares are exchanged freely subject to compliance with the rules applicable to companies whose shares are admitted to trading on a regulated market.

8.3.11 IDENTIFICATION OF SHAREHOLDERS

8.3.11.1 CROSSING THRESHOLDS/DECLARATION OF INTENT

LEGAL DECLARATIONS

under Articles L. 233-7 to L. 233-11 of the Commercial Code, any natural or legal person, acting alone or in concert, holding a number of shares representing more than one twentieth, one tenth, three-twentieths, one fifth, one quarter, three-tenths, one third, one half, two thirds, eighteen twentieths or nineteen twentieths of the Company's capital and/or voting rights must inform the *Autorité des marchés financiers* and the Company, within the agreed time limits by registered letter with acknowledgement of receipt, of the total number of shares and/or voting rights in his possession. The same people are also required to inform the Company when their participation falls below any of the above mentioned thresholds.

Finally, this reporting obligation is supplemented by the legal obligation to report, on time, the objectives over the next six months for any person crossing, upward or downward, the above mentioned thresholds of one tenth, three-twentieths, one fifth, or one quarter.

In the event of non-compliance with these reporting obligations, the provisions of Article L. 233-14 of the said Code shall be applied.

ADDITIONAL STATUTORY DECLARATIONS

since the amendment of Article 9 of the Articles of Association by the General Shareholders' Meeting on 15 June 1994, any natural or legal person, acting alone or in concert, who comes to hold or ceases to hold a fraction equal to 1% of the capital and/or voting rights, or any multiple thereof, is required to inform the Company within ten days by registered letter with acknowledgement of receipt addressed to the Company's head office, including the number of shares and voting rights held.

Failure to do so results in the deprivation of voting rights for the shares or voting rights exceeding the fraction that should have been declared for a period of two years commencing from the regularisation and on request, at a Meeting, of one or more shareholders owning 5% of capital or voting rights of a Meeting.

8.3.11.2 IDENTIFIABLE BEARER SHARES

Pursuant to Article L. 228-2 of the Commercial Code and Article 9 of the Articles of Association, the Company may at any time appeal to Euroclear SA for the procedure for identifying the holders of bearer shares called "identifiable bearer share" (TPI).

8.3.11.3 PUBLICLY MADE DECLARATIONS OF THRESHOLD CROSSING

DATE	AMF DECISION NO.	SUBJECT
03/08/1999	199C1045	Declaration of threshold crossing (ERAP—CEIR—SORAME). Declaration of intent. Appointment of five people qualified as directors. Reminder: exemption from the obligation to file a public tender offer.
29/12/1999	199C2064	Declaration of threshold crossing Cogema replaces ERAP.
30/12/1999	199C2068	Declaration of threshold crossing AFD replaces ERAP.
25/07/2001	199C0921	Draft amendment to the shareholders' agreement: reclassification of ERAMET shares held by Cogema at CEA Industrie.
12/09/2001	201C1140	Declaration of threshold crossing Amendment to the shareholders' agreement following the substitution of Cogema by AREVA.
20/12/2004	204C1559	Declaration of threshold crossing and declaration of intent. Substitution of Maaldrift BV by Carlo Tassara International.
14/02/2006	206C0296	Declaration of threshold crossing upward to 5.0034% of capital and 2.98% of voting rights by M&G Investment Management Limited.
17/01/2007	207C0134	Declaration of threshold crossing upward to 13.16% of capital and 7.74% of voting rights and declaration of intent by Carlo Tassara France.
18/01/2007	207C0137	Declaration of threshold crossing downward (0%) by Carlo Tassara International.
24/07/2007	207C1569	Declaration of threshold crossing downward to 4.14% of capital and 4.81% of voting rights by STCPI.
30/05/2008	208C1042	Amendment to the Shareholders' Agreement (CEIR—SORAME—AREVA) of 17 June 1999
03/06/2008	208C1083	Declaration of threshold crossing downward to 4.95% of capital and 2.93% of the voting rights of M&G Investment Management Limited.
21/07/2009	209C1013	Amendment to the SORAME—CEIR Agreement of 19 July 1999
20/03/2012	212C0416	Declaration of threshold crossing upward and then downward (4.92% of capital and 2.94% of voting rights) by BlackRock Inc.
12/04/2012	212C0486	Advertising of the SORAME-CEIR-FSI Shareholders' Agreement clauses
21/05/2012	212C0634	Declaration of threshold crossing downward by AREVA—End of SORAME-CEIR-AREVA Shareholders' Agreement.
23/05/2012	212C0647	Declaration of threshold crossing upward by FSI
22/07/2013	213C1027	Declaration of threshold crossing upward by BPI Group through Bpifrance Participations (ex-FSI)
22/07/2013	213C1028	Declaration of participation of the *Caisse des dépôts et consignations* through the BPI group
21/07/2014	214C1461	Declaration of threshold crossing upward by *Caisse des dépôts et consignations* and BPI Group, through BPI France Participations, as a result of the allocation of double voting rights.
28/07/2016	216C1753	Consideration of the consequences of the change within the Group (change of control of FSI Equation without affecting the equilibrium of the controlling group ERAMET, the SORAME-CEIR-FSI Equation shareholder agreement remaining unchanged)
2/09/2016	216C1953	Declaration of threshold crossing upward by the *Agence de participations de l'État* (APE), together with the FSI Equation which it controls and the companies SORAME and CEIR
2/09/2016	216C1957	Declaration of threshold crossing downward by Bpifrance, through Bpifrance Participations, and the end of collaborative action with FSI Equation, SORAME and CEIR
5/09/2016	216C1971	Declaration of threshold crossing downward by *Caisse des dépôts et consignations*, through Bpifrance Participations
20/12/2016	216C2860	Declaration of threshold crossing upward by Intesa SanPaolo S.p.A.
21/12/2016	216C2884	Declaration of threshold crossing downward by Carlo Tassara France SAS
19/09/2017	2017C2159	Declaration of threshold crossing downward by Intesa SanPaolo S.p.A.

8.3.11.4 ELEMENT LIKELY TO HAVE AN IMPACT IN THE EVENT OF A PUBLIC OFFER

In addition to the information on threshold crossings, double voting rights, shareholder agreements and commitments detailed in this Section, the following items are to be noted.

8.3.11.5 ABILITY TO USE THE CAPITAL INCREASE AUTHORISATIONS DURING PUBLIC OFFERS

According to the new wording of Article L. 233-32 of the Commercial Code, resulting from Law No. 2014-384 of 29 March 2014, the capital increase authorisations of the **19th to 23rd resolutions** put to vote at the General Shareholders' Meeting in May 2017 to increase the capital-authorisations with preferential subscription rights (19th), without preferential subscription rights through a public offering (20th) or private placement (21st), by subsidiaries (22nd) or in consideration of contributions in kind (23rd), within the limit of a nominal amount of €24 million for resolutions 19 to 23 (i.e. a little less than a third of the share capital), may be used during a takeover bid or exchange by the Board of Directors, subject to the powers expressly granted to general meetings and within the limits of the corporate interest of the Company.

8.3.11.6 LOANS

The Multicurrency Revolving Credit Facility Agreement (RCF) described in Note 7 to the consolidated accounts (Section 6.1), which was drawn up at the beginning of January 2016 for an amount of €980 million, provides for the possibility for each bank, in the event of a change of control of the Company, to notify the cancellation of its commitment and the early repayment of its participation in the advances in progress.

In addition, the bond loan with an option to repay in cash and/or new shares (ODIRNAN) in the amount of approximately €100 million described in note 7 to the consolidated financial statements provides for:

- the possibility of early redemption at the option of the Company within forty-five days following the change of control of the Company for all outstanding bonds.

In the event that the Company decides not to proceed with the early repayment of the bonds following the change of control, an automatic surcharge of 500 basis points of the nominal rate will apply as of the first interest period following said change of control.

The bond loans described in note 7 to the consolidated financial statements for a total amount of €625 million include a change of control clause that could lead to the mandatory early redemption of bond loans at the request of each bondholder in the event of a change of control of the Company.

8.4 SHAREHOLDER AGREEMENTS

Pursuant to a Shareholders' Agreement concluded on 16 March 2012, which entered into force on 16 May 2012 and was renewed on 31 December 2017 for a period of one year expiring on 31 December 2018, which was the subject of a decision and information from the *Autorité des marchés financiers* under No. 212C0647 at the time of its conclusion, and a decision and information from the *Autorité des marchés financiers* under No. 216C1753 relating to the development of the Group during the acquisition by the *Agence de participations de l'État* (APE) of the entire share capital of FSI Equation, the Company is majority controlled by a group of shareholders having declared together, including:

- a subgroup between SORAME and CEIR, companies controlled by the Duval family, under a concurrent shareholders' agreement dated 19 July 1999, which came into force on 21 July 1999 and was the subject of an amendment on 13 July 2009;
- the *Agence des participations de l'État* (APE), through its subsidiary FSI Equation.

The Shareholders' Agreement provides that the Board of Directors includes five directors proposed by SORAME/CEIR, three directors nominated by the APE, five directors must be natural persons, including three individuals proposed by the subgroup SORAME/CEIR and two proposed by the APE, selected on the basis of their competence and independence, two directors nominated by the Caledonian Territorial Corporation of Industrial Participation (hereinafter "STCPI"), a director proposed by agreement between SORAME/CEIR and APE, and a director called upon to chair the ERAMET Board of Directors.

The provisions of the Shareholders' Agreement referred to above as well as those of the subgroup are contained in the main extracts of the AMF's decision and information texts No. 216C1753, No. 212C0486 and No. 209C1013 (amendment of 13 July 2009) reproduced below (the full text of these texts is available on the AMF website).

8.4.1 DECISION AND INFORMATION NO. 216C1753 OF 28 JULY 2016

On 29 August 2016, the *Agence des participations de l'État*, acting on behalf of the State, acquired the entire capital of FSI-Equation, which holds 6,810,317 ERAMET shares, i.e. 25.66% of the capital of this company.

In this context, the *Agence des participations de l'État* filed a request for dismissal of a proposed public offer for the ERAMET shares with the AMF, which issued a decision No. 216C1753 on 28 July 2016, the terms of which are reproduced below.

"At its meeting of 13 July 2016, the *Autorité des marchés financiers* considered a request to dismiss a proposed public offer for the ERAMET shares, which is part of the amendment to the shareholding of this company(1). The group consisting of SORAME(2) and CEIR(3) (both controlled by the Duval family) and FSI-Equation(4) holds 16,646,151 ERAMET shares, representing 33,292,302 voting rights, or 62.71% of the capital and 74.34% of voting rights of this company(5), apportioned as follows:

	SHARES	% CAPITAL	VOTING RIGHTS	% VOTING RIGHTS
SORAME	8,051,838	30.33%	16,103,676	35.96%
CEIR	1,783,996	6.72%	3,567,992	7.97%
Total sub-concert SORAME/CEIR	**9,835,834**	**37.06%**	**19,671,668**	**43.93%**
FSI Equation (acting on behalf of the State)	6,810,317	25.66%	13,620,634	30.41%
Total concert	16,646,151	62.71%	33,292,302	74.34%

The *Agence des participations de l'État* (APE), acting on behalf of the State, intends to acquire, in the second half of 2016, the entire capital of FSI-Equation, which holds 6,810,317 ERAMET shares, i.e. 25.66% of the share capital of this company. As a result of the APE's acquisition of the entire share capital of FSI-Equation, the direct shareholding of ERAMET will not be changed, so the above-mentioned shareholding table will remain unchanged. Nevertheless, due to the APE replacing Bpifrance Participations in the control of FSI-Equation and in the group formed with the SORAME-CEIR subgroup, it will indirectly increase the threshold of 30% of the voting rights of ERAMET and, in collaboration with the SORAME-CEIR subgroup, the thresholds of 30% of the capital and voting rights of this company.

In this context, the APE has asked the *Autorité des marchés financiers* to note that there is no reason to file a public offer for the shares of ERAMET, particularly on the basis of Article 234-7 of the General Regulations.

In particular, the applicant contends that:

- ERAMET is controlled by a group composed of SORAME, CEIR and FSI-Equation, which holds 74.34% of ERAMET's voting rights (of which 30.41% of the voting rights are held by FSI-Equation), i.e. the majority of voting rights in the Company;
- the subgroup SORAME-CEIR is predominant within the group it forms with FSI-Equation(6) and the result of the proposed substitution operation with the capital of the FSI-Equation company, this predominance of the subgroup SORAME-CEIR will not be called into question insofar as the balance of the interests between the said shareholders in the capital of the ERAMET company will remain unchanged;
- the transaction will not entail any change in the terms of the exercise of power within ERAMET due to the absence of any modification of the provisions of the shareholders' agreement concluded on 16 March 2012 between the current collaborators, which provides, in particular, for the composition of the corporate bodies and the rules for consultation(6).

On this basis, the AMF noted (i) that the change of control of FSI-Equation in favour of the APE will have no implication for the balance of the group controlling ERAMET, within which SORAME and CEIR remain predominant over FSI-Equation, (ii) the shareholders' agreement between the subgroup SORAME-CEIR and FSI-Equation will remain unchanged, particularly with regard to the terms of exercising governance within ERAMET and, therefore, on the basis of Article 234-7 of the general regulations there was no need for the compulsory filing of a draft public offer.

In the event of a modification of the agreements concluded or the respective interests of the collaborators, the AMF would need to be informed so that it can assess the consequences of these changes with regard to the obligation to file a public offer.

(1) See, in particular, the communication issued by the State (APE) on 27 July 2016.

(2) Société de Recherche et d'Applications Métallurgiques controlled by the Duval family.

(3) Compagnie d'Études Industrielles de Rouvray, controlled by the Duval family.

(4) 100% owned by Bpifrance Participations, itself 100% owned by Bpifrance SA, which is jointly controlled 50% by the public institution Bpifrance and 50% by the *Caisse des dépôts et consignations.*

(5) Based on a share capital of 26,543,218 shares representing 44,783,479 voting rights, under the second paragraph of Article 223-11 of the general regulations.

(6) See in particular AMF Decision and Information Notice No. 212C0486 of 12 April 2012 and 212C0647 of 23 May 2012."

8.4.2 DECISION AND INFORMATION NO. 212C0486 OF 12 APRIL 2012

The main clauses of the said agreement are as follows:

8.4.2.1 COMPOSITION OF THE ERAMET BOARD OF DIRECTORS

The Board of Directors will be made up of five directors proposed by SORAME/CEIR, three directors proposed by the FSI, four directors who must be natural persons, of which two natural persons will be proposed by the SORAME/CEIR subgroup and two proposed by the FSI, selected on the basis of their competence and independence, two directors nominated by the Caledonian Territorial Corporation of Industrial Participation (hereinafter "STCPI") and a director called upon to chair the board of ERAMET.

This composition must be maintained except in the case of (i) a capital change of more than 10% of the share capital of ERAMET of the capital interests held at the signing of the Agreement, either by SORAME and CEIR or by the FSI, or (ii) a significant change in STCPI's participation in ERAMET, in terms of capital, constituting a reduction to below 635,372 ERAMET shares.

8.4.2.2 CHAIR AND COMMITTEES OF THE BOARD OF DIRECTORS

The parties (i.e. SORAME, CEIR and FSI) plan to consult before any appointment of a Chairman of the board, a managing director, or a deputy CEO, or appointment of leaders of each of the three divisions of the ERAMET group. The composition and duties of the committees of the Board of Directors, namely the Selection Committee, the Remuneration Committee, and the Audit Committee, are also defined. In the event of failure of the collaboration, the rules of general law apply.

8.4.2.3 STABILITY OF THE GROUP

COMMITMENT OF THE COLLABORATION

The parties agree to consult before any meeting of the ERAMET Board of Directors and any General Shareholders' Meeting with a view to a concerted exercise of their voting rights and the implementation of a common approach to it, and stipulate that, in instances of disagreement on a matter before the Board of Directors, they will ensure that its decision is postponed to its next meeting[1].

COMMITMENT TO RETAIN

The companies SORAME and CEIR undertake to hold the first 70% and the second 30% of their total interest in ERAMET and, as long as the FSI does not increase its overall interest in ERAMET, to retain 2% more of the ERAMET capital than FSI, which ensures the overall group the retention of 51% of the ERAMET voting rights as long as the participation of the FSI in ERAMET will remain equal to 25.68% of the capital. However, the SORAME/CEIR subgroup remains free to sell at least 80% of its interest in ERAMET, and its commitment to retention ceases if the FSI exercises its option to purchase the ERAMET shares from SORAME.

