# PEOPLE-DRIVEN PERFORMANCE





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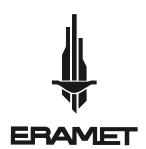
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This translation is a non binding translation into English and is provided solely for the convenience of English-speaking readers

# REGISTRATION DOCUMENT 2013

This document, prepared on the basis of the 2013 financial statements, includes all material information subsequent to the approval of the financial statements, as available at the date of its filing.



The French language version of this Document de Référence (Registration Document) was filed with the AMF on 26 March 2014, pursuant to Article 212-13 of the AMF General Regulations. It may be used in support of a financial transaction if supplemented by a prospectus which will have received the visa of the AMF. This document has been drawn up by the issuer and is binding for its signatories.

# **GROUP OVERVIEW**

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# **1.1.** GROUP PROFILE

The ERAMET group is a French mining and metallurgical group with leading global positions in each of its businesses. The Group, which in 2013 employed close to 14,000 people in some 20 countries, generated sales of  $\notin$ 3.2 billion.

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

The Manganese Division 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 – but it is the leading producer of very high value added alloys, "refined" alloys – and the world's leading producer of manganese chemical derivatives.

The Group is developing a new mineral-sands business segment within ERAMET Manganese, with completion of the operating unit at Grande Côte in Senegal scheduled for the first half of 2014, supplementing the titanium ore pyrometallurgy beneficiation business at the Norwegian Tyssedal site.

- The Nickel Division has nickel mines in New Caledonia and processes virtually all its ore itself. ERAMET is the world's seventh-largest nickel producer, the second-largest ferronickel producer, one of just three leading high-grade nickel producers and the global leader in nickel chloride. ERAMET is studying the development of its Weda Bay nickel deposit located on the island of Halmahera in Indonesia. This deposit, of world-market significance, would be developed locally using a hydrometallurgy process developed by the Group. The decision was deferred by the partners in early 2014 (see Section 2, Nickel).
- The Alloys Division is the second-largest global producer of both closed die-forged parts for aeronautics and energy generation, and high-speed steels, and is the world leader in powder-metallurgy alloys.

The Group has major competitive advantages:

- ore reserves of the highest quality in terms of both grade and lifespan;
- highly-developed technological skills in mining, metallurgy, closed die-forging and metal chemistry.

The Group is implementing a long-term growth strategy designed to strengthen and diversify its present positions, along the following lines of development:

- widening our world leadership positions in alloys (in the existing and new metals);
- strengthening our positions in top-of-the range metallurgy;
- diversifying our portfolio towards special metals with high growth potential (e.g. zirconium and titanium dioxide, rare-earth metals, lithium, etc.);
- increasing the Group's geographical diversification;
- pursuing growth in metal recycling.

These policy thrusts should enable the ERAMET group to scale up its diversification both geographically and in its metals portfolio, with the aim of improving its risk profile and strengthening its financial resilience. For certain large projects, ERAMET also works in partnership with industrial players.

In its development, the Group takes a long-term view. The Group acts responsibly towards its environment, employees and shareholders, in accordance with the principles of its Code of Conduct and its sustainable-development policy.

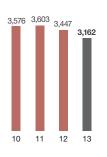
In the current environment of the markets and the world economy, without losing sight of its strategic objectives, the Group emphasises the preservation of its sound financial base and a high availability of liquidity. It will intensify in 2014 the effective measures already taken in 2013, featuring the limiting of its investments to below €400 million.

# **1.2.** KEY FIGURES / COMMENTS ON THE FINANCIAL YEAR

#### **1.2.1.** Key business figures \_\_\_\_\_

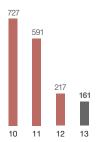
#### **1.2.1.1.** Business highlights (€ million)

#### Sales (€ million)



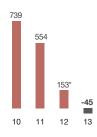
# Sales in 2013 were 8.3% down from 2012, to €3,162 million.

# Net cash generated by operating activities ( ${\ensuremath{\in}}\xspace$ million) Net operating cash flow



€161 million of net operating cash flows, compared with €217 million in 2012.

#### Current operating profit (loss) Current operating income



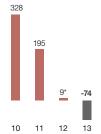
Current operating profit (loss) was lower, mainly due to the fall in nickel prices.

(\*) Restated for retroactive application of revised standard IAS 19.

#### Breakdown of sales by business segment in 2013

Sales by Division	2013	2012
Nickel	704	898
Manganese	1,562	1,560
Alloys	904	997
Holding co. and miscellaneous	(8)	(8)
TOTAL	3,162	3,447

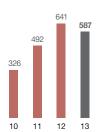
#### Profit (loss) for period, group share Net income, Group share (before impairment)



Net profit before impairment, impacted by development project costs, decreasing less than ROC due to positive tax impact.

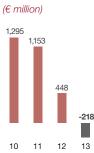
(\*) Restated for retroactive application of revised standard IAS 19.

#### Industrial capital expenditure Capital expenditure



Capital expenditure decreasing by more than 8%.

#### Consolidated net cash



The cash position was lower due to dividend payments and high capital-expenditure costs.

#### Geographic breakdown of sales in 2013

Sales breakdown by geographic area	2013	2012
Europe	1,418	1,598
North America	642	686
Asia	949	992
Other regions	153	171
TOTAL	3,162	3,447

1.2. KEY FIGURES / COMMENTS ON THE FINANCIAL YEAR

#### **1.2.1.2.** Summary of consolidated financial statements

(to IFRS, € million)	2013	2012 (1)
Sales	3,162	3,447
Current operating profit (loss)	(45)	153
Operating profit (loss) before impairment	(125)	80
Operating profit (loss)	(548)	79
Profit (loss) for period	(507)	43
Profit (loss) for the period, group share	(370)	9
Net cash generated by operating activities	161	217
Capital employed	2,992	2,979
Industrial capital expenditure	587	641
Average workforce	13,648	14,167

(1) Restated for retroactive application of revised standard IAS 19.

#### **Income statement**

#### Sales

ERAMET group sales fell 8.3% in 2013 from 2012, to  $\in$ 3,162 million. This decrease is mainly due to the activities of ERAMET Nickel, impacted by an average 15% fall in nickel prices.

#### Current operating profit (loss)

Group current operating loss came to  $\in$ 45 million, compared with a  $\in$ 153 million profit in 2012. This development is explained mainly by the fall in sales due to lower nickel prices, offset by firm results from manganese, particularly due to a rise in manganese ore production volumes, as well as to improved productivity and controlled overhead expenses in the Alloys Division.

The Group's productivity efforts achieved savings in 2013 of  ${\in}85$  million.

#### Operating profit (loss) before impairment

A loss of  $\in$ 125 million was returned, as against a profit of  $\in$ 80 million in 2012. This fall is explained mainly by the  $\in$ 198 million fall in current operating income, while other operating income and expenses (excluding impairment of assets) was slightly up from  $\in$ 73 million in 2012 to  $\in$ 80 million in 2013. These other items mainly include new-project development costs.

#### **Operating profit (loss)**

Operating loss of €548 million marked a significant fall from the €79 million profit in 2012. Operating profit in 2013 was impacted by a total expense of €423 million in impairment of assets: €337 million for the Weda Bay project in Indonesia, €53 million for the Manganese Division's recycling business in France and the United States, and €33 million for the Erasteel high-speed steel business.

#### Profit (loss) for period

The net loss for 2013 was  $\in$ 507 million compared with a net profit of  $\in$ 43 million in 2012, after the effect of:

- the €7 million net borrowing cost, being the net result of an average €860 million in cash invested at some 1.9% and average debt of €773 million bearing 4.7% interest;
- Other financial income and expenses, amounting to a loss of €25 million, of which €12 million in accretion expenses, €7 million of net interest on staff benefits and an expense of €4 million due to the measurement of financial instruments ineligible for hedging;
- a tax credit of €72 million, at an effective rate of 12% (46% before impairment of assets), compared with 40% in 2012 and 41% at 30 June 2013.

#### Net profit (loss), Group share

A net loss of €370 million was returned, compared with a profit of €9 million in 2012, after allowing for €137 million of non-controlling interests in the net result, of which €115 million consisted of the share of losses attributable to non-controlling interests following impairment of assets in the Weda Bay project in Indonesia.

#### **Consolidated balance sheet**

The Group consolidated balance sheet total at 31 December 2013 was €5,960 million compared with €6,309 million at 31 December 2012.