OBLIGATIONS IN CASE OF PUBLIC OFFER

Each party undertakes to make or execute in due time the declarations and obligations to which it is bound, to bear only the penalties for their possible non-performance, and to deposit and assume alone the mandatory public tender offer for its possible acquisitions of ERAMET shares, or any of its acts, or a breach of any of its obligations.

OPTIONS TO BUY AND SELL THE ERAMET SHARES OF SORAME AND CEIR

SORAME grants to the FSI an indivisible purchase option for its ERAMET shares, exercisable in the event of a transfer of shares or one or more shares of general partners or of any transaction on SORAME that results in the Duval family losing control of SORAME. CEIR grants the FSI an indivisible purchase option for all of its ERAMET shares, and the FSI grants it an indivisible put option for all of its ERAMET shares. These two options will be exercisable upon exercise by the FSI of its option to purchase the ERAMET shares held by SORAME.

RIGHTS OF RECIPROCAL FIRST REFUSAL (PRE-EMPTION)

The parties agree to a right of reciprocal first refusal, (i) in case of a firm intention to sell, on the market to unidentified third parties on an *ad hoc* basis or by accelerated bookbuilding (ABB) or by a fully marketed offer (FMO), a specified number of ERAMET shares; (ii) in the event of a proposed assignment to one or more identified third parties of one or more ERAMET share blocks, by application or off the market; and in the case of plans to contribute all or part of its interest in ERAMET, paid for by the shares of the Company benefiting from the contribution.

The right of first refusal is excluded in the following cases:

- transfers in the market: for SORAME and CEIR, as long as the commitment to retain and the FSI are respected, provided that it retains 20% of ERAMET's capital;
- transfers to a third party or several third parties identified or proposed contribution: for SORAME and CEIR, as long as the commitment to retain is respected and that a block of more than 5% of the capital is not sold to the same group of investors and for the ISF, as long as it keeps 20% of the ERAMET capital and that more than 5% of the capital is not sold to the same group of investors.

Generally, there is no obligation of notification and rights of first refusal for (i) free transmissions, upon death or *inter vivos*, to individuals, (ii) assignments within the SORAME/CEIR subgroup, provided that the first of these retains at least 70%, and the second at most 30% of their overall participation in ERAMET, (iii) in case of a merger of SORAME and CEIR, if SORAME is the absorbing firm and remains controlled by the Duval family, and (iv) in case of the FSI making a transfer or contribution of its ERAMET shares to one of its subsidiaries, provided that the recipient adheres to the shareholders' agreement and replaces the FSI in the resulting rights and duties.

(1) It is specified that in such a case, the parties are not required to agree and remain free to exercise their voting rights as they wish; in particular, they did not provide veto rights.

8.4.2.4 DURATION

The pact will enter into force on the actual transfer by AREVA to the FSI of the interest it holds in ERAMET. It is concluded for a fixed term ending on 31 December 2016, and extends beyond that date by tacit agreement for periods of one year, unless one of the parties notifies the other of its termination at least one month before the expiration of the current period. The pact will cease immediately and automatically in the event of (i) a change of predominance within the global group due to acquisitions or share subscriptions by the FSI, (ii) sale or contribution or transfer by one of the parties of more than 80% of its stake in ERAMET, or (iii) reduction to less than 15% of FSI's direct or indirect stake in ERAMET capital.

Consequently, SORAME and CEIR decided by addendum No. 2, concluded on 16 March 2012, to amend the duration clause of the shareholders' agreement which they concluded on 17 June 1999, already amended by addendum No. 1 of 13 July 2009.

Finally, it is specified that SORAME and CEIR have committed to the FSI to convert the required number of ERAMET shares to bearer shares so that the current interest of the SORAME/CEIR subgroup is not bound by more than 2% as a result of the loss of the double voting rights attached to the ERAMET shares sold to the FSI. After the sale of ERAMET shares, SORAME and CEIR and the FSI will ask ERAMET to re-register all of their ERAMET shares in order to recover the double voting rights two years later.

8.4.3 DECISION AND INFORMATION NO. 209C1013 OF 21 JULY 2009

By letter dated 16 July 2009, the AMF has been the recipient of a shareholder agreement entitled "Amendment No. 1 to the ERAMET Shareholders' Agreement of 19 July 1999 between SORAME and CEIR" concluded on 13 July 2009 between the company SORAME, partnership limited by share capital, and the company CEIR, by simplified joint-stock.

A/ It is recalled that the companies SORAME and CEIR (companies controlled by the Duval family) concluded on 19 July 1999 a shareholders' agreement establishing them in concert for 10 years, effective 21 July 1999.

This pact planned, in particular:

- the inalienability of their ERAMET shares for five years, except, for each of them, up to a maximum of 1.5% of the ERAMET share capital;
- complete freedom to sell between themselves their ERAMET shares, provided that SORAME continues to hold at least 70% of the ERAMET shares held by their collaboration and CEIR, a maximum of 30%, with the commitment to maintain this distribution between them in case of an increase in their holdings;
- reciprocal pre-emption rights over their ERAMET shares;
- a commitment to collaborate prior to any ERAMET General Shareholders' Meeting, with a view to the concordant exercise of their voting rights for the implementation of a common policy regarding that company.

B/ It is further recalled that the companies SORAME and CEIR, certain members of the Duval family and AREVA are united by a shareholders' agreement establishing them in collaboration with ERAMET, which results from a private agreement dated 17 June 1999, and a supplementary agreement of 27 July 2001 having substituted AREVA for COGEMA, itself already substituted for ERAP on 1 December 1999, pursuant to the provisions of the said agreement.

Amendment No. 2 to the aforementioned private deed of 17 June 1999 was signed on 29 May 2008, by which the parties extended their agreement of collaboration until 31 December 2008, and made various modifications to it, and for that reason substituted, as of 29 May 2008, a new wording to the previous drafting of their shareholders' agreement as of 17 June 1999.

In the absence of termination by the parties before 15 December 2008 and then 15 June 2009, the new agreement was tacitly extended twice, the last time from 1 July 2009, for a period of six months ending on 31 December 2009.

As of 16 July 2009, the parties to the agreement together hold 61.57% of the capital and 73.57% of the voting rights of ERAMET, broken down as follows:

	SHARES	PERCENTAGE OF CAPITAL	VOTING RIGHTS	PERCENTAGE OF VOTING RIGHTS
SORAME	7,818,919	29.37	15,637,838	35.16
CEIR	1,783,996	6.70	3,567,992	8.02
SORAME/CEIR subtotal	**9,602,915**	**36.07**	**19,205,830**	**43.18**
AREVA	6,787,277	25.39	13,514,554	30.63
Concert total	16,390,192	61.57	32,720,384	73.57

C/ On 13 July 2009, CEIR and SORAME signed an amendment to the agreement of 19 July 1999 described in point A above, extending their collaboration agreement until 21 July 2014, by providing different modifications, and, as of 13 July 2009, substituted it with a new wording to that of the shareholders' agreement of 19 July 1999.

The main clauses of the amendment between SORAME and CEIR are the following:

- stability of the SORAME/CEIR group: except in the event of a sale representing at least 80% of the group's interest in ERAMET and as long as AREVA does not increase its stake in ERAMET by more than 2%, the parties undertake to retain the number of shares and voting rights required for their subgroup to remain predominant in the overall collaboration;
- transfer of ERAMET shares between SORAME and CEIR: any sale of ERAMET shares may be carried out freely between the parties, provided that SORAME continues to hold at least 70% of the ERAMET shares held by the subgroup and CEIR, a maximum of 30%;
- increase in holdings by SORAME and CEIR in ERAMET: the parties are free to increase their participation in ERAMET, provided that they do not increase their shareholding by more than 2% of the capital or voting rights in less than twelve months;
- commitment to collaborate between the parties prior to any ERAMET General Shareholders' Meeting, with a view to the concordant exercise of their voting rights for the implementation of a common policy regarding ERAMET.

This agreement replaces the agreement of 19 July 1999. It is concluded for a period expiring on 21 July 2014 and shall thereafter be tacitly renewed for periods of two years, in the absence of its termination notified by either party with one month's notice before the expiry of the period in progress.

It shall cease, as will the concerted action between the parties, in the event of the sale by one of the parties of more than 80% of its interest in ERAMET.

Furthermore, the distribution of directors on the Board and committees is detailed in Section 4 "Governance" of this document.

To the knowledge of ERAMET, there is no other agreement or pact.

9

GENERAL SHAREHOLDERS' MEETING

9.1 EXPLANATORY STATEMENT

Dear Shareholders,

Please find below an explanatory note regarding the resolutions proposed for voting at your General Meeting.

Resolutions 1 and 2 concern the approval of the individual and consolidated financial statements for the previous year. The financial statements are set out in detail in the documents submitted to shareholders and are also commented on in the management report.

In **resolution 3**, you are asked to approve the special report prepared by the Company's Statutory Auditors concerning the agreements referred to in Articles L. 225-38 *et seq.* of the French Commercial Code for the previous financial year. It should be noted that this report provides an account of agreements previously made by your General Meeting which were ongoing in the previous financial year. Having already received approval from your General Meeting, these agreements will not be submitted to a vote at this Meeting.

In **resolution 4**, you are asked, in accordance with Article L. 225-42-1 of the French Commercial Code, to approve the severance pay that will or may be due to Christel Bories on termination of her mandate as Chairman and Chief Executive Officer, as authorised by the Board of Directors at its meeting of 23 February 2017.

This commitment is explained in detail in the Statutory Auditors' special report setting out the agreements referred to in Articles L. 225-38 *et seq.* of the French Commercial Code.

Resolution 5 proposes to the General Meeting the allocation of the profit for the past financial year and the payment of a dividend for the 2017 financial year.

In accordance with the provisions of Article L. 225-37-2 of the French Commercial Code (laid down by Law 2016-1691 of 9 December 2016, known as "Sapin II"), the General Shareholders' Meeting is called upon to approve **resolution 6** concerning the principles and criteria for the determination, distribution and allocation of the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind attributable to Christel Bories—"Say on Pay Ex Ante". These elements are contained in Chapter 7 of the Registration Document, "Remuneration of the management and administration bodies".

In accordance with the wording of Article L. 225-37-2, the approval of the General Meeting is also required each year for any changes to the above-mentioned items, including at each renewal of the term of office. If the General Shareholders' Meeting does not approve the resolution, the principles and criteria previously approved by shareholders continue to apply. In the absence of principles and criteria approved by the General Shareholders' Meeting, the remuneration is determined in accordance with the remuneration assigned in the previous year, or, in the absence of remuneration assigned in the previous year, in accordance with existing practices within the Company. The payment of the variable and exceptional remuneration elements related to financial year 2018 is subject to approval by an Ordinary General Shareholders' Meeting to be held in 2019 of the remuneration elements of the person concerned, in accordance with Article L. 225-100 of the French Commercial Code.

In accordance with the same provisions, the General Meeting is also called upon to approve in **resolution 7** the fixed, variable and exceptional elements constituting the remuneration and benefits of any kind paid or allocated to Christel Bories, Deputy Chief Executive Officer from 23 February to 23 May 2017 and subsequently Chairman and Chief Executive Officer from 23 May 2017 for the 2017 financial year—"Say on Pay Ex Post". These elements are contained in Chapter 7 of the Registration Document, "Remuneration of the management and administration bodies".

The General Meeting is also called upon to approve in **resolution 8** the fixed, variable and exceptional elements constituting the remuneration and benefits of any kind paid or allocated to Patrick Buffet, Chairman and Chief Executive Officer until 23 May 2017 for the 2017 financial year—"Say on Pay Ex Post". These elements are contained in Chapter 7 of the Registration Document, "Remuneration of the management and administration bodies".

Resolution 9, pursuant to the provisions of Article L. 225-209 of the French Commercial Code, requests the General Shareholders' Meeting to authorise the Board to renew the Company's share buyback programme in accordance with legal and regulatory provisions, by any means, including during a public offer period. The maximum buyback amount is 10% of the share capital and the maximum purchase price is €300 per share. This resolution concerns the annual renewal of this authorisation. The purpose of this authorisation is to allow the existing liquidity agreement to continue, and to implement bonus share awards to employees through the allocation of existing shares.

In **resolution 10**, the shareholders are asked to ratify, in accordance with the current provisions of Article 4 of the Articles of Association, the transfer of the Company's head office, as decided by the Board of Directors, from Tour Montparnasse—33, avenue du Maine—75015 Paris to 10, boulevard de Grenelle—75015 Paris and to ratify the amendment to the first paragraph of Article 4 of the Articles of Association relating thereto.

The purpose of **resolution 11** is to allow ERAMET's Board of Directors to grant a maximum number of 550,000 existing bonus shares over a period of three years (2019, 2020 and 2021) in accordance with the following terms and conditions:

- to all Group employees (provided that the applicable local legal, accounting and tax provisions allow it), the allocation of bonus shares without performance conditions;
- to the main executives of the Group (approximately 280 people) (provided that the applicable local legal, accounting and tax provisions allow it), the allocation of bonus shares with the majority subject to performance conditions;
- to members of the Executive Committee (including corporate officers), the allocation of bonus shares with 100% subject to performance conditions.

A maximum of one-third of the total amount of shares can be allocated to corporate officers.

The performance conditions for the first year of use (in 2019) of this authorisation for the selective performance share allocation plan will be as follows:

- relative performance of the ERAMET share for one-third of the share allocation. This involves comparing the change in total shareholder return over a three-year period with that of a panel of comparable companies on the Euromoney Global Mining Index; Diversified Metals & Mining, Steel—with the performance conditions being fully achieved if the ERAMET share is ranked among the 30% to 45% of the panel);
- intrinsic performance of the following financial indicators for two-thirds of the share allocation:
  - up to 50%: EBITDA at constant economic conditions as calculated on the basis of the budget, 100% achieved if budget is reached.
  - up to 50%: ROCE at constant economic conditions as calculated on the basis of the budget, 100% achieved if budget is reached.

The 550,000 bonus shares represent an annual grant of 0.7% of the share capital as at 31 December 2017.

Resolution 12 also proposes to amend the second paragraph of Article 4 of the Articles of Association for the future in order to benefit from the new, more flexible provisions of Article L. 225-36 of the French Commercial Code (resulting from Article 142 of Law 2016-1691 of 9 December 2016) on the transfer of the head office.

Resolutions 13, 14 and 15 concern the amendment of Articles 10, 15 and 16 of the Articles of Association in order to simplify the Articles of Association by removing the European Union nationality requirement applicable to the majority of the members of the Board of Directors (Article 10), the Chairman of the Board of Directors (Article 15), and the Chief Executive Officer and any Deputy Chief Executive Officers (Article 16).

Resolution 16 amending Article 19 of the Articles of Association is proposed in order to remove the European Union nationality requirement applicable to the Statutory Auditors and to incorporate the new provisions of Article L. 823-1 of the French Commercial Code (resulting from Article 140-(V) of Law 2016-1691 of 9 December 2016), which only makes the appointment of an Alternate Auditor necessary in cases where the Statutory Auditor is a physical person or single-member company.

Resolution 17 authorises the fulfilment of formalities involved in implementing the other resolutions passed by the combined Ordinary and Extraordinary General Shareholders' Meeting.

Board of Directors

9.2 TEXT OF DRAFT RESOLUTIONS

9.2.1 WITHIN THE REMIT OF THE ORDINARY SHAREHOLDERS' MEETING

FIRST RESOLUTION

(2017 annual financial statements)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having heard the report of the Board of Directors and the report of the Statutory Auditors on the annual financial statements for the year ended 31 December 2017, approves said financial statements as presented to it and the transactions reflected in those financial statements or summarised in these reports.

SECOND RESOLUTION

(2017 consolidated financial statements)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having heard the report of the Board of Directors and the report of the Statutory Auditors on the consolidated financial statements for the year ended 31 December 2017, approves said consolidated financial statements as presented to it and the transactions reflected in those financial statements or summarised in these reports.

THIRD RESOLUTION

(Related-party agreements)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having heard the special report established by the Statutory Auditors on the agreements covered by Articles L. 225-38 *et seq.* of the French Commercial Code, approves the transactions subject to its vote referred to therein.

FOURTH RESOLUTION

(Commitments of Article L. 225-42-1 of the French Commercial Code)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having heard the special report established by the Statutory Auditors on the agreements covered by Articles L. 225-38 *et seq.* of the French Commercial Code, and in accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, approves the provisions relating to the severance pay for the Chairman and Chief Executive Officer that may be due to Christel Bories, referred to therein.

FIFTH RESOLUTION

(Allocation of earnings)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings,

- notes that the result of the past financial year amounts to -€17,730,366.52
- to which are added retained earnings at 31 December 2017 of €328,340,123.90
- giving a distributable amount of €310,609,757.38

The General Shareholders' Meeting decides:

- to distribute an amount of €2.30 per share, i.e. for 26,633,660 shares comprising the share capital at 31 December 2017, the sum of €61,257,418
- leaving retained earnings after distribution of €249,352,339.38

The ex-dividend date will be 29 May 2018. The record date will be 30 May 2018. The dividend will be paid as of 31 May 2018. If, at the time of dividend payment, new shares have been created following the conversion of ODIRNAN into new shares, the amount of the dividend corresponding to these shares will be automatically deducted from retained earnings.

The General Shareholders' Meeting, acting as an Ordinary Shareholders' Meeting, notes that the dividends per share paid out with respect to the past financial year and the three previous financial years, were as follows:

	2014	2015	2016	2017
Number of shares subject to dividends	26,543,218	26,543,218	26,550,443	26,633,660
Dividend	€0	€0	€0	€2.30

SIXTH RESOLUTION

(Approval of the principles and criteria for determination, distribution and allocation of the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind attributable to the Chairman and CEO—"Say on Pay Ex Ante")

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the principles and criteria for determination, distribution and allocation of the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind attributable to the Chairman and CEO, as set out in the report of the Board of Directors prepared pursuant to Article L. 225-37-2 of the French Commercial Code and included on pages 278 to 280 of the 2017 Registration Document, under Section 7 "Remuneration of the Management and Administration Bodies"

SEVENTH RESOLUTION

(Approval of the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind paid or allocated in the 2017 financial year to Christel Bories, Deputy Chief Executive Officer from 23 February to 23 May 2017 and subsequently Chairman and Chief Executive Officer from 23 May 2017—"Say on Pay Ex Post")

Pursuant to Articles L. 225-37-2 and L. 225-100 of the French Commercial Code, the General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind paid or allocated in respect of the previous financial year 2017 to Christel Bories, Deputy Chief Executive Officer from 23 February to 23 May 2017 and subsequently Chairman and Chief Executive Officer from 23 May 2017, as set out in the Company's Corporate Governance report referred to in Article L. 225-37 of the French Commercial Code, included on pages 282 to 284 of the 2017 Registration Document, under Section 7 "Remuneration of the Management and Administration Bodies".

EIGHTH RESOLUTION

(Approval of the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind paid or allocated in the 2017 financial year to Patrick Buffet, Chairman and Chief Executive Officer until 23 May 2017—"Say on Pay Ex Post")

Pursuant to Articles L. 225-37-2 and L. 225-100 of the French Commercial Code, the General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the fixed, variable and exceptional elements constituting the total remuneration and benefits of any kind paid or allocated in respect of the previous financial year 2017 to Patrick Buffet, Chairman and Chief Executive Officer until 23 May 2017, as set out in the Company's Corporate Governance report referred to in Article L. 225-37 of the French Commercial Code, included on pages 285 and 286 of the 2017 Registration Document, under Section 7 "Remuneration of the Management and Administration Bodies".

NINTH RESOLUTION

(Authorisation to trade in the Company's shares)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having reviewed the report of the Board of Directors and the description of the Company's share buyback programme, exercising the option provided for in Article L. 225-209 of the French Commercial Code, authorises the Board of Directors to buy, or to arrange the purchase of the Company's shares up to a limit of 10% of the share capital, in order to:

- support the share price via a liquidity agreement with an investment services provider, in accordance with the AMAFI code of conduct recognised by the *Autorité des marchés financiers* ("AMF");
- provide shares upon the exercise of rights attached to securities granting access to share capital through redemption, conversion, exchange or any other means;
- implement any share purchase option plan concerning the Company's shares pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- allocate bonus shares pursuant to the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- allocate or transfer shares to employees as their share in the profits of the business or for the purpose of implementing any employee savings plan under the statutory provisions, with particular reference to Articles L. 3332-1 *et seq.* of the French Labour Code;
- cancel those shares, in accordance with the twenty-sixth resolution of the General Shareholders' Meeting of 23 May 2017, authorising a reduction in the Company's share capital for a period of 26 months.

Such shares may be purchased, sold, transferred or exchanged, by any means, in the market or over the counter, including, where appropriate, by means of derivatives. The capital that may be acquired or transferred in the form of blocks of securities may amount to the entire share buyback programme.

Such transactions may also be carried out during a public offer period if the purchase offer for the Company's shares is fully paid in cash.

Payment may be made by any means.

The maximum purchase price may not exceed **€300** per share.

This authorisation is granted for a period that will end at the General Shareholders' Meeting convened to approve the financial statements for 2018.

Based on the number of shares comprising the share capital at **31 December 2017**, assuming a price of **€300** per share, the maximum theoretical investment would amount to **€799,009,800.**

For the purposes of implementing this resolution, the Board of Directors is granted full powers and may, in turn, delegate those powers, in order to:

- place any stock market orders, entering into any agreements particularly with regard to the keeping of share purchase and sale records;
- make all relevant filings with the AMF;
- assign or reassign the acquired shares to the various objectives in line with the applicable legal and regulatory provisions;
- carry out all other formalities and generally do whatever is necessary.

TENTH RESOLUTION
(Ratification of the transfer of the head office within the same department)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, having read the report of the Board of Directors and the second paragraph of Article 4 of the Company's Articles of Association, as currently worded, decides to ratify the transfer of the Company's head office, as decided by the Board of Directors, from Tour Maine-Montparnasse, 33, avenue du Maine, 75015 Paris to 10, boulevard de Grenelle, 75015 Paris and the amendment to the first paragraph of Article 4 of the Articles of Association relating thereto.

9.2.2 WITHIN THE REMIT OF THE EXTRAORDINARY SHAREHOLDERS' MEETING

ELEVENTH RESOLUTION
(Allocation of bonus shares)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report by the Board of Directors and the special report by the Statutory Auditors, authorises the Board of Directors to proceed, in one or more instalments, for the benefit of the employees and eligible corporate officers of the Company and its affiliated companies within the meaning of Article L. 225-197-2 of the French Commercial Code, to allocate existing shares free of charge in accordance with Articles L. 225-197-1 *et seq.* of the French Commercial Code.

The General Shareholders' Meeting decides that the total number of shares that may be allocated free of charge under this authorisation may not exceed 550,000 shares.

In accordance with the regulations, this maximum limit does not take into account additional shares to be issued or allocated to preserve the rights of beneficiaries in the event of capital transactions.

The share allocations made pursuant to this authorisation may, under the conditions provided for by law, be granted to the Company's eligible corporate officers, provided that the definitive allocation of shares is subject to the fulfilment of one or more performance conditions determined by the Board of Directors at the time of the allocation decision, and that their number does not represent more than one-third of the maximum amount indicated above.

The allocation of shares to their beneficiaries will become definitive at the end of a vesting period, the minimum duration of which is set at two years.

In addition, the beneficiaries will not be able to sell the shares allocated to them under this authorisation for a minimum period of two years following the definitive allocation of the shares.

However, the General Shareholders' Meeting authorises the Board of Directors, insofar as the vesting period for all or part of one or more share allocations is at least four years, to impose no retention period for the shares in consideration, so that the shares will be freely transferable as soon as they are definitively allocated.

As an exception to the foregoing, the allocation of these shares to their beneficiaries will become definitive before the expiry of the aforementioned vesting periods in the event of invalidity of their beneficiary corresponding to the classification of the second or third category referred to in Articles L. 341-1 *et seq.* of the French Social Security Code, and the shares will be freely transferable in case of invalidity of the beneficiary corresponding to the classification in the aforementioned categories of the French Social Security Code.

The bonus shares awarded will consist of existing shares.

The decision to award the shares free of charge is made by the Board of Directors, which will determine the identity of the beneficiaries of the share allocations and set the conditions and, where applicable, the criteria for the allocation of shares.

The Board of Directors may use this authorisation, on one or more occasions, for a period of thirty-eight months from this meeting.

TWELFTH RESOLUTION
(Amendment to Article 4 of the Articles of Association)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report of the Board of Directors and the provisions of Article L. 225-36 of the French Commercial Code, resolves to amend the second paragraph of Article 4 of the Articles of Association to adopt the following text:

CURRENT VERSION	NEW VERSION
Article 4—Head office [...] It may be transferred to another location within the department or in a neighbouring department by the simple decision of the Board of Directors, subject to the ratification of this decision at the next Ordinary General Shareholders' Meeting, and elsewhere by virtue of a decision by the Extraordinary General Shareholders' Meeting. [...]	Article 4—Head office [...] It may be transferred ~~to another location within the department or in a neighbouring department~~ within France by the simple decision of the Board of Directors, subject to the ratification of this decision at the next Ordinary General Shareholders' Meeting~~, and elsewhere by virtue of a decision by the Extraordinary General Shareholders' Meeting~~. Pursuant to a delegation of powers by the Extraordinary General Shareholders' Meeting, the Board of Directors makes the necessary amendments to the Articles of Association to bring them into line with the laws and regulations, subject to ratification of these amendments by the next Extraordinary General Shareholders' Meeting. [...]

THIRTEENTH RESOLUTION

(Amendment to Article 10 of the Articles of Association)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report of the Board of Directors, resolves to amend Article 10.3 of the Articles of Association to adopt the following text:

CURRENT VERSION	NEW VERSION
Article 10—Board of Directors	**Article 10—Board of Directors**
1. The Company is administered by a Board of a maximum of seventeen members.	1. The Company is administered by a Board of a maximum of seventeen members.
2. A legal person may be appointed Director. It is required to appoint a permanent representative. The term of office of the permanent representative is given for the duration of that of the legal person holding the directorship and must be confirmed at each renewal.	2. A legal person may be appointed Director. It is required to appoint a permanent representative. The term of office of the permanent representative is given for the duration of that of the legal person holding the directorship and must be confirmed at each renewal.
In the event of death, resignation or removal of the permanent representative by the legal person, the latter must notify the Company without delay and provide details of the identity of the new permanent representative.	In the event of death, resignation or removal of the permanent representative by the legal person, the latter must notify the Company without delay and provide details of the identity of the new permanent representative.
3. The majority of members of the Board of Directors must be nationals of a Member State of the European Union.	3. ~~The majority of members of the Board of Directors must be nationals of a Member State of the European Union.~~
The provisions of the preceding paragraph are applicable to legal persons with directorships and their permanent representatives.	~~The provisions of the preceding paragraph are applicable to legal persons with directorships and their permanent representatives.~~ *[reserved paragraph]*
4. No person aged seventy or over may be appointed a Director. However, Directors who reach the age of seventy remain in office until the expiry of the current term.	4. No person aged seventy or over may be appointed a Director. However, Directors who reach the age of seventy remain in office until the expiry of the current term.
5. In the event of a vacancy due to resignation or death of one or more directorships, the Board may, between two General Meetings, make provisional appointments in order to make up the appropriate number. These appointments are submitted for ratification at the next Ordinary General Shareholders' Meeting.	5. In the event of a vacancy due to resignation or death of one or more directorships, the Board may, between two General Meetings, make provisional appointments in order to make up the appropriate number. These appointments are submitted for ratification at the next Ordinary General Shareholders' Meeting.
If the number of Directors drops below the legal minimum, the Board must immediately convene the General Meeting to make up the appropriate number.	If the number of Directors drops below the legal minimum, the Board must immediately convene the General Meeting to make up the appropriate number.
6. The term of office of the Directors is four years. It expires at the end of the Shareholders' Meeting convened to approve the financial statements for the previous financial year held during the fourth year following the year of their appointment.	6. The term of office of the Directors is four years. It expires at the end of the Shareholders' Meeting convened to approve the financial statements for the previous financial year held during the fourth year following the year of their appointment.
Any outgoing Director is eligible for re-election, subject to the age limit for the performance of his or her duties.	Any outgoing Director is eligible for re-election, subject to the age limit for the performance of his or her duties.
By way of derogation from the provisions of paragraph 4 above, the General Shareholders' Meeting, ruling under the quorum and majority conditions of the Ordinary Shareholders' Meeting, may, on the proposal of the Board of Directors, renew the term of office of Directors aged over seventy years, without renewing each of these terms more than once.	By way of derogation from the provisions of paragraph 4 above, the General Shareholders' Meeting, ruling under the quorum and majority conditions of the Ordinary Shareholders' Meeting, may, on the proposal of the Board of Directors, renew the term of office of Directors aged over seventy years, without renewing each of these terms more than once.
The application of Articles 10.4 and 10.6 above may not have the effect of maintaining or increasing the number of Directors over seventy years to more than one-third of Board members. Consequently, if this proportion is exceeded, the oldest Director(s) shall be considered to have resigned automatically at the next Ordinary General Shareholders' Meeting.	The application of Articles 10.4 and 10.6 above may not have the effect of maintaining or increasing the number of Directors over seventy years to more than one-third of Board members. Consequently, if this proportion is exceeded, the oldest Director(s) shall be considered to have resigned automatically at the next Ordinary General Shareholders' Meeting.

CURRENT VERSION	NEW VERSION
7. Each Director must own at least one share. If on the day of his/her appointment, a Director does not own at least one share, or if, while in office, he/she ceases to own any shares, he/she is deemed to have resigned if he/she does not rectify the situation within six months.	7. Each Director must own at least one share. If on the day of his/her appointment, a Director does not own at least one share, or if, while in office, he/she ceases to own any shares, he/she is deemed to have resigned if he/she does not rectify the situation within six months.
8. The General Shareholders' Meeting may allocate a fixed annual sum to Directors as attendance fees. These allocations shall be distributed by the Board among its members as it deems appropriate.	8. The General Shareholders' Meeting may allocate a fixed annual sum to Directors as attendance fees. These allocations shall be distributed by the Board among its members as it deems appropriate.
The Board may award exceptional remuneration for duties or mandates entrusted to Directors.	The Board may award exceptional remuneration for duties or mandates entrusted to Directors.
9. In addition to the directors whose number and method of appointment are provided for in Articles L. 225-17 and L. 225-18 of the French Commercial Code, when the Company meets the criteria set out in paragraph I of Article L. 225-27-1 of the French Commercial Code, the Board of Directors should include directors representing employees, in accordance with Article L. 225-27-1 of the French Commercial Code.	9. In addition to the directors whose number and method of appointment are provided for in Articles L. 225-17 and L. 225-18 of the French Commercial Code, when the Company meets the criteria set out in paragraph I of Article L. 225-27-1 of the French Commercial Code, the Board of Directors should include directors representing employees, in accordance with Article L. 225-27-1 of the French Commercial Code.
The number of directors representing employees is equal to two when the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code is greater than twelve, and equal to one when the number of directors is equal to or less than twelve.	The number of directors representing employees is equal to two when the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code is greater than twelve, and equal to one when the number of directors is equal to or less than twelve.
Directors representing employees are designated as follows:	Directors representing employees are designated as follows:
(a) where two directors need to be appointed, one of the directors is appointed by the Central Works Council as provided for in Articles L. 2327-1 *et seq.* of the French Labour Code, and the other director is appointed by the European Works Council;	(a)where two directors need to be appointed, one of the directors is appointed by the Central Works Council as provided for in Articles L. 2327-1 *et seq.* of the French Labour Code, and the other director is appointed by the European Works Council;
(b)where one director needs to be appointed, he or she is appointed by the Central Works Council as provided for in Articles L. 2327-1 *et seq.* of the French Labour Code.	(b)where one director needs to be appointed, he or she is appointed by the Central Works Council as provided for in Articles L. 2327-1 *et seq.* of the French Labour Code.
If, having been equal to or less than twelve, the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code increases to a number greater than twelve, the Chairman of the Board of Directors shall, within a reasonable time frame, refer to the European Works Council to appoint a second director representing employees.	If, having been equal to or less than twelve, the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code increases to a number greater than twelve, the Chairman of the Board of Directors shall, within a reasonable time frame, refer to the European Works Council to appoint a second director representing employees.
If, having been greater than twelve, the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code falls to equal to or less than twelve, the term of office of the director representing employees designated by the European Works Council will continue until completion, but will not be renewed if the number of directors remains less than or equal to twelve at the date of reappointment.	If, having been greater than twelve, the number of directors referred to in Articles L. 225-17 and L. 225-18 of the French Commercial Code falls to equal to or less than twelve, the term of office of the director representing employees designated by the European Works Council will continue until completion, but will not be renewed if the number of directors remains less than or equal to twelve at the date of reappointment.
Article 10.7 of these Articles of Association does not apply to directors representing employees. Directors representing employees are not taken into account when determining the maximum number of directors provided for in Article 10.1 of these Articles of Association.	Article 10.7 of these Articles of Association does not apply to directors representing employees. Directors representing employees are not taken into account when determining the maximum number of directors provided for in Article 10.1 of these Articles of Association.
The term of office of directors representing employees is four years from their appointment. The newly appointed directors representing employees take office at the expiry of the term of office of the departing directors representing employees.	The term of office of directors representing employees is four years from their appointment. The newly appointed directors representing employees take office at the expiry of the term of office of the departing directors representing employees.
The term of office of directors representing employees automatically ends in the event of termination of their employment contract with the Company, or one of its direct or indirect subsidiaries, in the event of dismissal in accordance with Article L. 225-32 of the French Commercial Code, or in the event of a conflict provided for in Article L. 225-30 of the French Commercial Code.	The term of office of directors representing employees automatically ends in the event of termination of their employment contract with the Company, or one of its direct or indirect subsidiaries, in the event of dismissal in accordance with Article L. 225-32 of the French Commercial Code, or in the event of a conflict provided for in Article L. 225-30 of the French Commercial Code.