The  $\in$ 349 million decrease in this total chiefly results from the following:

On the assets side, a €262 million decrease in intangible assets mainly due to the impact of impairments during the year, the €199 million fall in current financial assets (bonds), and the fall in trade receivables and other current assets by €110 million, which is explained by the fall in activity partly offset by the increases in cash and cash equivalents by €121 million and in property, plant and equipment by €82 million.

On the liabilities side, the €799 million fall in equity capital mainly due to the net loss for 2013 and dividend payments in the Comilog and Le Nickel-SLN subsidiaries, the €76 million reduction in deferred tax relating to regulated provisions in Gabon, New Caledonia and France, and a €59 million reduction in trade payables and other current liabilities due to the lowered activity, partly offset by the €588 million increase in borrowings (bond issue, *Schuldschein*, commercial paper).

Contingent liabilities connected with disputes are detailed in Notes 20 and 36 to the consolidated financial statements.

The 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 the Notes to the consolidated financial statements numbers 1.27 – Risks, and 24 – Risk management and derivatives.

#### **1.2.2.** Financing<sup>(1)</sup>

The Group's net borrowings <sup>(2)</sup> stood at  $\in$ 218 million at 31 December 2013 compared with a net cash position <sup>(2)</sup> of  $\in$ 448 million at 31 December 2012. This decrease results from the following flows:

- €161 million in net operating cash flows (€217 million in 2012);
- €594 million in net investment cash outflows including a cash outflow of €587 million in industrial capital expenditure;
- €252 million of cash outflows from equity capital transactions, consisting of dividend payments (of which €34 million to ERAMET shareholders and €218 million to non-controlling shareholders of consolidated companies);
- a positive €19 million impact from currency fluctuations.

#### **1.2.3.** Financing and credit facilities \_\_\_\_

The ERAMET group is not currently rated by a financial rating agency.

The Group may, if necessary, draw on the following sources of finance, also detailed in the Notes to the consolidated financial statements (Part 6 of this document).

#### 1.2.4. Investments \_\_\_\_\_

#### 1.2.4.1. Goals

The ultimate aim is both to improve competitiveness and to grow the business of the three strategic Divisions (Nickel, Manganese and Alloys). The policy is based on product differentiation with a focus on markets with structural medium- to long-term growth.

#### **1.2.4.2.** Main capital expenditure

#### Total amount of capital expenditure

Capital expenditure on property, plant and equipment recognised at Group level came to €231 million in 2005, €309 million in 2006, €319 million in 2007, €419 million in 2008, €286 million in 2009, €326 million in 2010, €492 million in 2011, €641 million in 2012 and €587 million in 2013.

Each major project may be differently financed (particularly from own resources, bank borrowings and finance leasing). The Nickel Division programme was funded from own resources and, in part, by a tax exemption granted under the French Paul Act. Further information is given in Notes 6 and 7 to the consolidated financial statements.

Current capital expenditure is generally funded from own resources.

#### Breakdown of capital expenditure by Division and description of major projects

#### **ERAMET Nickel**

	2010	2011	2012	2013
Investments recognized	€124 million	€141 million	€146 million	€172 million

(1) Table of debt flows (Note 22.8.2 to the consolidated financial statements).

(2) Net cash (positive) or net financial debt (negative) comprises cash and cash equivalents and other financial assets less short and long-term borrowings.

#### Improving production equipment

The capital expenditure carried out in 2013 at all the industrial sites in the Nickel Division was stringently examined from the standpoint of productivity, safety, the environment, and renewal. In connection with this systematic search for performance, in a context of limitation on sums to invest, the largest investments given priority were the following:

- For Le Nickel-SLN, at mines, fixed plant (scalpers, screed, hoppers etc.) and renewal of productivity-improving plant.
- For Le Nickel-SLN, at Doniambo, equipment for improving productivity (ore grinder, heating-plant by-pass, etc.), environmental performance (electro-filter) and safety (fuel storage tank, etc.). Construction of a new coal workshop, authorised in 2013, was deferred until 2014 on account of the delays in obtaining the relevant building permit.
- At Sandouville, attention focused on improving industrial safety and working conditions and on productivity and renewal.
- At Eurotungstène, various investments were carried out to maintain and diversify the capital stock.

Expenditure in 2014 will seek the same broad aims as in 2013, with each investment project rigorously scrutinised in the light of the unfavourable economic climate.

#### Electricity generating station for Le Nickel

The option for a Powdered-Coal generating plant solution was confirmed by an external expert assessment commissioned by the French Government. The partnership to develop an EPC type of solution with an electrical-assets developer was intensified. Preparation has begun of the administrative, technical and financial paperwork. This renewal of the generating plant will return SLN's production costs to within the average for its main competitors.

#### Weda Bay project

2013 saw the finalising of the optimisation phase in the feasibility and final-development study of the hydro-and pyrometallurgy processes through pilot runs lasting several weeks. Applications for administrative authorisation were made in accordance with Indonesian regulations. The risks analysis has been completed. Negotiations continued with the Indonesian Government. In view of the worsening in 2013 on the nickel market and in short-term prospects for nickel prices, ERAMET, In agreement with its partners Mitsubishi Corp. and Pt Antam, took the view that the conditions for making an investment decision in 2014 on the Weda Bay project were not fulfilled.

#### **ERAMET Manganese**

	2010	2011	2012	2013
Investments recognized	€130 million	€245 million	€399 million	€346 million

In 2013, the Manganese Division kept its global capital expenditure controlled to respond to worsened market conditions, while safeguarding its strategic capital expenditures.

- metallurgy complex at Moanda (Gabon);
- New Guilin plant (China);
- 4-million-tonne capacity consolidation at Comilog (Gabon);
- renovation of the Setrag railway (Gabon).

#### The Metallurgy Complex project at Moanda

Work was slightly delayed on constructing the production unit and on its electrical supply. The commissioning has now been rescheduled from the initial early 2014 date to the summer of 2014.

The intervening period has been turned to account by providing further training for the future operators of the Complex, and by sharing technical experience with the Group's other production units.

#### New Guilin project

After starting up at a reasonable pace, the Guilin production unit was confronted with a severe worsening of the local market in its main products. The production unit's output has been redirected to produce only high-value-added refined products. Production of standard products has been halted. Output of refined products is now on-stream, and accounts for 100% of the Guilin plant's production.

#### Production-capacity consolidation at Comilog

Investment in consolidating production capacity focused on two main points:

- delivery of 50 ore-carrying wagons in mid-year;
- the purchase of six locomotives for delivery in 2015-2016 to replace old locomotives.

#### Renovation of the Setrag railway line

After purchasing six new main-line locomotives in previous years, Setrag has begun consultations for renewing its fleet of shunting locomotives.

A major plan has been launched for upgrading the wagon fleet, and the early deliveries of tanker and flat wagons were made in 2013. Implementation of the plan will continue in 2014, also extending to reconditioning the log-carrying wagon fleet.

Alongside this, major works continued at the railway stations, with the same aim of improving customer accommodation, and an ambitious programme was started up to renovate the railway-staff housing. A first stage of 32 homes was begun in 2013. Renovation of the track will continue at an annual pace of 30 km of rail and 65,000 sleepers. A machine for checking the railway track alignment was purchased and commissioned.

At the same time, tests were begun on the different technical options for repairing the main unstable stretches of railway track. They are designed to determine the method for carrying out the works, which are expected to begin in 2014 and end in 2015.

Besides the pursuit of these major projects, necessary investment was carried out for maintaining the production capacity of the alloy production units.

During 2013, highly extensive works were carried out on furnace 10 at Porsgrunn to improve its reliability.

Late in the year, major renovation works were conducted on furnace 12 at the Sauda plant, also to secure significantly-improved operating safety. These works will be completed in 2014.

#### **ERAMET Alloys**

	2010	2011	2012	2013
Investments recognized	€69 million	€100 million	€84 million	€64 million

During the financial year 2013, ERAMET Alloys significantly cut back its capital expenditure.

The cutbacks reflected the completion of investment in an integrated workshop for heat-treating bars at Aubert & Duval's Les Ancizes site, and in heat-treatment and finishing equipment at Erasteel's Champagnole and Commentry production sites, in line with the closure at end July 2013 of Aubert & Duval's Gennevilliers site.

Other expenditure related to the modernisation of the Aubert & Duval and Erasteel information systems, the purchase of a treatment furnace for titanium parts to cater for the acceleration in the new aerospace programmes, and expenditure on maintaining/ modernising the existing plant, particularly in the areas of heat treatment, machining and testing, mainly at the production sites closely tied to trends in aerospace markets.

# 1.2.5. Recent developments and outlook \_\_\_\_\_

# **1.2.5.1.** Information at the date of the Board of Directors Meeting on 20 February 2014

No other material events occurred up to the date of the Board meeting.