CURRENT VERSION	NEW VERSION
In the event of a vacancy of a directorship representing employees during the term of office, for any reason whatsoever (in particular death, resignation, dismissal, termination of employment contract), the vacant seat is filled in accordance with the same appointment procedures as set out in the third paragraph of this Article (10.9). The term of office of the director thus designated ends upon the expiry of the normal term of office of his or her predecessor. The Board of Directors may validly meet and deliberate until the replacement date of the director representing employees. The provisions of this paragraph (10.9) will cease to apply if, at the end of a financial year, the Company no longer fulfils the conditions required for the appointment of directors representing employees, it being specified that the term of office of any director representing employees appointed under this Article 10.9 will expire at its term.	In the event of a vacancy of a directorship representing employees during the term of office, for any reason whatsoever (in particular death, resignation, dismissal, termination of employment contract), the vacant seat is filled in accordance with the same appointment procedures as set out in the third paragraph of this Article (10.9). The term of office of the director thus designated ends upon the expiry of the normal term of office of his or her predecessor. The Board of Directors may validly meet and deliberate until the replacement date of the director representing employees. The provisions of this paragraph (10.9) will cease to apply if, at the end of a financial year, the Company no longer fulfils the conditions required for the appointment of directors representing employees, it being specified that the term of office of any director representing employees appointed under this Article 10.9 will expire at its term.

FOURTEENTH RESOLUTION

(Amendment to Article 15 of the Articles of Association)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report of the Board of Directors, resolves to amend Article 15 of the Articles of Association to adopt the following text:

CURRENT VERSION	NEW VERSION
Article 15—Chairman of the Board of Directors The Board of Directors elects, from among its members, a Chairman, a natural person, and determines his or her remuneration. The Chairman is appointed for a term that cannot exceed that of his or her term of office as a director. He or she is eligible for re-election. The Chairman must be a national of a Member State of the European Union and may not hold the position beyond the age of 70. However, the Chairman may remain in office until the Ordinary General Shareholders' Meeting following his or her seventieth birthday. The Board of Directors may revoke the appointment at any time. Any provision to the contrary is deemed to be unwritten. The Chairman represents the Board of Directors. He or she organises and directs the Board's work and reports thereon to the General Shareholders' Meeting. He or she oversees the proper functioning of the Company's bodies and ensures in particular that the Directors are able to fulfil their duties.	**Article 15—Chairman of the Board of Directors** The Board of Directors elects, from among its members, a Chairman, a natural person, and determines his or her remuneration. The Chairman is appointed for a term that cannot exceed that of his or her term of office as a director. He or she is eligible for re-election. The Chairman ~~must be a national of a Member State of the European Union and~~ may not hold the position beyond the age of 70. However, the Chairman may remain in office until the Ordinary General Shareholders' Meeting following his or her seventieth birthday. The Board of Directors may revoke the appointment at any time. Any provision to the contrary is deemed to be unwritten. The Chairman represents the Board of Directors. He or she organises and directs the Board's work and reports thereon to the General Shareholders' Meeting. He or she oversees the proper functioning of the Company's bodies and ensures in particular that the Directors are able to fulfil their duties.

FIFTEENTH RESOLUTION

(Amendment to Article 16 of the Articles of Association)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report of the Board of Directors, resolves to amend Article 16 of the Articles of Association to adopt the following text:

CURRENT VERSION	NEW VERSION
Article 16—General Management	Article 16—General Management
1. Chief Executive Officer	**1. Chief Executive Officer**
The General Management of the Company is exercised, under its responsibility, by a natural person appointed by the Board of Directors and bearing the title of Chief Executive Officer.	The General Management of the Company is exercised, under its responsibility, by a natural person appointed by the Board of Directors and bearing the title of Chief Executive Officer.
The Chief Executive Officer may be dismissed at any time by the Board of Directors.	The Chief Executive Officer may be dismissed at any time by the Board of Directors.
The Chief Executive Officer must be a national of a Member State of the European Union. He or she may not perform his or her duties after reaching the age of 70.	The Chief Executive Officer ~~must be a national of a Member State of the European Union. He or she~~ may not perform his or her duties after reaching the age of 70.
The Board of Directors determines the remuneration of the Chief Executive Officer.	The Board of Directors determines the remuneration of the Chief Executive Officer.
The Chief Executive Officer is vested with the broadest powers to act in all circumstances on behalf of the Company. He or she exercises these powers within the limits of the corporate purpose and subject to the powers expressly assigned by law to the Shareholders' Meetings and the Board of Directors.	The Chief Executive Officer is vested with the broadest powers to act in all circumstances on behalf of the Company. He or she exercises these powers within the limits of the corporate purpose and subject to the powers expressly assigned by law to the Shareholders' Meetings and the Board of Directors.
He or she represents the Company in its dealings with third parties.	He or she represents the Company in its dealings with third parties.
The decisions of the Board of Directors limiting the powers of the Chief Executive Officer are not binding on third parties.	The decisions of the Board of Directors limiting the powers of the Chief Executive Officer are not binding on third parties.
2. Deputy CEOs	**2. Deputy CEOs**
On the proposal of the Chief Executive Officer, the Board of Directors may appoint one or more individuals to assist the Chief Executive Officer and bearing the title of Deputy Chief Executive Officer.	On the proposal of the Chief Executive Officer, the Board of Directors may appoint one or more individuals to assist the Chief Executive Officer and bearing the title of Deputy Chief Executive Officer.
The number of Deputy Chief Executive Officers cannot exceed five.	The number of Deputy Chief Executive Officers cannot exceed five.
On the proposal of the Chief Executive Officer, the Deputy Chief Executive Officers may be dismissed at any time by the Board of Directors.	On the proposal of the Chief Executive Officer, the Deputy Chief Executive Officers may be dismissed at any time by the Board of Directors.
The Deputy Chief Executive Officers must be nationals of a Member State of the European Union. They may not perform their duties after reaching the age of 70.	The Deputy Chief Executive Officers ~~must be nationals of a Member State of the European Union. They~~ may not perform their duties after reaching the age of 70.
The Board of Directors determines the remuneration of the Deputy Chief Executive Officers.	The Board of Directors determines the remuneration of the Deputy Chief Executive Officers.
In agreement with the Chief Executive Officer, the Board of Directors determines the scope and duration of the powers granted to the Deputy Chief Executive Officers.	In agreement with the Chief Executive Officer, the Board of Directors determines the scope and duration of the powers granted to the Deputy Chief Executive Officers.
They have the same powers as the Chief Executive Officer with regard to third parties.	They have the same powers as the Chief Executive Officer with regard to third parties.
When the Chief Executive Officer ceases or is prevented from performing his or her duties, the Deputy Chief Executive Officers retain, unless the Board decides otherwise, their duties and powers until the appointment of the new Chief Executive Officer.	When the Chief Executive Officer ceases or is prevented from performing his or her duties, the Deputy Chief Executive Officers retain, unless the Board decides otherwise, their duties and powers until the appointment of the new Chief Executive Officer.

SIXTEENTH RESOLUTION

(Amendment to Article 19 of the Articles of Association)

The General Shareholders' Meeting, deliberating in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, having reviewed the report of the Board of Directors and the provisions of Article L. 823-1 of the French Commercial Code, resolves to amend Article 19 of the Articles of Association to adopt the following text:

CURRENT VERSION	NEW VERSION
Article 19—Statutory Auditors The Company is audited by two Statutory Auditors. Two Alternate Auditors are also appointed by the General Shareholders' Meeting. The Auditors must be nationals of a Member State of the European Union. The Statutory and Alternate Auditors are appointed by the Ordinary General Shareholders' Meeting for the duration, under the conditions and with the assignments provided for by law. The Statutory Auditors perform the duties assigned to them by law. Their remuneration is fixed according to the regulations in force.	**Article 19—Statutory Auditors** The Company is audited by two Statutory Auditors. Two Alternate Auditors ~~are~~ may also be appointed by the General Shareholders' Meeting in the cases provided for in the second paragraph of Article L. 823-1 of the French Commercial Code. ~~The Auditors must be nationals of a Member State of the European Union.~~ The Statutory and Alternate Auditors are appointed by the Ordinary General Shareholders' Meeting for the duration, under the conditions and with the assignments provided for by law. The Statutory Auditors perform the duties assigned to them by law. Their remuneration is fixed according to the regulations in force.

SEVENTEENTH RESOLUTION

(Powers)

The Combined Ordinary and Extraordinary General Shareholders' Meeting fully empowers the bearer of an original, an extract or a copy of the minutes of this Meeting to carry out any filing or formality that may be necessary.

9.3 AUDITORS' REPORT ON THE RESOLUTIONS PRESENTED TO THE GENERAL SHAREHOLDERS' MEETING

Combined Ordinary and Extraordinary General Shareholders' Meeting of 24 May 2018

ELEVENTH RESOLUTION

AUDITORS' REPORT ON THE AUTHORISATION TO ALLOCATE BONUS EXISTING SHARES

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in accordance with the terms of our engagement defined by Article L. 225-197-1 of the French Commercial Code, we hereby submit to you our report on the proposed authorisation of the allocation of bonus existing shares to salaried employees, or to certain categories of them, whether they belong to your Company or to Group companies, or to the corporate officers of your Company and its affiliated companies, which you are asked to approve. The total number of shares that may be allocated under this authorisation may not exceed 550,000 shares.

Your Board of Directors proposes, on the basis of its report, to authorise the allocation of bonus existing shares for a period of thirty-eight months from the date of this meeting. It is the responsibility of the Board of Directors to prepare a report on this proposed transaction. It is our responsibility to inform you of our observations, if any, on the information provided to you in relation to the proposed transaction.

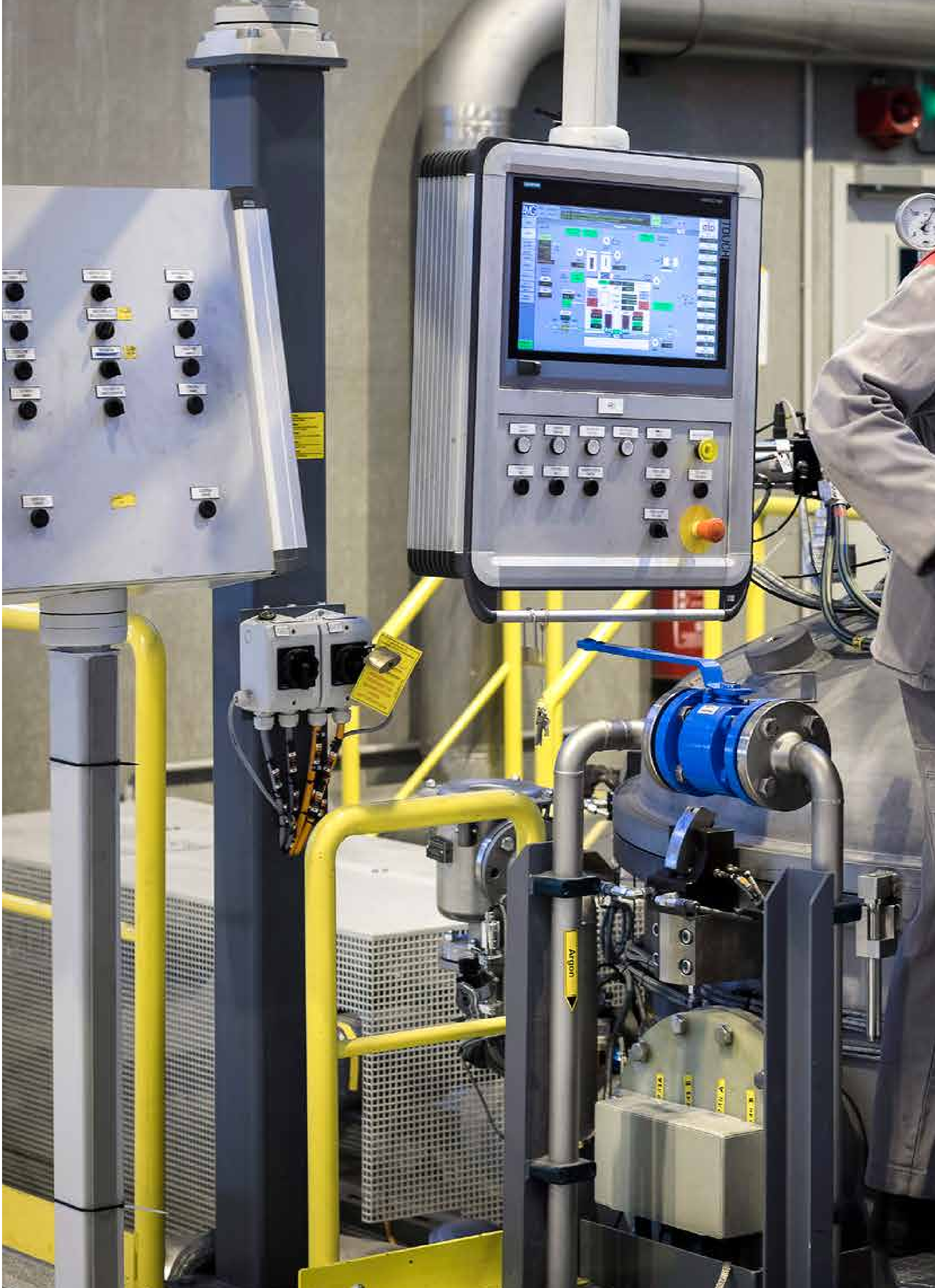
We have implemented the procedures we considered necessary in accordance with the professional standards of the national auditing body *(Compagnie nationale des commissaires aux comptes)* relating to this engagement. These procedures consisted mainly of verifying that the methods envisaged and set out in the report by the Board of Directors comply with the legal provisions governing such transactions.

We have no comments to make on the information given in the Board of Directors' report on the proposed authorisation to allocate bonus shares.

Paris-La Défense, 20 February 2018

The Statutory Auditors

KPMG Audit	Ernst & Young Audit
Denis Marangé	Jean-Roch Varon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ADDITIONAL INFORMATION

10.1 PERSONS RESPONSIBLE FOR THE REGISTRATION DOCUMENT

10.1.1 NAME AND STATUS OF OFFICIALS

CHRISTEL BORIES
Chairman and CEO of ERAMET.

THOMAS DEVEDJIAN
Deputy Director in charge of finances

10.1.2 DECLARATION BY THE PERSONS RESPONSIBLE FOR THE REGISTRATION DOCUMENT

We declare that to the best of our knowledge, having taken all reasonable measures in this regard, the information in this Registration Document is accurate and does not contain any omission that could affect its scope.

We certify to the best of our knowledge that the financial statements have been prepared in accordance with the applicable accounting standards and give a true and fair view of the financial position and results of the Company and of all the companies included in the consolidation, and that the management report (presented in chapters 1—Presentation of the Group, 2—Activities, 4—Corporate governance, 5—Risks and Internal control, 6—CSR, 7—Remuneration of the management and administration bodies and 8-ERAMET and its shareholders) faithfully reflects the changes in the business, earnings and the financial position of the Company and all of the companies included in the basis for consolidation, while presenting the main risks and uncertainties faced by them.

The Auditors have provided us with a letter of completion of assignment in which they state that they checked the information concerning the financial position and the financial statements presented in this Registration Document, and that they read the document in its entirety.

Done in Paris, on 28 March 2018

Thomas Devedjian
Deputy Director in charge of finances

Christel Bories
Chairman and CEO

10.2 STATUTORY AUDITORS

The Company's corporate and consolidated financial statements are audited by the Auditors listed below:

10.2.1 STATUTORY AUDITORS

ERNST & YOUNG AUDIT

Address: Tour First—1, place des Saisons, 92400 Courbevoie, No. 344 366 315 in the Nanterre trade and corporate register (RCS).

Partner in charge of audit: Jean-Roch Varon.

Date of appointment: General Shareholders' Meeting of 29 May 2015, replacing Ernst & Young and Others.

Term expiry date: General Shareholders' Meeting called in 2021 to approve the 2020 financial statements.

The Ernst & Young network has been ERAMET's Statutory Auditor since 1991.

KPMG

Address: Immeuble Le Palatin—3, cours du Triangle, 92800 Puteaux, No. 775 726 417 in the Nanterre trade and corporate register (RCS).

Partner in charge of audit: Denis Marangé.

Date of appointment: General Shareholders' Meeting of 29 May 2015.

Term expiry date: General Shareholders' Meeting called in 2021 to approve the 2020 financial statements.

10.2.2 DEPUTY AUDITORS

AUDITEX

Address: Tour First—1, place des Saisons 92400 Courbevoie, No. 377 652 938 in the Nanterre trade and corporate register (RCS).

Date of appointment: General Shareholders' Meeting of 13 May 2009, renewed at the General Shareholders' Meeting of 29 May 2015.

Term expiry date: General Shareholders' Meeting called in 2021 to approve the 2020 financial statements.

SALUSTRO REYDEL

Address: Immeuble Le Palatin—3, cours du Triangle 92800 Puteaux, No. 652 044 371 in the Nanterre trade and corporate register (RCS).

Date of appointment: General Shareholders' Meeting of 29 May 2015.

Term expiry date: General Shareholders' Meeting called in 2021 to approve the 2020 financial statements.

10.3 FINANCIAL INFORMATION

10.3.1 NAME OF INFORMATION OFFICER

Head:	Philippe Gundermann.
Status:	Strategy and Investor Relations Director
Address:	ERAMET Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 Telephone: 33 (0) 1 45 38 42 78

10.3.2 COMMUNICATION METHODS

Frequency: in accordance with regulations, ERAMET publishes its annual and interim results and releases quarterly sales figures.

Information release: in addition to legal publication in financial publications, press releases and all regulated financial information are made available to the public on the Company's website (http://www.eramet.com—in the Investors section) and released in accordance with AMF regulations.

The Articles of Association, minutes of AGMs, Company and consolidated financial statements, reports by the auditors and all documents made available to shareholders can be consulted at the Company's headquarters.

All data indicated in this document for which no source is specifically indicated is from the Company's internal reporting and data.

All copies of documents included in this Registration Document may be viewed on the ERAMET website (http://www.eramet.com) or consulted by making a request to the Company's Director of Legal Affairs at its headquarters: Tour Maine-Montparnasse—33, avenue du Maine, 75015 Paris.

10.3.3 LIST OF FINANCIAL INFORMATION RELEASES, INCLUDING PRESS RELEASES

- 21 February 2018: 2017 annual results.
- 8 December 2017: ERAMET joins the SBF 120 index.
- 24 October 2017: Turnover in third quarter of 2017.
- 4 October 2017: Developments in Erasteel's holdings in China.
- 28 September 2017: Bond issue of €500 million maturing in February 2024.
- 15 September 2017: Buyback of equity shares.
- 8 September 2017: Strengthening the turnaround plan for Le Nickel-SLN in New Caledonia.
- 27 July 2017: Results for first half of 2017.
- 8 June 2017: Finalisation of the agreement with the Tsingshan Group regarding the development of the Weda Bay Nickel nickel deposit in Indonesia.
- 23 May 2017: Press release after the General Shareholders' Meeting of 23 May 2017.
- 12 May 2017: Changes to the partnership between Erasteel and HeYe Special Steel Co Ltd in China.
- 2 May 2017: Availability of documents concerning the 2017 Annual General Shareholder's Meeting.
- 28 April 2017: Turnover of the first quarter of 2017.
- 24 March 2017: Publication of the 2016 Registration Document.
- 23 February 2017: Annual Results 2016—deployment of a new cycle of governance.
- 17 January 2017: Two-year extension of the revolving credit facility.
- 3 January 2017: Completion of the sale of ERACHEM as of 31 December 2016 to PMHC II, Inc.

10.3.4 PROVISIONAL 2018 FINANCIAL REPORTING SCHEDULE—EMBARGO PERIODS

The provisional timetable for financial communication of 2018 is as follows:

- 21 February 2018: 2017 annual results.
- 20 April 2018: turnover of the first quarter of 2018.
- 25 July 2018: half-year results 2018.
- 25 October 2018: turnover of the third quarter of 2018.

During an embargo period (quiet period) of 15 calendar days before the quarterly sales publications or annual or interim results, the Company refrains from contact with analysts, investors or brokers who operate both in securities and credit.

10.3.5 BALO PUBLICATIONS

Announcement of the General Shareholders' Meeting:	5 April 2017
Notice calling the General Shareholders' Meeting:	5 May 2017
Notice of approval of financial statements without amendment:	2 June 2017

10.4 RECONCILIATION TABLE WITH THE ANNUAL FINANCIAL REPORT

This Registration Document contains all the information required in annual financial reports pursuant to Article L. 451-1-2 of the French Monetary and Financial Code and Article 222-3 of the General Regulations of the AMF.

In order to facilitate the reading of this annual financial report, the concordance table below identifies the sections contained herein.

NO.	INFORMATION IN THE ANNUAL FINANCIAL REPORT	REGISTRATION DOCUMENT
1	Statement by management on the accuracy of the information	Section 10.1
2	Consolidated financial statements	Section 3.1
3	Auditors' Report on the consolidated financial statements	Section 3.2
4	Financial statements of the parent company	Section 3.3
5	Auditors' report on the financial statements	Section 3.3
6	Management report:	See management report reconciliation table
7	Fees of the Statutory Auditors	Section 3.1
8	Report of the Board of Directors on the Corporate governance report attached to the Management report Report of the Statutory Auditors prepared in accordance with Article L. 225-235 of the French Commercial Code on the report of the Board of Directors on the Corporate governance report.	Section 4

10.5 MANAGEMENT REPORT RECONCILIATION TABLE

The reconciliation table below identifies the main sections required by the French Commercial Code, the French Monetary and Financial Code, the French General Tax Code and the AMF's General Regulations.

ACTIVITY	REGISTRATION DOCUMENT
Major events after the reporting date	Section 1
Foreseeable outlook	Section 1
Results of subsidiaries and companies controlled, by areas of activity	Section 2—Section 3
Research and development	Section 2
Description of the main risks and uncertainties	Section 3
Group policy concerning management of financial risks, exposure to price, credit, liquidity and cash risk	Section 3
Analysis of business developments, results and the financial position of the Company in the course of the year	Section 3
Stakes or controlling interests in companies based in France	Section 3
Information on supplier payment terms	Section 3
Table of the financial results of the Company over the past five years	Section 3
Reincorporation of general costs and sumptuary expenses	Section 3
Legal and information and information concerning shareholder structure	
Sum of dividends paid out over the last three financial years	Section 3
Identity of shareholders with more than 5% of equity	Section 8
Employee shares held on the last day of the year	Section 8
Information on share buybacks during the year—treasury shares	Section 8
Table summarising valid authorisations granted to the Board by the General Shareholders' Meeting concerning share capital increases, and the use made of these authorisations during the year	Section 8
Elements likely to have an impact in the event of a public offer	Section 8
Information concerning corporate officers	
Terms and functions of members of the Board of Directors and General Management	Section 4
Total remuneration and any benefits granted to each corporate officer	Section 7
Information stipulated in Article R. 225-105-1 the Commercial Code	
1/Social Information	
A/ Jobs	
Total headcount (distribution of employees by sex, age and geographic area)	6.7.2.1 to 6.7.2.5 and 6.7.7.1
Hires:	6.7.2.6
Redundancies	6.7.2.7
Remuneration and developments in pay	6.7.4
B/ Organisation of work	
Organisation of working hours	6.7.3
Absenteeism	6.7.3
C/ Health and safety	
Conditions of health and safety at work	6.6.1 and 6.6.2
Frequency and seriousness of occupational accidents and accounting for professional illnesses	6.6.4
D/ Corporate relations	
Organisation of social dialogue (procedures for information, consultation and negotiation vis-à-vis staff)	6.7.5
Overview of collective agreements, particularly regarding health and safety at work	6.7.5—6.7.4.2
E/ Training	
Total number of training hours	6.7.7
Training policies implemented	6.7.7

ACTIVITY	REGISTRATION DOCUMENT
F/ Equal treatment (policy implementation and measures taken)	
Gender equality	6.7.8.1
Employment and integration of people with disabilities	6.7.8.3
Fight against discrimination	6.7.8
G/ Promotion of and compliance with the ILO fundamental principles and rights at work (respect for freedom of association and the effective recognition of the right to collective bargaining, the elimination of discrimination in respect of employment and occupation, the elimination of forced or compulsory labour, and the abolition child labour)	6.7.8.5
2/Environmental information	
A/ General policy on environmental matters	
Organisation of the Company and procedures for assessment or certification	6.1/6.2.1/6.2.2
Staff training and information concerning protection of the environment	6.2.1
Resources allocated to prevention of environmental contingencies and pollution	6.2.1
Provisions and cover to guard against environmental contingencies	3.3
B/ Pollution	
Prevention, reduction or rectification of waste in air, water or soil with a serious impact on the environment	6.2.3
Consideration of noise pollution and any other kind of pollution specifically related to a certain activity	6.2.1
C/ Circular economy	
i) Prevention and management of waste	
Prevention, recycling, reuse, other forms of recovery and waste disposal	6.2.4
Actions to combat food waste	6.2.4
ii) Sustainable use of resources	
Water consumption and supply in accordance with local constraints	6.2.4
Consumption of raw materials and measures taken to boost efficiency of consumption	6.2.4 and 6. 2.6
Energy consumption, measures taken to boost energy efficiency and use of renewable energies	6.2.5
Use of soil	6.2.6 and 6.2.7
D/ Climate change, contribution to adaptation and the fight against global warming	
Greenhouse gas emissions generated as a result of the Company's business activities	6.2.5
Adaptation to the consequences of climate change	6.2.5
Voluntary medium to long-term reduction targets to reduce greenhouse gas emissions and the means implemented for this purpose	6.2.5
E/ Protection of biodiversity	
Measures taken to preserve or develop biodiversity	6.2.7
3/Information relating to societal commitments in favour of sustainable development	
A/ Territorial, social and economic impact of the business	
Impact of the business on employment and regional development	6.3.1
Impact of the business on neighbouring and local populations	6.3.1
B/ Relations with stakeholders	
Conditions of dialogue with stakeholders	6.3.2
Solidarity, partnerships and sponsorships	6.3.2
C/ Subcontracting and suppliers	
Consideration of social and environmental factors in purchasing policy	6.3.4
Importance of subcontracting	6.3.4
Social and environmental responsibility in relations with suppliers and subcontractors	6.3.4
D/ Fair trade practices	
Action taken to prevent all forms of corruption	6.3.3
Measures taken to protect health and safety of consumers	6.5 and 6.3.3
E/ Other action taken to protect human rights	6.7.8.5

10.6 RECONCILIATION TABLE WITH EUROPEAN REGULATION 809-2004

The following reconciliation table identifies the main sections required under European Regulation No. 809-2004, implementing the "Prospectus" directive.

SECTION	INFORMATION	REGISTRATION DOCUMENT
1	**Persons responsible**	**10.1**
1.1	Persons responsible	10.1
1.2	Statement of responsible persons	10.1
2	**Statutory Auditors**	**10.2**
2.1	Information on Statutory Auditors	10.2
2.2	Changes	10.2
3	**Selected financial information**	**1**
3.1	Selected financial information	1
3.2	Interim periods	not applicable
4	**Risk factors**	**5**
5	**Information concerning the issuer**	
5.1	History and development of the Company	2
5.2	Investments	2
6	**Business overview**	
6.1	Main activities	2
6.2	Main markets	2
6.3	Exceptional events, if any, likely to affect activities and markets	2
6.4	Likely dependence	2
6.5	Competitive position	2
7	**Organisational chart**	
7.1	Group	2
7.2	Important subsidiaries	2
8	**Property, plant and equipment**	
8.1	Important tangible assets	2
8.2	Environmental aspects of this equipment	6
9	**Review of financial position and results**	
9.1	Financial position	1
9.2	Operating income	1
10	**Cash and equity**	
10.1	Capital	1
10.2	Cash Flow	1
10.3	Funding Structure	1
10.4	Potential Restrictions on Capital Use	1
10.5	Sources of Financing	1
11	**Research and development—Patents and licences**	**2**
12	**Trend Information**	
12.1	Trends	1
12.2	Potential Influence	1
13	**Profit forecasts or estimates**	
13.1	Assumptions	not applicable
13.2	Report	not applicable
13.3	Comparison	not applicable
13.4	Actualisation	not applicable
14	**Administrative, management and supervisory bodies and Executive Management**	
14.1	Information on members	4
14.2	Conflicts of interest	4
15	**Compensation and benefits**	

SECTION	INFORMATION	REGISTRATION DOCUMENT
15.1	Compensation	7
15.2	Pensions, retirement or other benefits	7
16	**Functioning of the administrative and management bodies**	4
16.1	Date of expiry of mandates	4
16.2	Service contracts	4
16.3	Committees	4
16.4	Declaration on corporate governance	4
17	**Employees**	
17.1	Information on employees	6
17.2	Participations and options for share subscriptions	6
17.3	Participation of employees	6
18	**Major shareholders**	
18.1	Shareholders	8
18.2	Voting rights	8
18.3	Ownership and control	8
18.4	Agreements related to control	8
19	**Related party transactions**	**3**
20	**Financial information concerning the issuer's assets and liabilities, financial position and results**	
20.1	Historical financial information	3
20.2	Pro forma financial information	not applicable
20.3	Financial statements	3
20.4	Verification of historical financial information	3
20.5	Date of latest financial information	3
20.6	Interim and other financial information	not applicable
20.7	Dividend distribution policy	3
20.8	Legal and arbitration proceedings	3 and 5
20.9	Significant change in the financial or commercial situation	not applicable
21	**Additional information**	
21.1	Share capital	8
21.1.1	Issued capital	8
21.1.2	Other non-equity shares	8
21.1.3	Treasury shares	8
21.1.4	Convertible or exchangeable securities, or securities with subscription warrants	8
21.1.5	Acquisition conditions	8
21.1.6	Options or agreements	3
21.1.7	Capital history	3
21.2	Memorandum and Articles of Association	8
21.2.1	Corporate purpose	8
21.2.2	Regulations of management and control bodies	7
21.2.3	Rights and privileges of shares	8
21.2.4	Changes to the rights of shareholders	8
21.2.5	General Shareholders' Meetings	8
21.2.6	Change of control elements	8
21.2.7	Shareholding thresholds	8
21.2.8	Conditions governing amendments to the Articles of Association	8
22	**Significant contracts**	**5**
23	**Information from third parties, statements by experts and declarations of interest**	
23.1	Declarations of Interest	not applicable
23.2	Certificate	not applicable
24	**Public documents**	**10**
25	**Information on equity investments**	**2 and 3**

APPENDIX
2017 VIGILANCE PLAN

I. SCOPE AND OBJECTIVES

This aim of the Vigilance Plan is to meet the requirements of Law No. 2017-399 of 27 March 2017 on the duty of care of parent companies and contracting undertakings.