#### **1.2.5.2.** Outlook for 2014

The first half-year of 2014 will feature the start to two major projects:

 The production of ilmenite (an ore upstream in the titanium dioxide production chain) and zircon at Grande-Côte is significant for the Group in developing a new deposit other than nickel and manganese, and as the Group's first business base in Senegal. The Senegalese Government holds a 10% interest in the project, alongside TiZir, a 50/50 joint venture of ERAMET with the Australian group, Mineral Deposits Limited. From this project, costing USD650 million, along with the Norwegian Tyssedal production site, will emerge a powerful player with a presence in the titanium dioxide value chain, upstream of white pigment producers.

■ The Moanda Metallurgical Complex, consisting of two production sites adjoining the mining operation will produce silicomanganese and metallic manganese for the first time on Gabonese soil. Gabon will thus, through this project become the only African country apart from South Africa to have developed this type of processing for its manganese ore. Expenditure on this project totalled €228 million.

In view of the economic prospects, and of market conditions remaining at the start of 2014 much as they were in late 2013, the Group will be pursuing its efforts to boost competitiveness in each of its Divisions. The Group's target productivity-improving expenditure for 2014 will amount to some €110 million, following on from €85 million already expended in 2013.

In 2014, ERAMET will continue its drive to reduce working capital requirement, and will limit its capital expenditure to below €400 million.

Lastly, ERAMET intends to continue its strategy of diversifying its sources of finance. The Group's financial situation will remain very sound.

# **1.3.** HISTORY AND DEVELOPMENT OF THE COMPANY

The Company was incorporated in 1880 under the name Le Nickel, originally for the exploitation of nickel mines in New Caledonia.

Under the majority control of the Rothschild family since the end of the 19<sup>th</sup> century, in the late 1960s it became the parent company of all the Rothschild group's mining subsidiaries (Le Nickel-Peñarroya-Mokta group). Later milestones in the life of the Company and Group are as follows:

**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 Le Nickel changed its name to Imétal and held 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 shareholdings were reduced to 15% each.

**1985:** Société Métallurgique Le Nickel-SLN, which owns the mining assets located in New Caledonia, became a wholly-owned subsidiary of a new parent company called 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 into complementary business activities, with the goal of holding strong global positions in its main markets.

**1989-1991:** Acquisition of the French company La Commentryenne and the Swedish company Kloster Speedsteel, respectively the world's third-largest and largest producers of high-speed steels. The two companies were merged in 1992 into a new company called Erasteel, wholly owned by ERAMET-SLN, making it the sector's global leader with over 25% of market share.

**1991:** Long-term commercial and financial partnership with Nisshin Steel (a major Japanese stainless steel producer), resulting in the phased acquisition of a stake in Société Métallurgique Le Nickel-SLN. Nisshin Steel's interest reached its definitive 10% level at the end of October 1994.

**1992:** Société Métallurgique Le Nickel-SLN and ERAMET-SLN took on their current names of 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 30% of ERAMET's share capital becoming listed on the Paris Stock Exchange *Second Marché* through disposals by ERAP, Elf and Imétal.

**1994:** The BRGM group (*Bureau de Recherches Géologiques et Minières,* a French state-owned company) transferred ownership of its Cofremmi subsidiary, owning nickel ore reserves in New Caledonia, in return for the grant shares representing 2.34% of ERAMET's new share capital.

**1995:** Transfer of the ERAMET share listing to the Paris Stock Exchange *Premier Marché* (Monthly Settlement compartment).

**1995-1996:** ERAMET acquired a 46% stake in Comilog (Gabon), the world's second-largest producer of high-grade manganese ore and also a leading global producer of ferromanganese for the steel industry and manganese-based chemicals.

**1997:** Agreement with GenGabon (of the Gencor Group) whereby that company sold ERAMET a 15% interest in Comilog. ERAMET now held 61% of Comilog.

**1998:** Agreement to swap Poum/Koniambo mining rights in New Caledonia.

**1999:** Several major transactions were carried out, resulting in the current capital structure and the Group's current business configuration:

- The Group consolidated SIMA (Duval family), a leading global producer and transformer of high-performance special steels and nickel alloys.
- Disposal of a 30% interest in Le Nickel-SLN to ERAP in exchange for ERAMET shares; ERAP then transferred that interest to a New Caledonian publicly-owned entity, Société Territoriale Calédonienne de Participation Industrielle (STCPI). The French State transferred the remaining stake in ERAP to COGEMA, which was subsequently absorbed into the AREVA group.
- Acquisition of the manganese business of the Norwegian group Elkem, making ERAMET the world's foremost producer of manganese alloys, and broadening its product range with high value added refined alloys.

With the completion of these operations, the Group's businesses have become organised into three Divisions – Nickel, Manganese and Alloys – and the Group's share capital is mostly held by private shareholders, with the French state retaining a non-controlling interest.

**2000:** Acquisition of the Mexican company Sulfamex, producing manganese-based agrochemicals. Opening of the Moanda industrial complex in Gabon.

2001: Impairment of Special Metals Corporation.

**2002:** Acquisition of the Guilin manganese alloy plant (China).

Erasteel acquired a controlling interest (78%) in Peter Stubs (UK).

#### 2003:

- Closure of the ferromanganese site at Boulogne-sur-Mer and the manganese alloy site at Shaoxing (China) – Comilog sold Sadaci (molybdenum roasting) and the carbon black business, both based in Belgium.
- Acquisition of a 100% interest in the Trappes research centre (France) and a 100% interest in Eurotungstène.

2004: New Caledonia: commissioning of the new furnace.

Buyout of the AREVA group's minority interest in the Manganese Division.

Purchase from Comilog of an 80% interest in Comilog Asia, the company holding the Guilin and Guangxi joint ventures in China.

**2005:** Acquisition of a 100% interest in Bear Metallurgical (a subsidiary of Gulf Chemical and Metallurgical Corp.) in the United States.

In November 2005, Setrag was granted a 30-year concession to operate the *Transgabonais* railway.

**2006:** Aubert & Duval: opening of the tool steels distribution centre in Wuxi (China).

Acquisition of Weda Bay Nickel.

Manganese ore production reached 3 million tonnes.

Opening of the new closed die-forging plant in Pamiers, France (40,000-tonne press).

**2007:** Electrolytic manganese dioxide (EMD) plant in China: opening of the new plant at Chongzuo, in southern China.

Tiébaghi (New Caledonia): opening of the nickel ore beneficiation plant.

Erasteel in China: construction of a drawing plant in Tianjin.

July 2007: swap of ERAMET shares with SLN shares for STCPI as part of the SLN shareholders' agreement.

New Caledonia: opening of the Poum mine at end 2007.

**2008:** July: acquisition of a 58.93% controlling interest in the Norwegian group Tinfos (55.78% economic interest).

**2009:** February: Weda Bay project, partnership and agreement for the sale of 33.4% of Strand Minerals (Indonesia) to Mitsubishi Corporation.

March: Tinfos, a new agreement raising ERAMET's interest in Eralloys from 56% to 94.3% while reducing its interest in Notodden from 56% to 34% (Eralloys brings together the business lines of the former Tinfos excluding the Notodden electric power plant).

April: construction started on the Moanda metallurgy complex (Gabon). Aubert & Duval established a new titanium processing unit (UKAD) in Auvergne (France).

May: completion of the second phase in the acquisition of Eralloys (ex Tinfos – Norway).

June: ERAMET raised its stake in Eralloys to 100% after acquiring the non-controlling interests.

December: agreement for the sale of Nizi, an international trading business acquired in 2008 with Tinfos.

Agreement to acquire Valdi (France), engaged in the recycling of non-ferrous metals.

**2010:** February: ERAMET and Bolloré signed an agreement to explore lithium deposits.

October: agreement with the Gabonese Republic for a phased increase (until 2015) of its interest in the capital of Comilog.

**2011:** Commissioning of four strategic capital-expenditure projects by ERAMET Alloys.

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

**2012:** May: the Fonds Stratégique d'Investissement (FSI) acquired an interest in ERAMET's share capital through its acquisition of interests previously held by AREVA. Opening in July of the New Guilin manganese alloy plant in China.

**2013:** Appointment of a director nominated jointly by BPI and SORAME/CEIR, representing Gabon on ERAMET's Board of Directors.

A successful €400 million first issue of a 7-year bond.

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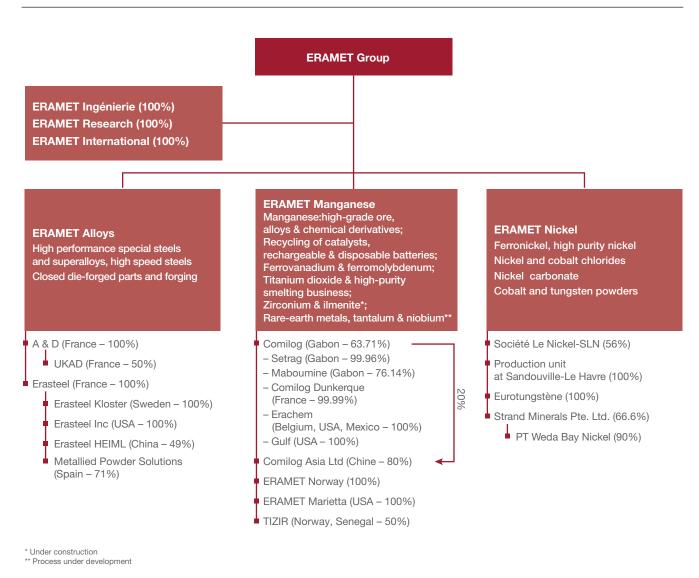
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# 2.1. GROUP STRUCTURE



# **2.2.** ERAMET NICKEL

#### 2.2.1. The nickel market \_\_\_\_\_

#### **2.2.1.1.** Nickel applications

#### Nickel properties

Nickel is a metal generally used in alloys with other products. Nickel's rich array of properties makes it a key material for modern living.

Nickel is an essential alloying element that, depending on the steel grade, can provide:

- resistance to atmospheric corrosion, when combined with chromium;
- resistance to high temperatures without losing its good mechanical properties;
- ductility (ease of conversion);
- mechanical strength;
- electrical resistance;
- magnetic properties.

Nickel can be electrochemically deposited in a thin layer, and is used in rechargeable batteries. Lastly, it possesses catalytic properties.

The symbol for nickel in the periodic table of the elements, "Ni", is a commonly-used abbreviation for this metal.

#### Uses of nickel

It is difficult to find substitutes for Nickel in most of its applications. World primary nickel consumption in 2013, estimated at close upon 1.8 million tonnes, broke down as follows:

Stainless steel:	67%
Nickel alloys:	12%
Electroplating:	8%
Casting and alloy steels:	7%
Other uses (including catalysis and rechargeable batteries):	6%

Sources: ERAMET estimates.

#### End uses of nickel

End uses of nickel are widely varied and essential to modern life.

#### Stainless steel

Stainless steel is by far the world's largest-consuming sector for nickel.

#### Food safety and hygiene

This is one of the major uses of stainless steel, which exhibits excellent hygienic properties, essential to safeguarding consumers. Stainless steel is often legally prescribed in developed countries, and is often found in household equipment and utensils (sinks, cutlery, saucepans, etc.), domestic appliances (washing machines, microwave ovens, catering kitchen ranges), food-industry and pharmaceutical-production tools or surgical equipment.

#### Basic industries

Chemicals, petrochemicals, paper, energy production.

#### Construction industry

Lifts, ramps, street furniture, water cisterns, building decoration and accessories. Stainless steel is used for its aesthetic qualities, its low maintenance costs and its durability.

#### Transport

Trains (bodywork and interior fittings), ships, tanker trucks, aerospace, automotive catalytic exhausts.

#### Nickel alloys

#### Superalloys

The growth of modern aviation (jet engines) was largely driven by the development of superalloys, which have high nickel content (over 45%) combined with other metals (particularly cobalt and chromium). Superalloys can ensure good mechanical performance at the increasingly high operating temperatures of jet engines. These superalloys are also used in gas turbines for energy generation and for some oil industry applications.

#### Nickel/iron alloys

The production and transportation of industrial gases and liquid natural gas at very low temperatures require the use of certain nickel/iron alloys. Other nickel/iron alloys are used in measuring equipment and semiconductors.

#### Corrosion-resistant nickel alloys

These alloys are used in the chemical industries and in environmental-protection plant (smoke and gas treatment, water treatment, etc.).

#### Electroplating (coating with pure metal)

Nickel provides a bright finish and resistance to atmospheric corrosion (taps, hardware, tubes, etc.).

#### Casting and alloy steels

Automotive industry and mechanical engineering.

#### **Rechargeable batteries**

Back-up batteries, telephones, laptop computers, electronic and hybrid automobiles.

#### Coinage

In many countries, coins are made from pure nickel (such as the French franc until the introduction of the euro) or using copper alloys containing nickel (one- and two-euro coins).

#### Others

Catalysis (petrochemicals, margarine production, dyes, etc.).

#### Nickel and sustainable development

Nickel is used in a great many environmental applications (gas and effluent treatment, etc.).

Besides its intrinsic properties, nickel imparts durability to the components containing it. Nickel is infinitely recyclable and its high economic value makes its collection and recycling worthwhile. The structure of the nickel recycling industry has been firmly established for many years. Products are usually collected for recycling (industrial scrap and products from the destruction of appliances and equipment) by small businesses that sell them on to the major companies in the nickel recycling industry. These firms blend the various alloys containing nickel (stainless steel, superalloys, alloy steels, etc.) in carefully defined proportions to make a new product that is suitable for use by their stainless steel producing customers. In 2013, recycled nickel accounted for approximately 38% of the nickel used in producing stainless steel worldwide.

#### 2.2.1.2. Nickel supply

#### The three types of nickel ore

Access to high-grade ore reserves (ore richness, chemical properties, deposit size) is a key factor in the nickel industry.

The three ore types have specific characteristics that determine the method of mining them and their production cost structure.

- sulphide ore;
- lateritic oxide ore (limonite);
- garnieritic oxide ore (saprolite).

#### Sulphide ore

Sulphide ore mines are generally underground. Geographically they are mainly located to the North (Canada, Siberia, etc.) or South (South Africa, Australia, etc.). In these ores, nickel is found with several other metals: copper, cobalt, gold, silver and often platinoids.

The ore can be concentrated physically, increasing its nickel content to roughly 10%-20%. The resulting concentrate goes through pyrometallurgical treatment in a furnace to obtain an intermediate product called matte. Complex chemical refining techniques are used to recover and make use of the various metals in the matte. The process usually ends with a reduction phase (production of powder and briquettes) or with electrolysis (sheet nickel). The carbonyl process (vapour metallurgy) is also used to produce metallic nickel (nickel carbonyl powders and pellets).

#### Oxide ores: laterites, from the upper mining levels

The mines are opencast. They are generally located in tropical zones (New Caledonia, Indonesia, Philippines, Cuba, and elsewhere). Nickel content is low, usually some 1%. The oxide ores contain cobalt and do not usually lend themselves to beneficiation. This ore is put through hydrometallurgical processes (dissolving in ammonia or sulphuric acid) to separate out the nickel and recover the cobalt.

#### Oxide ores: garnierites, from rate lower mining levels.

The mines are opencast, generally in tropical zones (New Caledonia, Indonesia, Philippines, Colombia, Dominican Republic and elsewhere). Garnierites are located under laterites. They have higher nickel grades (approx. 1.5-3%). They cannot be substantially beneficiated.

The ore is treated by pyrometallurgy (electric furnaces), which usually gives a finished product, ferronickel (used to make stainless steel) or, less frequently, an intermediate product, matte (nickel sulphate), which is refined to make metallic nickel.

#### Mining production in 2013, broken down by country

Mining production in 2013	Millions of tonnes of nickel content	% of production
Indonesia	680	28%
Philippines	335	14%
Russia	250	10%
Australia	245	10%
Canada	225	9%
New Caledonia	152	6%
China	95	4%
Brazil	80	3%
Cuba	65	3%
Colombia	55	2%
Others	215	9%
WORLD TOTAL	2,400	100%

Sources: INSG (International Nickel Study Group), ERAMET estimates.

#### 2.2.1.3. The main nickel-producing countries

In 2013, ERAMET was the world's seventh-largest producer of refined nickel (the finished product). The country breakdown for refined nickel production was as follows:

2013 (nickel content, thousands tonnes)	Metallurgical production	Finished products
China	618	33%
Russia	242	13%
Japan	177	9%
Australia	144	8%
Canada	140	7%
Norway	91	5%
Brazil	57	3%
New Caledonia	55	3%
Colombia	49	3%
Finland	45	2%
United Kingdom	41	2%
South Africa	33	2%
Others	187	10%
WORLD TOTAL	1,880	100%

Sources: INSG (International Nickel Study Group), Producers, ERAMET estimates.