The scope of this plan primarily covers all Group entities: the parent company, ERAMET SA, and the companies it directly or indirectly controls. This scope is also described in the chapter on Corporate Social Responsibility (CSR) in the Group's Registration Document. The measures concerning the in-scope entities are set out in sections 2, 3, 4 and 6 of this plan.

The scope of the plan also covers suppliers and sub-contractors of Group entities (parent company or controlled subsidiaries). Risks related to entities are discussed in section 5 of this plan, as the assessment and management of risks in the supply chain is subject to specific measures.

THE ERAMET GROUP

(see also www.eramet.com)

The ERAMET group is a French mining and metallurgical group with leading global positions across the entire metal value chain, from mining to the processing and manufacturing of metals.

In 2017, the Group generated sales of around €3.6 billion and at the end of the year employed 12,590 people in around 20 countries, half in Europe (40% in France) and nearly one-third in Africa (24% in Gabon).

The Group's industrial activities are grouped into three operating entities:

- **ERAMET Manganese** is an integrated producer of manganese, whose main assets are:
  - a manganese mine in Gabon, operated by COMILOG. The COMILOG deposit has been in operation for 50 years and still contains resources for more than 40 years;
  - two local processing units in Gabon, the Moanda Industrial Complex (CIM) and the Moanda Metallurgical Complex (CMM), which produce high purity manganese and manganese alloys;
  - five industrial sites (three in Norway, one in the US and one in France) for the production of high carbon and refined manganese alloys.

  In Gabon, COMILOG is also responsible for the operations of SETRAG (Société Concessionnaire du Chemin de Fer Transgabonais).

  ERAMET Manganese is the world's leading producer of refined manganese alloys, the world's second largest producer of high-grade manganese ore, and contributed to around 52% of the Group's sales in 2017.

- **ERAMET Nickel** is an integrated producer of ferronickel, whose activities include:
  - the operation by Société Le Nickel (SLN) in New Caledonia of seven directly operated mines and eight mines subcontracted to local operators (piece-workers), two ore processing plants (washing plants) and a pyrometallurgical plant in Doniambo, which transforms the ore into ferronickel. SLN has been in operation since the end of the 19th century and has resources for another fifty years;
  - the production of high purity nickel and nickel salts at the Sandouville plant (France).

  ERAMET Nickel is the world leader in the production of high-grade ferronickel and nickel chloride, the third largest producer of high-purity nickel, and contributed to around 18% of the Group's sales in 2017.

  ERAMET Nickel also owns a minority interest in the Weda Bay Nickel deposit in Indonesia, one of the largest deposits in the world yet to be exploited and currently under development.

- **ERAMET Alloys** specialises in the manufacture of high-technology steel products. Its industrial activities are mainly divided between:
  - the seven French sites of the subsidiary Aubert & Duval, dedicated to the conversion of special steel and die-forged parts into superalloys and the manufacture of forged aluminium and titanium parts for aircraft structures;
  - the eight sites of the subsidiary Erasteel, dedicated to the manufacture of special steels, steel tools, high-speed steels and superalloys; two of these plants are located in France, three in Sweden, one in China, one in the US and one in England;
  - a titanium operation developed through partnerships in France: titanium processing (UKAD) and titanium recycling (EcoTitanium).

  ERAMET Alloys is the world leader in the manufacture of gas atomised powders, the second largest manufacturer of die-forged parts, and contributed to around 30% of the Group's sales in 2017.
- **TiZir:** ERAMET holds a 50% stake in the joint venture TiZir Ltd, formed with the Australian company Mineral Deposits Limited (MDL), which now owns two production sites:
  - Grande Côte Opérations in Senegal, which since 2014 operates a mineralised sands deposit (mainly ilmenite and zircon);
  - the Tyssedal plant in Norway, which transforms the ilmenite produced in Senegal into titanium dioxide slag and high-purity pig iron.

  TiZir Ltd's turnover is included in that of ERAMET Manganese.
- Lastly, ERAMET is developing a lithium production project from a deposit located at an altitude of 3,800 metres in the province of Salta in north-western Argentina.

II. RISK MAPPING AND ASSESSMENT OF SUBSIDIARIES

As part of its risk identification and control process, the Group updates its major risk map every three years, the implementation of which is managed by the Risk Management Department. The risk map is presented to the Executive Committee and to the Audit, Risks and Ethics Committee of the Group's Board of Directors. The map identifies major strategic, operational, financial and compliance risks. It is complemented by more detailed risk mappings focusing on specific cross-functional themes, such as human rights, the environment and health and safety of people.

1. RISK MAPPING

A. RISKS OF VIOLATIONS OF HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS

In 2017, the Group formalised its mapping of the risks of violations of human rights and fundamental freedoms, with the support of external expertise.

A risk universe was established by matching the impacts of the Group's activities with the list of rights contained in the UN Universal Declaration of Human Rights of 1948, the two UN International Covenants of 1966 (International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights), as well as the European Convention on Human Rights of 1950. Sector benchmarks on the identification and management of risks of human rights abuses were also taken into account. The criteria for assessing these risks, in terms of severity of harm and probability of occurrence, were also defined. They involve an assessment of the severity of the impact, not directly for the Group, but for the potentially affected third party(ies) (employees, local residents or other people).

The assessment of the level of severity and probability of occurrence of these risks was carried out by a representative panel of the different corporate functions and Group entities across all geographical areas.

The risk universe of human rights violations defined during this exercise for the ERAMET group can be broken down into the following three broad categories, and the main risks were assessed for each of them:

- the risks for Group employees, mainly those related to health and safety at work, and to a lesser extent those related to discrimination and harassment. The risks to the health and safety of employees are described in more detail in the following section (II.1.b);
- risks to communities bordering the Group's sites, whether related to potential environmental impacts, or resulting from other activities (acquisition of land or, to a lesser extent, safety measures implemented for the protection of certain installations);
- the risks generated by contributors to the Group's supply chain, such as, for example, non-compliance with the fundamental conventions of the International Labour Organisation. These risks are addressed in the section of the Vigilance Plan that focuses on the supply chain (Section V).

The risk mapping will be updated regularly, based in particular on continuous assessments of the situation of the Group's sites and entities with regard to these risks.

B. RISKS OF HARM TO THE HEALTH AND SAFETY OF PEOPLE

This section focuses on the risks of harm to the health and safety of employees. Risks to the health and safety of other people, such as residents close to the sites, are discussed in the sections on human rights and environmental risks and the associated control measures.

RISKS OF UNDERMINING THE SAFETY OF EMPLOYEES

The prevention of risks of work-related accidents is based primarily on the analysis of risks in the workplace, conducted within the plants. This highly operational analysis makes it possible to secure a specific operation by identifying all the risks to which the operators are exposed and the means of control implemented to manage them. These local analyses are compiled in the risk register of each site (known as the "single risk assessment document" for French sites). These risks are assessed according to a scale based on the frequency x gravity pair, taking into account the protection measures in place. This methodology makes it possible to identify the most critical risks and thus feed into the site's Safety Improvement Plan. Risk registers make it possible to group the risks by standard activities specific to each site. For example, they include mechanical handling, machine driving, walking, etc.

At Group level, the risk analysis is based on this segmentation by type of activity. The risk assessment is based on actual accident statistics taken from the reporting of accidents over a period of several years, according to the frequencies actually observed and the average potential severity estimated on a case by case basis.

The Group's risk analysis of workplace accidents allowed the risks identified to be grouped into three distinct families:

- **Technological risks** associated with processes and installations present the most serious potential hazards. An explosion, a toxic gas leak, or equipment failure can impact several people in a single incident. The frequency of occurrence of these events is the lowest in our history.
- **Critical activities** are dangerous tasks that are carried out on a daily basis as part of the operation of our facilities. They include machine work, work at height, vehicle traffic, working in confined spaces and working with liquid metal. Failure to control these risks can lead to serious accidents. In 60% of cases, the consequence of lack of control of these critical activities is work stoppage and, in a little over 10% of cases, serious injury.
- Finally, the Group's operations involve many routine activities, such as walking, lifting and moving objects and using hand tools. About two-thirds of the Group's accidents involve these activities, but the severity of the accidents associated with them is statistically less serious than for critical activities. For these routine activities, the accident rate that triggers a work stoppage is only 40%, while the rate of serious accidents is less than 1%. ERAMET groups these activities which are difficult to categorise under the heading **"non-standardised activities".**

RISKS OF UNDERMINING THE HEALTH OF EMPLOYEES

Based on the analysis of risks in the workplace and recorded in the risk registers of each site, Occupational Health professionals identify the risks that may have a lasting or deferred impact on the health of employees. These risks may relate to physical health (noise, vibrations, awkward postures, repetitive movements, night or alternating work, electromagnetic fields, extreme temperatures, exposure to dangerous chemical agents, including asbestos) or psychological health (workload, organisation of work, autonomy).

Deferred risks are risks of occupational diseases, which are reported separately based on reports sent to the employer or which result in investigations by internal or regulatory prevention services. In France, a Table of Occupational Diseases is regularly updated and specific regulations are implemented in the other countries where the Group operates.

These risk maps and analyses of the risks to the health and safety of employees are regularly updated.

C. RISKS OF DAMAGE TO THE ENVIRONMENT

As part of its environmental protection commitments and objectives, the Group maps the environmental damage risks for each of its sites. Environmental impact and risk assessment studies are carried out as part of the sites' exploration licences, ISO 14001 management systems and the Group's HSE audits. They are supplemented by industrial risk assessments carried out with insurers.

In 2017, the assessments resulting from these various activities were aggregated and harmonised in order to formalise a Group-wide risk map of damage to the environment. This mapping of environmental risks will be updated on a regular basis.

The main risks and challenges for the Group's sites are related to the following potential impacts:

- Water consumption/pressure on water resources (for industrial and mining sites);
- Emissions into water (for industrial sites);
- Atmospheric emissions (for industrial sites);
- Energy consumption and greenhouse gas emissions (for industrial sites);
- Production of hazardous waste (for industrial sites);
- Risks of historical soil pollution (for industrial sites);
- Impact on biodiversity (for mining sites);
- Erosion (for mining sites);
- Production of waste rock and tailings (for mining sites).

The details of the nature of the risks associated with these impacts are described along with the corresponding control measures in section III.2 of this plan.

Furthermore, industrial risks (the occurrence of an industrial accident) can also lead to environmental damage. The main industrial risks to which the Group's sites may be exposed are fire, explosion (including, for certain sites, related to the risk of contact between water and molten metal), machine breakdown on critical equipment, and natural events (floods, storms/cyclones, etc.).

2. PROCEDURES FOR THE REGULAR RISK ASSESSMENT OF SUBSIDIARIES

In terms of environmental and health/safety risks, the risk situation of the subsidiaries is regularly assessed through two main mechanisms: internal environmental and safety information systems, and the HSE (Health, Safety and Environment) audit system.

A dedicated environmental information system (EraGreen) has been fully deployed in all industrial and mining sites, allowing for the collection and consolidation of environmental performance indicators. These indicators are mostly derived from the sampling and analysis plans developed by the sites as part of their operating permits. Information and reporting systems dedicated to the management of human resources and Health/Safety, including the reporting of accidents resulting in work stoppage, are also deployed at all sites.

The Group also relies on a demanding internal audit system for the performance of its entities in the areas of Environment, Health, Safety and Energy. The common audit guidelines are structured as three pillars: human involvement, operational control and prevention. They fully take into account the requirements of ISO 14001, OHSAS 18001 and ISO 50001. Mixed teams of the Group's internal auditors (corporate departments, division coordination, and site representatives) trained according to an internal guidelines system, conduct these audits which last several days and make it possible to situate in detail the performance of the sites. This involvement strengthens the cross-functional level of expertise of HSE managers and promotes experience sharing between operational teams.

Corrective action plans are defined at the end of each audit, and for all risks considered significant, a quarterly report on the implementation of corrective actions is consolidated at Group level.

In particular, with regard to the risk assessment of subsidiaries in terms of industrial risk, the control system is based primarily on the programme of biennial insurance engineering visits (insurance prevention audits) to its industrial sites in close collaboration with insurers, brokers and the Group Insurance Department. Any significant risk detected during these audits results in a corrective action plan by the site concerned.

In terms of risks of human rights violations, the risk situation of sites will be assessed each year in light of the risks identified by the risk mapping exercise performed in 2017. This assessment must be based on data from the annual site CSR reports, covering specific Human Resources management indicators, and indicators related to the management of potential impacts on communities bordering our sites. This assessment will also take into account data from the monitoring of the social and environmental management of Group projects, carried out as part of the provision of project support.

III. RISK MANAGEMENT

1. RISK MANAGEMENT POLICIES AND ORGANISATION

A. POLICIES AND COMMITMENTS

The management of risks related to human rights, health, safety and the environment is first and foremost the focus of a clear commitment by the Group in all of these areas. ERAMET has adopted an Ethics Charter and a Sustainable Development Policy, both of which set the standard for its social responsibility. These two fundamental documents have been translated into the languages of the countries where the Group operates and are implemented across all Divisions and sites.

The Group's Ethics Charter sets out the Group's commitments and the rules and principles of action and behaviour of employees in many areas, including respect for human rights (with reference to the UN Universal Declaration of Human Rights and all the fundamental conventions of the International Labour Organisation), the protection of the health and safety of persons, and the respect for and protection of the environment.

The ERAMET group's Sustainable Development Policy sets out a number of these commitments. It is structured around four priorities:

- *the protection and development of the Group's employees*, with commitments relating in particular to employee health and safety and social dialogue;
- *the management of risks and impacts on health and the environment*, with commitments relating to the control of the impacts of industrial processes at the Group's sites, the reduction of energy consumption, the fight against climate change, better use of natural resources, and the development of recycling;
- *the use of sustainable development opportunities for the benefit of customers*, with commitments related to the integration of sustainable development in the Company's business innovation and diversification policy, product responsibility (development of their environmental benefits and risk reduction) and a responsible purchasing approach;
- and finally, *maintaining a relationship of trust with stakeholders*, by meeting their expectations through dialogue and consultation actions, by contributing to the development of the areas where we operate, and by sharing the Group's non-financial performance in a transparent manner.

These thematic commitments are set out in more specific policies, such as the **Safety Charter**, the **Health Policy**, the **Environment Charter**, the **Biodiversity Policy**, the **Energy Policy** and the **Climate Change Policy**. The complete texts of these charters and policies are available on the ERAMET group's website.

B. ORGANISATION

The Group's commitment translates into involvement at the highest level of the Company. The Communication and Sustainable Development Director and the Human Resources, Health, Safety and Security Director, both members of the Group's Executive Committee propose, support and monitor the multi-year objectives and associated action plans. They report to the Executive Committee.

The effective integration of CSR topics into the Group's activities is also closely monitored by ERAMET's Board of Directors, in particular through two of its Committees, the Strategy and CSR Committee, and the Audit, Risks and Ethics Committee.

The Communication and Sustainable Development Department (DC2D) has an Environment, Industrial Risks and Product Department (DERIP) and a Public Affairs Department (DAP), while the Human Resources Department (DRH) includes a Social Relations Department, a Safety and Prevention Department, a Security Department and a Medical Advisor, responsible for promoting the Group's Health Policy. The Group Ethics Officer and the Divisions' Purchasing Departments complete this system.

These corporate functions are organised and structured around practices and processes aimed at continuously strengthening their commitment and efficiency, highlighting a strong culture of risk identification and control.

The objectives and action plans are available in all of the Divisions and operational entities of the Group. Their effective execution and the good coordination between the Corporate functions and the Divisions have been strengthened by the establishment of working groups and cross-functional committees focusing on various themes (biodiversity, mining environment, responsible purchasing).