#### 2.2.1.4. State of the nickel market

In 2013, stainless steel production reached a new production record of an estimated 37.8 Mt, 7% up from 35.3 Mt in 2012. With almost 18 million tonnes, China remained the principal driver of stainless steel production growth. By contrast, production outside China is estimated to be slightly contracting (1% down in 2013 following on from a similar decline in 2012).

Primary nickel demand in 2013 rose 5.5% in stainless steel (up 61,000 tonnes) and 4% in non-stainless-steel sectors (rising 22,000 tonnes), particularly through robust demand in alloys and a market rebound in electroplating, after a marked slowdown in 2012. In all, actual world demand for primary nickel grew +5%, with total consumption of over 1.76 million tonnes.

In parallel, nickel supply continued its strong expansion, being estimated at 1.91 million tonnes, growing 8% in 2013 (an additional 145,000 tonnes).

The new projects, of which production remained limited in 2011-2012, made a bolder contribution of 72,000 tonnes to the increase in supply (up 36,000 tonnes). The chief contributor to the increase in supply remained Chinese nickel pig iron (NPI), with production estimated at 455,000 tonnes (up 102,000 tonnes from 2012). This increase is due to the development of RKEF producers (Rotary Kiln Electric Furnace, in which an electric furnace is preceded by calcining in a rotary kiln, a technology equivalent to the one used by conventional ferronickel producers) which accounted for 52% of NPI in 2013 compared with 38% in 2012. Buoyed by the abundance of low-cost Indonesian nickel ore, NPI managed to remain competitive and continued its growth during the year.

Primary nickel production, growing faster than demand, generated a market surplus estimated at 149,000 tonnes in 2013. This market situation, which follows two years of surplus (surpluses of 20,000 tonnes in 2011 and 82,000 tonnes in 2012) heavily depressed prices and contributed to the creation of surplus stocks on LME and at nickel producers.

#### 2.2.1.5. Nickel prices

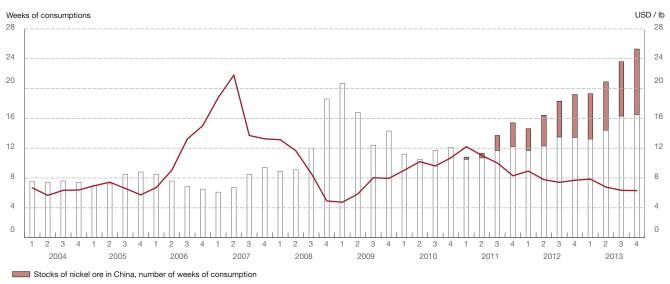
Until 1979, nickel prices were set by the main nickel producers. Since 1979, nickel has been listed on the London Metal Exchange (LME), where market operators can trade futures and carry out hedging transactions. Every trade on the LME can in theory be settled by physical delivery of metal. In practice, however, only a small fraction of trading results in physical delivery. Sizeable volumes are also traded over-the-counter between financial institutions.

In January 2007, ERAMET became an Associate Trade Member (Category 5) of the London Metal Exchange.

In the medium term, LME prices will react to the nickel market fundamentals, namely the balance between supply and demand. In the short term, however, the macroeconomic situation and the positioning of the financial actors are liable to amplify some upward or downward adjustments. The chart below illustrates historical changes in nickel prices (in USD/lb at current parity): the strong price rise over the last ten years reflects, in addition to strong demand, very sizeable changes in the quality of deposits and in the production-cost and capital-expenditure factors.

As the consequence of a market in heavy surplus, nickel prices entered a downtrend in 2013 (slumping -14% compared with the 2012 average), and reaching a critical level: an average USD6.81/ Ib for the year (USD15,003/tonne) and an average USD6.31/Ib for the second half of 2013 (USD13,913/tonne).

In 2013, LME stocks rose to over 261,000 tonnes (120,000 tonnes more than the previous year).



Stocks of nickel ore (at LME and nickel producers), number of weeks of consumption

<sup>-----</sup> Average LME price, USD/lb

# 2.2.2. Overview of ERAMET Nickel Division \_\_\_\_\_

#### **2.2.2.1.** Key points

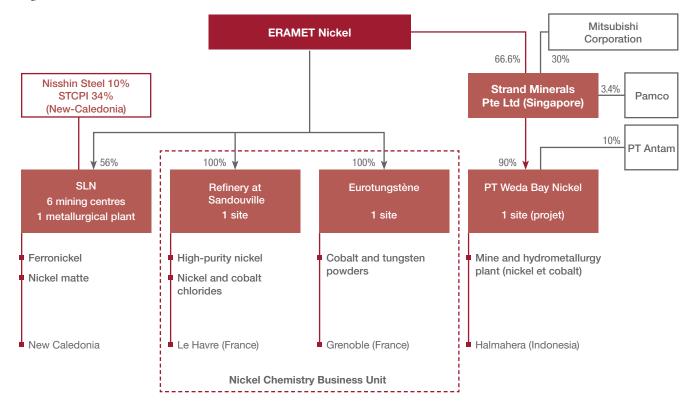
ERAMET has a strong and very long-standing presence in New Caledonia (since 1880).

- ERAMET is the world's seventh largest nickel producer, with production increasing steadily in recent years to reach 56,000 tonnes in 2012 (slightly down in 2013).
- ERAMET operates high-quality mines from the standpoint of both grade and reserves. Operating conditions have evolved in recent years (recovery, humidity content, etc.) and the Group has adapted its metallurgical technology thanks to its research centre to keep pace with these changes while continuing to grow production.
- All ERAMET's metallurgical production uses ore from its own mines.
- ERAMET is the world's second largest ferronickel producer, for the stainless steel market.
- The Group has made extensive investments in New Caledonia to renew a major proportion of the plant and equipment of Le Nickel-SLN (SLN) and to increase its production capacity in order to offset the effects of certain technical changes in its deposits.

#### **2.2.2.2.** Organisational structure

#### Organisational structure as at 31 December 2013

- Production has risen steadily, to over 56,000 tonnes in 2012, although with a dip in 2013 to 53,000 tonnes due to technical incidents, labour-relations conflicts and in line with market trends.
- ERAMET is examining the development of the Weda Bay project at Halmahera in Indonesia, with its partners, Mitsubishi and Antam. This hydrometallurgy project, based on Group proprietary technology, is at a very advanced study stage, but in early 2014, the decision was postponed by the partners owing to the market environment, the resulting financing conditions and negotiations in progress with the Indonesian Government.
- ERAMET/SLN is examining the possibility of developing New-Caledonian oxide ore using the process developed by the ERAMET group for Weda Bay. For this purpose, a statement of intent was signed with Vale and the Southern Province for the joint exploration of the Prony and Creek Pernod nickel-oxide deposits, paving the way for local development of this resource, which could be of world class.



ERAMET Nickel, the Group's Nickel Division, is now split into four companies: Le Nickel-SLN, ERAMET (Sandouville), Eurotungstène and Weda Bay Minerals Inc.

#### Le Nickel-SLN

Le Nickel-SLN, founded in 1880, has been mining nickel deposits in New Caledonia continuously for over 120 years. It now operates mines and a metallurgical plant in New Caledonia.

#### Weda Bay Minerals Inc.

On 2 May 2006, ERAMET acquired Weda Bay Minerals Inc., listed on the Toronto stock exchange and owner of the world class Weda Bay nickel deposit at Halmahera in Indonesia. This deposit is 10% co-owned by the Indonesian company Pt Antam. ERAMET has undertaken studies for building a mine and a plant using the hydrometallurgical process developed by the Group at its research centre. In February 2009, ERAMET sold to the Mitsubishi Corporation 33.4% of Strand Minerals (Indonesia) Pte Ltd, which owns 90% of Pt Weda Bay Nickel, with the remaining 10% owned by Pt Antam, an Indonesian company. In December 2011, Mitsubishi Corporation decided to sell a 3.4% interest in Strand Minerals (Indonesia) Pte Ltd to the Japanese company, Pacific Metals Co. Ltd (Pamco).

In view of the worsening of the nickel market in 2013 and the short-term nickel-price prospects, ERAMET, in agreement with its partners Mitsubishi Corp. and Pt Antam, viewed conditions as unfavourable to an investment decision in 2014 concerning the Weda Bay project.

- The very depressed nickel prices precluded satisfactory financing of the project. Exchanges are continuing with the Indonesian Government, with the aim of clarifying certain points in the regulatory and tax framework which would apply to this project.
- This postponement of the project led to the ERAMET group recognising at 31 December 2013 €224 million in impairment (as ERAMET's share) of investment in assets for the Weda Bay project.
- The postponement decision in no way reflects on either the project's quality, grounded in one of the most sizeable worldclass nickel deposits, or the performance of the hydrometallurgy process successfully developed by the ERAMET teams to work this type of deposit.

#### ERAMET

ERAMET owns and operates a nickel refinery at Sandouville, in mainland France, and markets all the Nickel Division's products except for ore sales, which are managed by Le Nickel-SLN. In addition, ERAMET provides technical support for Le Nickel-SLN in several areas, particularly its purchasing management, research, engineering, legal and financial needs.

ERAMET is thus both the majority shareholder and the industrial and commercial operator of Société Le Nickel-SLN.

Le Nickel-SLN sells all the metallurgical production from Doniambo to ERAMET. The sale price of the ferronickel sold to ERAMET depends on the average price at which ERAMET sells to its customers, minus marketing costs and a sales margin for ERAMET. The sale price of matte depends on ERAMET's average selling price to its customers for the Sandouville products after deducting marketing costs and refining expenses.

#### Eurotungstène

Eurotungstène Poudres is specialised in the production of extrafine cobalt powders and tungsten powders. These powders are used, among others, to make hardened carbides for machining metal and for diamond tools used to cut stones and building materials.

The research conducted by the company over a number of years has led to the development of new product lines (Next® and Keen® polymetal powder ranges). These new products, in which cobalt is partly replaced by cheaper metals, have specific properties that drive their strong growth at the expense of conventional cobalt binders.

Eurotungstène can source its cobalt from cobalt chloride supplied by ERAMET's Sandouville plant.

#### Mines and industrial facilities

The Group is an integrated nickel producer, from mining through to a marketable product.

#### **Nickel mines**

The Nickel Division mines located in New Caledonia benefit from:

- sizeable tonnages of saprolite resources for pyrometallurgy;
- high nickel contents of some 2.45-2.5%, with cut-off grades of 1.7 to 2.0% Ni;
- reserves currently representing some 15 years' production with two beneficiation plants (recoverable resources represent a much longer mining lifespan estimated at approximately fifteen additional years as of today). The Group has also developed its own process for beneficiating New Caledonian oxide ores. This technology was first implemented at the Népoui beneficiation plant and then adapted to maximise the value of the Tiébaghi deposit;
- in-depth knowledge of the geology and mining methods developed by Le Nickel-SLN; and
- environmentally friendly mining techniques.

#### Operation of nickel mines

Le Nickel-SLN's oxide ore deposits (garnierite) are mined opencast. They are generally located at altitudes of 500-1,000 metres. Le Nickel-SLN currently has six working mines. Five are directly operated by the company:

- Thio, operated since 1875;
- Kouaoua, operated since 1960 and re-opened in 1977;
- Népoui Kopéto, operated from 1970 to 1982, reopened in 1994;
- Tiébaghi, operated since 1997; and
- Poum: this mine opened at end 2007.

The sixth mine, *Étoile du Nord*, has been operated since 1988 by a subcontractor, Société Minière Georges Montagnat.

Le Nickel-SLN has extensive experience in mining deposits in New Caledonia. Deposits are identified by geological, geochemical and geophysical surveys and their geological structures are modelled. Extraction is based on the mine's geology and carried out by hydraulic shovels. The ore is transported by trucks with payloads of 50 to 100 tonnes, depending on the model.

The mine's output is mostly sent to the Doniambo plant. The output is carried from the mine to the coast either by truck, or at Kouaoua by an 11-kilometre conveyor, or at Népoui or Tiébaghi in the form of slurry. At the port, the ore is stored and standardised before it is loaded aboard ships for transfer to the Doniambo plant.

Mining techniques factor in environmental needs, with tailings stored in stabilised heaps, control of water run-off and revegetation/ restoration.

Société Le Nickel-SLN's total mining output for the past three years was as follows:

Removal rate kt/h	2010	2011	2012	2013
SLN mining-centres saprolites	2,519	2,442	2,451	2,586
Tributer-mined saprolites	736	632	757	739

#### Népoui and Tiébaghi beneficiation plants

At Népoui, ore is sent hydraulically through a seven-kilometre pipeline to the beneficiation plant. The plant was opened in 1994 and uses innovative technology based on sorting by particle size and density to increase ore content. This allows exploitation of a larger proportion of the deposit (including lower-grade ores), thus extending the lifespan of the reserves. This process has been adapted to process the ore from the Tiébaghi mine, where the new Tiébaghi beneficiation plant was opened in November 2008.

#### Doniambo metallurgical plant

The Doniambo plant produces directly marketable ferronickel (approx. 80% of its output) and nickel matte (20% of output), which is used in its entirety by the Sandouville plant. The proportion varies according to the market trend in each product.

The ore received from mines is standardised and then dried. It is then calcined in five rotary furnaces after adding a reducing agent. In the ensuing stage, the ore is melted in three Demag electric furnaces. The output is then converted, either into marketable ferronickel (SLN 25) by ladle refining and then granulating, or into nickel matte by the addition of sulphur and refining in a Bessemer furnace.

The Doniambo plant is one of the world's two largest ferronickel production units and sustained capital expenditure has driven the steady improvement in the technology and equipment used there. Its close proximity to the port at Nouméa also makes the plant directly accessible for cargo ships and ore carriers.

A major modernisation programme is in progress for the production equipment at Doniambo. In all, four out of the five rotary calcining furnaces, and two of the three electric furnaces were renewed in recent years. Moreover, ore-drying installations have been updated. Sizeable investments have also been made for the environment.

#### Metallurgical production (ferronickel and matte) at the Doniambo plant (tonnes of nickel content)

1994	50,129
1995	52,343
1996	53,413
1997	54,892
1998	56,502
1999	56,642
2000	57,463
2001	58,973
2002	59,867
2003	61,523
2004	55,180
2005	59,576
2006	62,383
2007	59,796
2008	51,131
2009	52,131
2010	53,719
2011	54,360
2012	56,447
2013	53,015

#### Sandouville refinery

The Sandouville-Le Havre refinery uses a high-performance hydrometallurgical process that was specially developed by ERAMET's research teams. The 70% nickel matte used is completely sourced from Le Nickel-SLN's metallurgical plant in Doniambo, New Caledonia.

The matte is crushed and then corroded by an iron chloride solution in the presence of chlorine. Several successive extraction stages in mixer-settlers separate out the iron and cobalt as the iron and cobalt chlorides. The various remaining impurities are then removed. The resulting nickel chloride is mostly processed by electrolysis in several stages. The very pure nickel cathode obtained is usually cut up and put into drums. The Sandouville refinery has undertaken a policy of making high-value-added products for various applications such as electronics and chemicals.

The refinery makes high-purity nickel (over 99.97% nickel content) in metal form (sheet nickel), as well as nickel chloride, nickel carbonate, cobalt chloride and iron chloride.

#### **ERAMET** Nickel marketing policy and products

The Group has a global sales network, ERAMET International, that markets most of its nickel. The ore is sold directly by Le Nickel-SLN.

The Nickel Division's sales strategy is based on a range of high value-added products that have been developed specifically to meet the technical needs of their users. The Group has leading global positions in its main products.

The Group provides its customers with significant technical and sales support to help them derive maximum benefit from its products in their own production processes. ERAMET maintains long-term partnerships with its customers. Ferronickel sales are usually covered by multi-year contracts with specific tonnage commitments.

Selling prices are determined by reference to LME nickel prices, to which significant premiums are added to reflect the value in use of these products. Premiums are reviewed annually or quarterly.

#### Ore

Ore is mainly sold to ferronickel producers in Japan and to the Yabulu plant in Australia.

#### Ferronickel

The Group's entire ferronickel production is sold to stainless steel producers. Ferronickel is an alloy of nickel (23-30%) and iron. SLN 25 ferronickel provides stainless steel producers not only with nickel, but also with top quality iron. Steelmakers can use ferronickel in shot form in a converter to achieve substantial productivity gains.

Most of the major stainless-steel producers are customers of the Group. The Group has entered into medium or long-term contracts with some of those customers that provide for volume commitments subject to periodic price reviews. These contracts guarantee ERAMET relatively regular shipments. They account for the bulk of the Group's ferronickel shipments.