Furthermore, the Group pays particular attention to the integration of social, environmental, health and safety, cultural and societal criteria at the earliest stages of their projects. Sustainable development experts and specialists are integrated into the industrial, technical, legal and financial teams, and participate in the various steering committees, from pre-project phases to feasibility studies and pre-construction. Likewise, they participate in acquisition audits in the case of merger or acquisition projects, as well as in due diligence related to the transfer of assets.

2. RISK MANAGEMENT ACTIONS

A. MANAGEMENT OF RISKS OF HUMAN RIGHTS VIOLATIONS

HUMAN RIGHTS IN THE WORKPLACE

Health and safety is an integral part of fundamental human rights, and as such has been integrated into the Group's risk mapping exercise on human rights violations. Due to the nature of their industrial and mining activities and their countries of operation, the Group's sites may incur risks related to the health and safety of employees, the management of which is one of the Group's priorities. These measures are described in section III. 2. b of this plan.

In order to strengthen the control of local workplace discrimination and harassment risks identified during the Group mapping exercise, an e-learning course is gradually being rolled out to all Group employees to raise awareness about the Ethics Charter, including a section dedicated to these issues. More generally, information is sent to all employees, through infographics displayed at all the Group's sites concerning the organisation of ethical compliance and in particular the existence of the professional whistleblowing system, presented in section VI of this plan. In addition, as part of a trade union agreement related to the prevention of psychosocial risks, monitoring units have been set up at the various sites in mainland France to anticipate risk situations and alert them if an employee with psychological difficulty is identified. Training on the prevention of psychosocial risks has also been deployed for all Group managers. Actions to reinforce these mechanisms are planned, with the appointment of a Group Diversity Officer, whose role is to promote and coordinate all actions in favour of diversity and the fight against discrimination.

Measures to manage risks to the rights of workers in the supply chain, which were also identified during the mapping exercise, are presented in section V of this plan.

RIGHTS OF COMMUNITIES BORDERING GROUP SITES

Most of the ERAMET group's sites have a permanent presence in the areas in which they operate, which with they develop highly interdependent relationships. The local integration of sites, particularly with regard to neighbouring communities, is therefore a key element in the sustainability of the Group's activities. As a result, the Group has built long-term relationships of trust with neighbouring communities, and works to prevent any risk of violation of their fundamental rights.

The prevention of such risks is primarily achieved through the implementation of dialogue mechanisms with the relevant stakeholders or their representatives. Information and consultation activities with local residents are set up according to the level of impact and risk of each site. The scope of these actions is most often adequately defined by national or local regulations. In France, for example, because of their Seveso "High Threshold" status or their ICPE (Installation Classified for the Protection of the Environment) status, several sites participate in "Site Monitoring Commissions", composed of representatives of the State, local authorities, local residents, farmers and employees. As part of authorisation processes and studies of societal and environmental impacts, the projects establish mechanisms for consulting with local residents and other stakeholders in order to take into account their expectations in controlling these impacts at all stages of the project. In consultation with the Communication and Sustainable Development Department, some sites may go beyond the regulatory requirements for dialogue with local residents. In particular, the sites exercise greater vigilance with regard to the indigenous or vulnerable populations that may reside in the surrounding area. In addition, and depending on their potential impacts, some sites also set up dedicated systems to receive and respond to concerns, questions or complaints from local populations, as presented in section VI of this plan.

In a process of continuous improvement, actions to reinforce these dialogue mechanisms with the affected people are included in a multi-year action plan drawn up by the Group.

More targeted control measures are also put in place to manage specific risks related to the acquisition of land, environmental impacts and systems to ensure the safety of certain facilities.

The activities of certain Group sites require the acquisition of land from communities that reside or carry out economic activities (agricultural or commercial) in the area. These operations may present risks of human rights violations (property rights or the right to an adequate standard of living of these communities). In terms of preventing these violations, the Group refers to the principles set out in the Performance Standards of the International Finance Corporation (World Bank Group) relating to these relocation activities, with particular focus on the implementation of resettlement action plans.

Some sites also present environmental impact risks that may affect local residents. These may be pollution risks or risks of reducing communities' access to the natural resources they use. All of these risks are subject to the control measures set out in Section III. 2. c. of this plan, relating to the management of risks of damage to the environment. Depending on the nature of these impacts or risks, local residents may be involved in the definition or execution of these control measures. In particular, local communities are associated with baseline characterisation studies that include their knowledge of biodiversity, its uses and ecosystem services.

In addition, some of the countries or regions in which the ERAMET group operates may experience unstable political, security or climate situations (terrorism, information theft, crime, earthquakes, cyclones, etc.). In this context, the Group Security Department implements measures to ensure the protection of employees (whether travelling for business reasons, or foreign or local residents), intellectual property and ERAMET facilities. ERAMET is aware that these measures must be established in respect of the rights of communities bordering the Group sites, therefore it has established a Group Security Policy that respects international law, French law and the laws of the countries in which the Group operates. As part of this policy, in accordance with the principles of the ERAMET group Ethics Charter, the prevention of safety risks first requires dialogue and a relationship of mutual respect with local communities. Similarly, training and rules governing the use of force and the equipment of the security personnel are decided, designed and controlled by a Site Security Officer, who acts within the framework defined by the Group Security Director.

B. MANAGEMENT OF RISKS OF HARM TO THE HEALTH AND SAFETY OF PEOPLE

Actions to prevent risks to the health and safety of employees are coordinated by the Safety and Prevention Director and the Group Medical Advisor, who report directly to the Director of Human Resources, Health, Safety and Security. Together, they establish and propose to the Executive Committee the Group's health and safety policies and guidelines. Once validated, these guidelines are defined in the divisions by the Division Managers, assisted by Health and Safety coordinators, and then by the Site Managers, who are themselves assisted by a site Health and Safety coordinator.

Prevention of damage to health and accidents is at the heart of the system, and concerns ERAMET employees and temporary workers and subcontractors who work on the sites. It is based on the analysis of risks in the workplace, which determines the actions and preventive measures to be implemented.

MANAGEMENT OF RISKS RELATED TO EMPLOYEE SAFETY

In relation to Safety, actions at Group level are coordinated within the framework of the "Group Safety Committee" which includes the Human Resources, Health, Safety and Security Director, the Division Directors, the Safety and Prevention Director, and the Health and Safety coordinators of the divisions.

Prevention tools are adjusted to the three major risk groups identified:

- The prevention of technological risks is based on the implementation of barriers (technical, organisational and human) as a result of hazard studies. Prevention depends greatly on the technical expertise of the teams that has been acquired over years of operations and their ability to identify and respond to weak signals.
- The risks associated with critical activities are too important to leave the choice of method of operation to the stakeholders; these activities are also strongly governed by rules. ERAMET has compiled a set of minimum essential rules—"Essential Safety Requirements"—that are required by all sites, in compliance with local legal requirements. Limited in number, they are communicated as part of a Group communication campaign. They are auditable and audited as part of corporate audits.
- Finally, non-standardised activities cannot reasonably be governed by simple rules. For the work situations concerned, ERAMET develops the situational intelligence of its teams so that the stakeholders learn to make safety-related decisions. Team awareness, feedback, and especially interactions with the chain of command in the field are all systematically used to guide decisions towards safer behaviour.

MANAGEMENT OF RISKS RELATED TO EMPLOYEE HEALTH

In terms of prevention of health risks, the Group's strategy is based on the Group's Health policy, which covers four main areas, broken down into specific priority actions. The strategic areas are:

- reducing and managing the effects and impacts of the Group's activities on the health of employees and local residents;
- continued employment for all employees during their professional career, including when affected by poor health;
- participation in general public health and chronic disease prevention campaigns;
- the prevention of risks to psychological health and the implementation of actions for the Quality of Working Life.

For the management of risks related to products, a centralised structure, the Group Products Committee defines the rules and standards for the management of chemical products and provides support and services to the Divisions and sites in order to help them comply with the many regulations. The action of this structure has three main objectives:

- improve the technical and scientific knowledge of Group products;
- provide support and information to internal and external clients;
- harmonise the chemical risk management methods on the sites.

Harmonising the chemical risk management on the sites is a major challenge. ERAMET group production sites are found on five continents, and they must, therefore, follow and respect various regulations concerning hygiene and controls of chemical exposures in the workplace. In this area of regulation, the differences may be significant from one country to another for the same substance. Harmonisation and communication between sites on these subjects is therefore important for exchanging, explaining and implementing practices and references, ensuring a corresponding protection that is higher than the regulations in force in the relevant country. In concrete terms, a steering committee brings together the Group Prevention and Safety Department, the Group Medical Advisor, the Group Environment, Industrial Risks and Products Department and the Hygiene, Health and Safety Coordinators of the Divisions. It defines and monitors the priority actions for the year. One of these actions is the production and circulation of practical toxicological sheets that identify the references and good practices, accompanied by a methodological guide for the measurement of exposure. A consolidated chemical risk assessment method is also available and is being deployed across the sites.

In particular, the asbestos-related risk for the Group is divided into environmental asbestos at nickel mines and also the management of asbestos products at industrial sites.

In New Caledonia, specific operating procedures exist to control veins of asbestos-containing ores in the event that the mining activity uncovers them. The operators are trained in the precautions to be taken, and special medical monitoring has been set up, in consultation with the authorities, social partners, and other mining operators.

No industrial site of the Group has ever produced or processed asbestos, nor marketed composite materials made up entirely or partially of asbestos. This material has never been used as a raw material by ERAMET but rather only as a component of certain materials of thermal protection equipment. In accordance with applicable regulations, particularly in France, the Group has carried out asbestos technical diagnostics (DTA) on its industrial sites, by authorised firms, the conclusions and recommendations of which are then translated into detailed action plans.

C. MANAGEMENT OF RISKS OF DAMAGE TO THE ENVIRONMENT

To manage its environmental risks, the Group relies on a network of internal experts and on a structured organisation: The Environment, Industrial Risks and Products Department (DERIP) defines the Group's benchmarks, coordinates the general dynamics of continuous improvement, implements the control mechanisms of the internal standards and provides expert technical support to the sites and projects. The monitoring and anticipation of regulatory changes are performed jointly with the Public Affairs Department. In addition, more than 80 people make up the network of HSE functions at the sites with a reporting line to their senior management for the vast majority of them. Training and awareness activities on the essentials of environmental responsibility management are also developed at the sites, within the Divisions and at Corporate level.

The management of environmental risks begins with the implementation of environmental management systems. This is why the Group pursues an objective of ISO 14001 certification for all its sites, except those that have no significant impact on the environment. The latter category includes sites with purely administrative activities, such as offices, distribution centres or sites in project or closure phase.

In terms of controlling risks specific to mining sites, teams dedicated to taking into account environmental requirements in mining are present on the sites and in the subsidiaries concerned, and implement formalised tools for the environmental management of mines. All mining subsidiaries have formalised a Mining Environment plan of action and the progress of these action plans is reviewed regularly with the Group Environment, Industrial Risks and Products Department. In addition, a community of experts on the mining environment has been set up and meets regularly. Its role is to formalise good practices guidelines applicable throughout the Group and to encourage the exchange of expertise between sites. Finally, Environmental Management Systems compatible with the requirements of ISO 14001 have been deployed by the mining subsidiaries.

The more targeted measures and actions to control each of the environmental risks are described below.

WATER CONSUMPTION/ PRESSURE ON WATER RESOURCES (INDUSTRIAL AND MINING SITES)

Mining, metallurgy and hydrometallurgy activities consume water in several ways: for the cooling of furnaces and other metallurgical plants, for the washing of ores, raw materials and by-products, and finally for hydrometallurgical processes (solubilisation and reactive environments).

None of the Group's industrial sites is located in a country confronted with "water stress" according to the definition adopted by the UN, that is to say, whose water resource per inhabitant, for all uses combined, is generally less than 1,700 cubic metres per person per year. Although this water resource is often substantial or abundant on its sites, the Group attaches real importance to its preservation. Multiple actions are taken to use only the required amount.

Whenever technically possible, the sites encourage internal recycling of the water consumed. The cooling of furnaces and other metallurgical facilities, as well as other high-consumption uses, are mainly done in a closed circuit. The water consumption is then essentially supplemented in order to compensate for evaporation or losses in the system. Where possible, the sites also source water from a nearby industrial site.

With regard to mining sites, the issue of water consumption mainly concerns the Grande Côte Opérations (GCO) site in Senegal. The subject of water management is sensitive there, as the operation of the mine uses two aquifers, one of which is very important for the people and the country in general. Given this situation, every precaution is taken to ensure that the impact of the mine is as low as possible. GCO has an expert team in hydrogeology, and the water management system was designed and authorised by the competent department of the Senegalese government to avoid additional pressure on the surface water table used to supply agricultural crops for local residents. All mining installations are controlled to ensure minimal variations in the level of this water table.

EMISSIONS INTO WATER (INDUSTRIAL SITES)

Hydrometallurgical sites are those which present relatively the most significant risks to water pollution, due to the use of chemicals and an aqueous process. ERAMET is committed to reducing its aqueous emissions, and all industrial water is managed in accordance with applicable regulations.

In addition to preventive systems, such as basins and double-walled storage tanks, curative mechanisms, such as effluent treatment plants using physico-chemical processes or hydrocarbon separators (separation by decantation) are used to allow discharges that are in accordance with the statutory limit values.

The Group's sites also closely monitor the quality of groundwater and the impact of the activity on soils and subsoils. Several hundred piezometers are distributed throughout the Group's various sites, both within and outside of the Company, to support the initial phases of any new project (characterisation of the initial state) and also to monitor any impacts on ground and surface water.

ATMOSPHERIC EMISSIONS (INDUSTRIAL SITES)

Pyrometallurgical activities with their fusion plants and heat treatment furnaces contribute the most to channelled air emissions, including power plants. CO_2 emissions are discussed below.

Air emissions are a function of the nature of raw materials and ores used, the transfer and loading technologies in place, the installed capacity of the equipment and especially the level of activity of the sites.

In pyrometallurgy, channelled emissions are generated in the handling of materials, furnaces, grinding and milling operations, as well as operations involving molten liquid metal and slag. In hydrometallurgy, channelled dust emissions most often occur during the handling, grinding, drying or transfer of materials.

The effluent purification systems generally used in the Group's factories are electrostatic precipitators, baghouses and washing towers. Specific treatment systems for certain pollutants can also be used, such as activated carbon filters. The different items of equipment are installed according to the characteristics of the industrial processes, the targeted purification performances and regulatory constraints.

ENERGY CONSUMPTION AND GREENHOUSE GAS EMISSIONS (INDUSTRIAL SITES)

Sites which have metallurgical furnaces and/or electricity generation facilities are those that amass the bulk of energy consumption and greenhouse gas emissions. Thus, around four-fifths of the energy requirements are consumed by 14 Group pyrometallurgical plants.

Through its Climate Change policy, the Group is committed to reducing its greenhouse gas emissions, in particular by reinforcing its approach to improving energy efficiency, by promoting and developing the recycling of raw materials in a circular economy approach, and prioritising low-carbon energy sources and processes under economically acceptable conditions.

The Group Energy Policy, which incorporates the principles of the ISO 50001 standard, is deployed by the Group Energy Centre across all sites, where ISO 50001 certification is being progressively extended. The Group Coordinator, an ISO 50001 auditor certified by AFNOR, leads the process, providing the sites with expertise in several business areas and ensuring regulatory and technological monitoring. The site energy contacts, representatives of site management in relation to the ISO 50001 standard, locally implement the continuous improvement process in relation to energy. Finally, the site management is committed to an energy management system based on the principles of the ISO 50001 standard and to allocating resources that are adapted to the challenges of each site. Division management is called upon to support site management.

As part of the energy efficiency initiative, energy performance indicators are set up at the sites and are integrated into the management of industrial performance. The values and developments of these indicators are analysed in relation to each local process. Because of the variety of jobs and processes, consolidation of these indicators at the Group level would have no purpose. Consequently, and for reasons of confidentiality and protection of our processes, the Group decided not to communicate more precisely on these indicators.

PRODUCTION OF HAZARDOUS WASTE (INDUSTRIAL SITES)

The activities that generate hazardous waste are mainly derived from the pyrometallurgical processes of the Group's mining divisions. The ERAMET Alloys sites that are significant in terms of their size are also responsible for significant quantities of hazardous waste.