#### Pure nickel and related products: one of just three highpurity nickel producers worldwide

- Metallic nickel (HP Nickel): nickel cathodes are mainly sold to nickel alloy manufacturers (superalloys for aerospace and nuclear power and alloys produced to constraints that improve resistance to corrosion, expansion, pressure etc.), as well as nickel electroplating workshops;
- Nickel chloride (SELNIC): ERAMET is the world's leading producer of nickel chloride, a product used in electroplating and in the chemicals industry (catalysts);
- Nickel carbonate (Nickel ONE): NiCO<sub>3</sub> is mainly used in the refining sector to make catalysts and in the ceramic industry as a pigment.
- Cobalt chloride: used in the tyre industry and in the chemicals industry (catalysts) and by ERAMET's Eurotungstène subsidiary.

#### ERAMET Nickel's research and development policy

The Nickel Division's research and development policy has brought about major developments over the past 30 years. The Group has extensive research facilities with ERAMET Research, based in Trappes (France).

R&D work has led to the following developments:

- the hydrometallurgical process at the Sandouville plant in 1976;
- ferronickel shot in 1978;
- ore beneficiation processes for the Népoui (1991) and Tiébaghi (2008) plants; and
- mining geology techniques.

Furthermore, the process improvements obtained through research and development have promoted a steady expansion in the capacity of the three Demag furnaces.

At the same time, the Group established its own hydrometallurgical process for laterites. This could be applied industrially in the Weda Bay deposit and could also be rolled out to other deposits over time, particularly in New Caledonia for working the Prony/ Creek Pernod deposits.

#### ERAMET Nickel's return on capital employed

ROCE: Current operating profit (loss) restated for provisions or reversals on fair-value tests / Capital employed at 31 December of year y-1 (Consolidated equity capital for the Division, plus net financial borrowing, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets, and excluding the Weda Bay investment).

#### Nickel ROCE (before tax)

%	2009 (1)	2010 (1)	<b>2011</b> <sup>(1)</sup>	2012 <sup>(2)</sup>	2013
Nickel	(7)	26	24	(5.3)	(69.8)
(1) Not rootated following the application of rovinad standard IAC 10					

(1) Not restated following the application of revised standard IAS 19.

(2) Restated for retroactive application of revised standard IAS 19.

# 2.3. ERAMET MANGANESE

#### **2.3.1.** The manganese market \_

#### 2.3.1.1. Manganese demand

#### Main applications

#### Steel

Over 90% of manganese worldwide is used in steel production. All steelmakers use manganese in their production processes; on average, 6-7 kg of manganese is used per tonne of steel. However, some 9 to 10 kg of manganese content in ore needs to be extracted per tonne of steel. Manganese represents a very small portion of the cost of steelmaking.

Manganese is mainly used in steel as an alloying element to improve hardness, abrasion resistance, elasticity and surface condition when rolled. It is also used for deoxidation/desulphurisation in the manufacturing process. It is consumed in the form of manganese alloys (ferromanganese and silicomanganese).

#### Other applications

- Rechargeable and disposable batteries: mainly alkaline disposable batteries. A smaller percentage continues to be used in saline disposable batteries, which are less efficient. 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).

#### Historical consumption trends, outlook

Manganese demand is primarily influenced by trends in global carbon steel production.

The years from 1998 to 2008 saw firm average growth in world carbon steel consumption. This is due to the end of the downturn in steel consumption by the former soviet bloc, the slight upturn in demand in traditional regions and, above all, accelerating demand in emerging countries, with increasingly significant demand from China.

From 2002 to 2008, global demand even grew by over 7% annually, mainly driven by growth in Chinese demand of almost 14% per annum.

The 2008 economic crisis sharply impacted effective steel consumption; widespread and deep stock cutbacks at steel consumers and producers amplified the effects of the crisis. The developed countries were particularly hard-hit, producing, in 2009, 60-70% of the 2008 output, whereas in the second quarter 2009, India and China returned to their pre-crisis production levels.

In the years 2010-2012, steel production in developed countries made little progress owing to the debt reduction measures in these regions, where steel demand remained virtually constant, at levels consistently below those of 2008. On the other hand, steel consumption in the emerging countries grew at a firmer pace while remaining affected by Government credit-reduction measures designed to control inflation, as in China.

For 2013, China was the mainspring of world steel production growth. Thanks to buoyant demand, Chinese steel production held firm throughout the year, totalling 779 million tonnes. In contrast to 2012, which featured de-stocking and hence steel production growth (increasing 3%) slower than consumption, 2013 by contrast was marked by strong growth in steel production (increasing 7.5% from 2012), partly due to re-stocking.

World steel production in 2013 amounted to 1,604 million tonnes of carbon steel, 3.4% up from 2012. Among the developed countries, only Japan with its "Abenomics" monetary and financial measures saw its steel production increase (by 3.1%), whereas declines were registered in Europe (by 1.8%) and the United States (losing 2%), after high figures due to restocking in the United States in 2012.

The emerging countries also returned fairly disappointing steel production figures, with declines from 2012 for Brazil (of 0.9%), Turkey (of 3.3%) and Russia (of 1.4%). Only India's steel production showed growth, of 5.2%, but this fell short of forecasts. These difficulties in emerging countries are explained by the worsening

economic difficulties specifically affecting those countries from mid-2013 onwards: trade-balance deficit, high interest rates, devalued currency, the change in the Fed's monetary policy, etc.

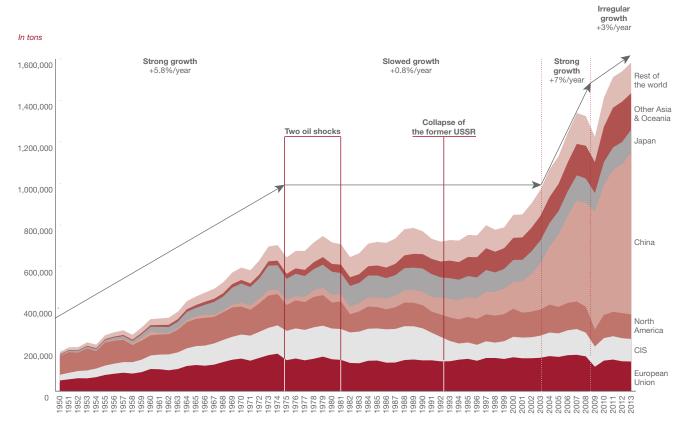
Beyond the crisis, medium- and long-term prospects are favourable, since growth in world demand will continue to be driven by the development of emerging countries, whose potential remains considerable. In particular, the urbanisation of world populations is a significant underlying trend: every year, some 20 million persons in China and India, and 60 million worldwide are urbanising. As it happens, construction the council more than half the world consumption of steel. Needs relating to infrastructure and industrialisation are steadily being supplemented by needs for durable consumer goods such as cars.

#### Global carbon steel production by geographic area

(million tonnes)	2011	%	2012	%	2013	%
Europe	181.4	12.0%	170.3	11.0%	167.5	10.4%
Former USSR	112.4	7.4%	110.8	7.1%	108.7	6.8%
NAFTA (Canada/USA/Mexico)	117.5	7.8%	120.4	7.8%	117.8	7.3%
Japan	107.7	7.1%	107.3	6.9%	110.5	6.9%
China	694.0	45.2%	724.7	46.7%	779.0	48.6%
India	72.3	4.8%	77.2	5.0%	81.2	5.1%
Other Asia & Oceania	116.6	7.7%	117.5	7.6%	116.6	7.3%
Others	117.0	7.8%	122.1	7.9%	123.3	7.7%
TOTAL	1,512.1	100%	1,550.3	100%	1,604.4	100%

Source: WSA, ERAMET estimates.

#### Carbon steel production by geographic zone



Source: WSA, ERAMET.

#### 2.3.1.2. Manganese supply

#### Manganese ore

The supply of manganese ore is made up of two types of ore, of differing quality. As with iron ore, a distinction is made between high-grade manganese ore with 35 to 48% content, for which shipment is affordable, and low-grade ore which is consumed locally. Although both types of ore are used in combination by alloy producers, the use value of the high-grade ore is very much higher than lower-grade ores. Hence, the manganese ore price is strongly influenced by availability of high grade ore and trends in its consumption.

Global ore production in 2013 was estimated to be 15 million tonnes of manganese content. Ore production is mainly from eight countries: South Africa, Australia, China, Gabon, Brazil, Ukraine, India and Ghana. The production of high-grade ore is concentrated in Australia, Gabon, South Africa and Brazil.

#### Manganese ore production in 2013

(manganese content, in thousands of tonnes)

Others <sup>(1)</sup>	765 <b>15,002</b>
Georgia (1)	53
Mexico (1)	189
Ghana (1)	521
Ukraine (1)	448
Kazakhstan (1)	351
India (1)	750
Gabon	1,633
Brazil	916
South Africa	4,434
Australia	3,237
China (1)	1,705

(1) Low grade ore. Sources: International Manganese Institute and ERAMET estimates.