These activities produce dust recovered by filtration systems, sludge and sodium-calcium slag which, depending on their intrinsic properties and the location of the operation, can be considered hazardous waste. The hazardous waste is treated through specific, authorised channels. Controls are put in place to ensure the proper management of this waste throughout the process (transport of waste, delivery to approved centre and final treatment).

IMPACT ON BIODIVERSITY (MINING SITES)

In terms of controlling biodiversity risks, ERAMET has formalised its commitments through a dedicated policy, which is structured around three main themes:

1. Better awareness and understanding of biodiversity and its features.
2. Act to preserve biodiversity.
3. Raise awareness, exchange and share.

The principles are to be adapted at sites in a manner proportionate to local issues.

In New Caledonia, Société Le Nickel (SLN) operates nickel deposits on various sites in the heart of a region renowned for its rich biodiversity and a high rate of endemism among its flora and fauna species. It has developed reliable and environmentally friendly rehabilitation methods including revegetation by hydraulic seeding and plantations. The naturally low fertility of the soils, rich in metals and poor in organic elements, as well as the extreme rainfall conditions, make it difficult to see the results of this work in the short term because of the very slow growth.

SLN has implemented a global biodiversity management plan derived from a Biodiversity Strategy that incorporates international preservation standards in this area. Through this strategy, SLN implements its global biodiversity management plan.

In this context, SLN is working on the reintroduction of rare and threatened plant species through inventories of mining centres, as well as phenological monitoring to better control the reproduction of these species. SLN also monitors the wildlife (reptiles, birds, bats), the marine environment and the water quality of its mining creeks on all of its active sites.

In Gabon, the mining procedure includes a remodelling step and the progressive upgrading of the topsoil. The gradual reshaping of historically disturbed surfaces has also been completed.

In Senegal, the exploitation of mineralised sands involves the clearing of vegetation as a floating dredge moves along the deposit. Biodiversity is of medium sensitivity in the currently exploited areas. The issues are mainly related to the rehabilitation and revegetation of large areas, as and when the exploited sites are made available. Revegetation (sowing/planting of local species) occurs after the reshaping of slag heaps to maximally reflect the original landscape (dunes). An additional irrigation system is also in place to allow the continuity of revegetation operations during the nine months of the dry season.

EROSION (MINING SITES)

At mining sites in New Caledonia, and to a lesser extent in Gabon, the major issue of water management is to prevent the entry of suspended solids (SS) into the receiving environment through run-off caused by erosion due to surface stripping.

To avoid this, the sites are equipped with sedimentation ponds that trap suspended matter to prevent their transport into the natural environment. Upstream of these works, many precautions are taken to minimise erosion: roofing of sites to prevent water entry, minimisation of open areas, conservation of natural embankments at the edges of stripping sites, organisation of run-offs to reduce speed, implementation of hydraulic locks, etc. These measures are documented in the Water Management Plan.

In Gabon, the subject of erosion is less significant given the topography of the plateau deposit and the draining characteristics of the upper geological layers of the plateau. Attention is paid to the topic, however, due to the ongoing extension of the deposit into the sloping part. A specific water management plan associated with the extension of the deposit has been developed. As part of this plan, a specific environmental monitoring system is in place, which confirms the effectiveness of the measures taken and makes it possible to verify that the very limited and localised phenomenon of acid mine drainage does not have a significant impact on the natural environment.

In Senegal, the protection against wind and water erosion of the dunes reconstituted after the passage of the dredge is an issue. This risk of erosion is controlled by means of regeneration of the reconstituted dunes, as the revegetation stabilises the sands.

PRODUCTION OF WASTE ROCK AND TAILINGS

Given the considerable volume of tailings being handled at SLN operations, the storage of tailings in appropriate structures and their revegetation is a vital environmental task in order to minimise erosion and the impacts on the ecosystem and landscape.

SLN has implemented effective techniques that have been validated by the authorities, one of which is to create tailings stockpiles. The stability of these structures is guaranteed in the long term, even during exceptionally heavy rains. These tailings stockpiles are subject to continuous monitoring and regular audits by an external third party. Moreover, in order to minimise land clearing and promote site rehabilitation, SLN privileges flat-top piles in old mining pits, when the environmental conditions are favourable.

In Gabon, the problem is less sensitive since, on the one hand, the volumes of tailings being handled are much less, and on the other hand because the technique of exploitation by the successive opening/closing of extraction compartments allows the majority of tailings to be placed directly into the compartments after extraction.

The Senegal mine is not at all affected by this problem, since the sand dune is reconstituted after passing the dredge and extracting the recoverable part.

Mine tailings, which are produced in ore concentration plants at the mines in Gabon and in New Caledonia, are chemically stable and therefore are not hazardous waste within the definition of the regulations. In New Caledonia, all processing residues from enrichment plants are also commercially exploited as by-products of the mine. In Gabon, mine tailings are stored in eight basins, consisting of closed dykes. The residues of the metallurgical enrichment plant are stored in a retaining dyke. These structures are continuously monitored for their stability.

The GCO plant in Senegal produces a very small amount of residues. The residual products have characteristics which allow their return to the natural environment when the dune is reconstituted.

RISKS OF HISTORICAL SOIL POLLUTION (INDUSTRIAL SITES)

The Group exercises the utmost vigilance against potential impacts on soils and subsoils resulting from its past, current or future activities, both in the area of its industrial and mining activities.

Over several years, the Group has developed expertise to support the cessation of activity of certain industrial sites. This expertise concerns the investigation, identification, monitoring and management of potentially impacted sites through various projects, such as the rehabilitation of industrial sites and the end-of-life of landfills or old mines. This expertise is also consulted in the context of internal audits or in advance of acquisitions and disposals. It is important to mention the implementation of a policy of systematic characterisation of soil conditions before any new project, in accordance with the Group's Sustainable Development policy.

IV. SYSTEMS TO MONITOR THE MEASURES IMPLEMENTED AND ASSESS THEIR EFFECTIVENESS

Several of the Group's systems make it possible to monitor the implementation of the measures presented in this plan and to evaluate their effectiveness.

The Group's HSE and CSR reporting system, described in section II.2 of this plan, measures the resources deployed and their results on each site. The data is collected and controlled by the Communication and Sustainable Development Department and the Human Resources Department. In the case of risk management related to the use of products across several Group departments, the Group Product Committee (described in section III.2.b) is the body responsible for monitoring the implementation of actions.

The HSE audit system, also described in section II.2 of this plan, is a monitoring tool for each of the Group's sites, resulting in the development of recommendations. The implementation of the recommendations resulting from audits and defined as high priority is monitored on a quarterly basis by the Environment, Risk and Products Department. To supplement this HSE audit system, the Group plans to integrate human rights-related elements and develop a multi-year programme of dedicated audits, prioritising the most sensitive sites identified as part of the human rights risk mapping exercise. For this type of risk, as well as for those related to suppliers and subcontractors, the multi-year programme also provides for the intervention and recommendations of the Group Risk Management Department and the Internal Audit Department.

In the specific case of Group projects, the implementation of environmental and societal impact management action plans is monitored on a continuous basis as part of project support provided by the Environment, Industrial Risks and Products Department.

Finally, all the reinforcement measures described in this Vigilance Plan are included in multi-year action plans validated by the Group's Executive Committee, and their implementation is subject to a mid-year review. The Group's Board of Directors, through the Strategy and CSR Committee and the Audit, Risk and Ethics Committee, also monitors the implementation of these measures on an annual basis.

In accordance with the requirements of French law, the report on the effective implementation of the Vigilance Plan will be published annually in the Group's Management Report.

V. IDENTIFICATION AND MANAGEMENT OF RISKS RELATED TO SUPPLIERS AND SUBCONTRACTORS

The ERAMET group's activities involve the significant use of external purchasing and, to a lesser extent, outsourcing. The entire ERAMET group spends about 60% of its turnover on the purchase of goods and services. As a result, the Group pays particular attention to CSR issues related to its upstream value chain.

1. RISK MAPPING AND SUPPLIER AND SUBCONTRACTOR ASSESSMENT PROCEDURES

RISK MAPPING

As part of its responsible purchasing approach, in 2017, the Group conducted a risk mapping exercise to identify the risks generated by the activities of its suppliers and subcontractors in relation to human rights and fundamental freedoms, health and safety of people, and the environment ("CSR risks").

In order to develop this risk map, an approach based on the business categories of the various suppliers and subcontractors was chosen. The ISIC (International Standard Industrial Classification of All Economic Activities) nomenclature developed by the UN was used. This nomenclature contains several hundred categories. The Group's suppliers are divided into 66 of them, each of which was assessed according to two criteria: the CSR risk of the category and the importance of the category for the ERAMET group.

- For the assessment of the CSR risk of the business categories, ERAMET availed of the expertise of an external company, proposing a CSR risk rating for each business sector. This rating is the result of data analysis and sectoral studies on the impacts and practices specific to each business category. These risks are analysed in the four areas: working conditions and respect for human rights, the environment, ethics and fair practices, and issues related to the supply chain of the sector itself.
- The assessment of the importance of the purchase categories for ERAMET is based on several Group-specific criteria. These criteria include the purchase volume, the number of potential suppliers or subcontractors in the purchase category, or the impact of the purchased product on the quality of the products marketed by the Group.

The combination of these two assessments made it possible to position the 66 categories into four risk areas, and in particular to identify seven purchase categories that are both important for the Group and pose CSR risks:

- manufacture of non-metallic mineral products;
- manufacture of coke and refined petroleum products;
- metallurgy and manufacture of basic precious and non-ferrous metals;
- recovery of materials (waste treatment consisting of secondary raw materials, recovery by sorting material from non-toxic waste);
- wholesale trade of solid, liquid and gaseous fuels and related products;
- wholesale trade of metals and ores;
- mining of coal and lignite.

This mapping exercise, whose methodology will evolve as part of a continuous improvement approach, will be renewed every year.

PROCEDURE FOR ASSESSING THE SITUATION OF SUPPLIERS AND SUBCONTRACTORS WITH REGARD TO CSR RISKS

The ERAMET group also has a procedure defining the methods for assessing suppliers according to the risk level of the business category to which they belong.

ERAMET has chosen to focus its assessment efforts on the Group's 180 or so suppliers in the seven highest-risk business categories. These assessments will be gradually extended to suppliers belonging to lower-risk but potentially sensitive categories as part of a multi-year action plan. In the case where a new supplier or subcontractor belonging to one of these categories applies to be listed with ERAMET, the same rules apply.

For all suppliers in these seven categories and for which purchases exceed a certain amount, the assessment is in the form of a questionnaire whose answers are analysed by an external third party. This questionnaire, adapted according to the sector of activity and the size of the Company, covers the four areas: working conditions and respect for human rights, the environment, ethics and fair practices, and the supply chain of the sector. The companies questioned are required to provide documents to support their declarations (certifications for example). For the other suppliers in these seven high-risk categories, the CSR assessment is being progressively incorporated into the global supplier assessment standards (quality, financial rating, HSE management, etc.) already used by the Group's entities.

In parallel with this process involving all Group purchases, specific assessments are made for tungsten purchases. Some of the Group's activities require the use of tungsten in metallic form, in limited quantities, in their manufacturing processes. This metal comes from ores that can be called "conflict" ores if their exploitation is used to finance armed groups and fuel civil wars in some parts of the world. ERAMET is therefore very attentive to the conditions of supply of these materials and in particular to compliance with the specific provisions of the "US Dodd Frank Act", as well as the guidelines set by the OECD for multinational companies.

The ERAMET buyers in charge of these supplies thus systematically require their suppliers to provide information concerning the origin of the ores used for the manufacture of tungsten metal sold to ERAMET. They are also asked what due diligence measures they have put in place to verify this origin. To this end, the Group's buyers use the Conflict Minerals Reporting Template (CMRT), supplied and updated regularly by the Responsible Minerals Initiative (RMI), previously known as the Conflict Free Smelter Initiative.

2. RISK MANAGEMENT

RISK MANAGEMENT POLICY AND ORGANISATION

ERAMET has adopted a Responsible Purchasing Charter, which formalises the Group's desire to strengthen the integration of sustainable development issues related to procurement, and promotes a dynamic of continuous improvement. ERAMET's expectations with regard to its suppliers, subcontractors and service providers primarily target three main areas: human rights and working conditions, environment and products, and good business practices. The Charter is also available on the ERAMET website.

In order to oversee the Group's responsible purchasing approach, ERAMET has established a Responsible Purchasing Committee, bringing together the Division's Purchasing Managers and representatives of the Communication and Sustainable Development Department and the Group Legal Department. This Committee is an integral part of the Group's ethics compliance organisation, led by the Ethics Officer.

RISK MANAGEMENT ACTIONS

Compliance with the principles set out in the ERAMET group's Responsible Purchasing Charter forms part of ERAMET's contractual requirements for all its suppliers and subcontractors. The charter specifies that audits may be carried out by ERAMET at suppliers' premises to verify compliance with the principles stated therein.

All subcontractors operating on ERAMET's sites must also comply with the rules in force at these sites in relation to environmental, health and safety risk management.

Moreover, at the end of CSR assessments, more targeted risk management actions must be implemented for suppliers whose rating is below a certain threshold. The Group first of all engages in discussions with the supplier with a view to defining corrective measures to be implemented by the supplier according to a defined schedule. In case of refusal or the impossibility of the supplier to implement corrective actions, ERAMET reserves the right to terminate the contractual relationship, this case being also provided for in the Responsible Purchasing Charter.

3. SYSTEM TO MONITOR THE MEASURES IMPLEMENTED AND ASSESS THEIR EFFECTIVENESS

For actions related to responsible purchasing, the monitoring of the implementation of measures and the assessment of their effectiveness is carried out both on the supplier side (risk management measures) and internally (implementation of the approach).

In the first place, compliance by suppliers with the requirements of the Responsible Purchasing Charter or the corrective measures requested as a result of CSR assessments is monitored by means of supplier audits. The procedure and the audit reference framework for suppliers and subcontractors of the Alloys Division include components relating to environmental management, and employee health and safety. These audits are carried out with a sample of suppliers in accordance with an annual audit plan. In order to supplement this existing system, supplier audit procedures and an audit reference framework must also be developed for the sites of the Nickel and Manganese Divisions, by integrating feedback from the audits conducted by the Alloys Division sites.

Internally, performance indicators relating to the updating of risk maps, the roll-out of assessments, and audits of suppliers are monitored by the Responsible Purchasing Committee. Some of these indicators are associated with objectives that are part of the Group's multi-year CSR plan, the implementation of which is the subject of a mid-year report to the Group's Executive Committee and the Strategy and CSR Committee of the Board of Directors.

VI. WHISTLEBLOWING AND REPORTING MECHANISM

The Ethics Charter and the Group's ethics programme have formulated a set of rules and principles for actions and behaviours that apply to everyone and include a professional whistleblowing system. This system allows each employee to notify the Group Ethics Officer or the Ethics Compliance Officer (RCE) of his/her entity of any events that may violate the principles and commitments of the Ethics Charter and the laws or rules relating to ethics. In particular, the Group encourages employees to disclose acts of discrimination and harassment at work, any conduct contrary to the Group's policies and standards in relation to health, hygiene, safety at work and the protection of the environment, and any violation or risk of violation of the human rights of Group employees or external persons affected by the Company's business activity.

The whistleblowing procedures are made available to employees in the Ethics Charter available on the Group's intranet and are displayed on the premises of each entity. These alerts can be submitted anonymously.

The alert is managed according to a procedure that can be viewed on the Group intranet. This procedure guarantees that the employee initiating the alert has complete confidentiality, and insofar as the employee acts selflessly and in good faith, it also guarantees that no action can be taken against him or her as a result of the use of this mechanism.

In addition to the Group's whistleblowing mechanism, and depending on their potential impacts on the environment and local residents, some sites have also set up dedicated systems to receive and respond to concerns, questions or complaints from local residents. These site-level mechanisms ensure the local management of complaints, whose receipt, processing and resolution procedures are adapted to the cultural context of the entity and the nature of the impacts that may affect local residents. To complement existing systems and harmonise practices across the Group, the Group Standard for Responsible Project Management, currently under development, includes criteria for setting up these local complaint management mechanisms.

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