The main manganese ore producers are BHP Billiton, Comilog (ERAMET), Assmang and Vale.

#### Manganese alloys

Manganese alloys are produced by reducing manganese ore at temperatures of approximately 1,600 °C. This process is carried out by adding coke to one of two types of furnace:

- Electric furnaces: the most widely used process in the world today. Producers' relative competitiveness largely depends on the availability and cost of their electricity supply;
- Blast furnaces: the producers using this process are mainly based in China, due to the local availability of coke. Outside China, blast furnaces are exclusively located in Japan and Eastern Europe.

There are four product families:

- High carbon ferromanganese (HC FeMn): containing 65-79% manganese and 6-8% carbon. HC FeMn can be produced by two types of process, electric furnaces or blast furnaces;
- Silicomanganese (SiMn): containing 60 to 77% of manganese. It can only be produced by electric furnace, using ore with the possible addition of FeMn slag;
- Refined ferromanganese (MC FeMn, etc.): this higher valueadded product contains less carbon. It is mainly produced by transferring molten HC FeMn alloy to an oxygen converter, which reduces the carbon content to the desired level. A distinction is made between medium carbon ferromanganese (1.5% carbon) and low-carbon ferromanganese (0.5% carbon). These products are used above all to make flat steel products and special steels.
- Low-carbon silicomanganese (LC SiMn): with the acquisition of Tinfos, ERAMET Comilog Manganèse has strengthened its presence in the refined manganese alloy market, in particular low-carbon silicomanganese. Tinfos has developed unique expertise in this alloy, which is intended mainly for the production of stainless steel, one of the ERAMET group's main markets.

## ERAMET Manganese is the world's leading producer of refined alloys.

# Breakdown of global manganese alloy production in 2013

Silicomanganese	64%
High carbon ferromanganese	25%
Refined ferromanganese and refined silicomanganese	11%

Sources: ERAMET estimates.

#### Global manganese alloy production in 2013

(alloys, thousands of tonnes)

Europe	1,042
CIS	1,342
North America	174
China	9,705
Other Asia and Oceania	3,737
Others	1,519
WORLD TOTAL	17,519

Sources: ERAMET estimates.

The manganese alloy industry is highly fragmented. There are no significant technological barriers for high carbon ferromanganese and silicomanganese, which are standard products.

However, between the trend in the ore supply, with lower manganese contents, and the trend towards demand for highquality steel, the market is increasingly differentiating between alloys of the same type but of varying quality.

Among the standard alloys, silicomanganese has grown the fastest, driven by the fact both that it can be produced mainly using low-grade ore available in China, India and Ukraine, and that it is suited to the production of long steel items which are benefiting from those countries' growth in construction.

The supply of manganese alloys depends on the availability of manganese ore. After a long period of overcapacity in the 1980s and 1990s, accelerated demand from steelmakers during the 2000s, combined with lower ore supply elasticity, caused short bursts of high market tension in manganese alloys. In 2012 and 2013, the sizeable ore supply generated a surplus supply of alloys having regard to the level of demand. The refined manganese alloys market is a specialist-products market. Refined alloys represent 11% of alloy production. This market is basically geared to the production of flat-steel products for markets such the automotive industry and shipbuilding.

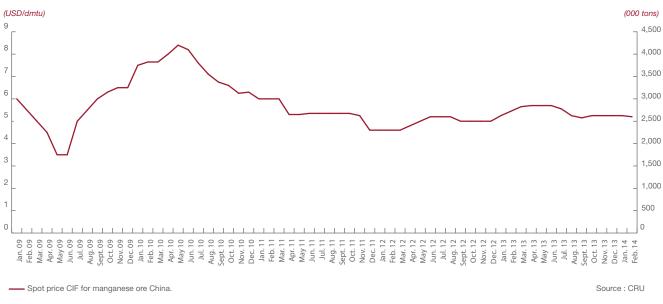
The producers are scattered among a large number of countries, even though China accounts for approximately half of world production. The competitiveness of Chinese alloys and of metallic manganese, which is a substitute for refined alloys, fell sharply in early 2008 as a result of the Chinese Government's decision to impose a 20% export duty on metallic manganese and alloys. This depressed the Chinese supply of manganese alloys for export and accentuated alloy production overcapacity in China. Outside China, the reduction in Chinese supply was offset in 2010 by a significant increase in the supply of alloys from India, particularly silicomanganese. However, since January 2013, the Chinese Government has decided to withdraw the export tax on the manganese metal, while maintaining that tax on manganese alloys.

#### **2.3.1.3.** Manganese prices

#### Manganese ore

The selling price of manganese ore, as with alloys, is negotiated directly between buyers and sellers. Prices are typically quoted in USD/dmtu (dry metric tonne unit). A dmtu corresponds to 10 kg

of manganese content. The price of a dmtu is higher for rich ores and also depends on granularity and the presence or absence of impurities.



Source: CRU.

Spot price CIF for 44% manganese ore imported to China.

Whereas previously, the high-grade ore price was set for one year, the validity term of contract prices has shortened since 2009, increasing the volatility of manganese ore prices. This trend further accelerated in 2010, with prices moving from quarterly to monthly quotation.

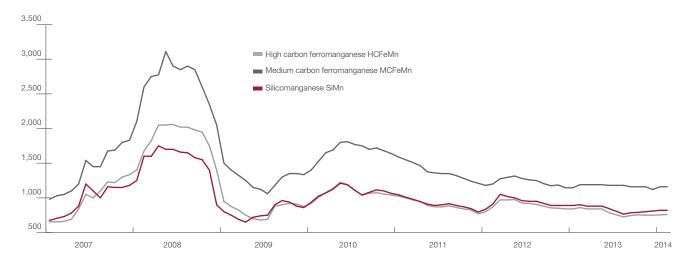
#### Manganese alloys

There is no futures market for manganese alloys. Prices are negotiated directly between producers and customers. For programmed sales, alloy prices are often negotiated on a quarterly basis. Non-scheduled sales are negotiated on the basis of spot prices.

The manganese market is above all global and highly competitive. However, prices can sometimes vary between geographic areas (Europe, North America and Asia) because of movements in currency rates or economic cycles out of step with each other. These differences are usually only temporary. Structural differences among the various alloy groups also exist because of their relative values in use. In particular, refined alloys have higher selling prices than standard alloys.

Outside Europe, manganese alloy prices are mostly denominated in US dollars. In Europe, they are mainly negotiated in Euros. Prices are determined per gross tonne of alloy and not on manganese content. However, product quality, particularly manganese content, is taken into account when negotiating.

There are several specialised publications for the metals market that track manganese price trends through monthly spot price surveys. The graph below is based on data published in the CRU (London).



#### Manganese alloy prices in Europe (euros per gross tonne of alloy: €/t)

Source: CRU.

Manganese alloy prices are historically less volatile than those of LME-listed metals.

#### **2.3.1.4.** Recent market conditions

After many years of slow growth, world carbon steel production, driven by China, accelerated from 2000 to 2007, at an annual average growth rate of approximately 7%.

This resulted in considerable demand for manganese that fed through into an initial manganese price peak in 2004 for both alloys and ore.

The response on the supply side was swift and since 2005 prices have fallen back to their historical average.

Global carbon steel production increased by 9.1% in 2006 and 7.3% in 2007, resulting in an upturn in prices that rose to record levels in 2008.

Manganese ore supply is faced with certain logistical bottlenecks on the railways and at the ports of certain large producer countries like South Africa. At the same time, few major investment projects have been announced to meet the rapid growth in demand, and most projects are concentrated in South Africa.

Apart from logistical constraints and the cost of the ore itself, manganese alloy production is being affected by higher energy bills such as for electricity and coke, which are driving prices upwards. In addition, in China where most new capacity has been built in recent years, a new policy has been introduced designed to limit exports of a number of metallurgical products, including manganese alloys. This policy has been implemented through successive export duty increases.

The ore market is chiefly driven by ore consumption trends in China and hence, by Chinese steel production trends. Accordingly, ore demand recovered from late 2009 onwards. This sharp upturn in Chinese ore demand was accentuated by the expansion of demand in India, causing ore prices to rise, reaching a peak in May 2010, before turning down again. Since 2011, manganese ore prices have remained relatively stable, around USD 5/dmtu, higher than before 2006, but exhibiting volatility owing to the heavy dependence on China.

2013 featured the emergence of two new South African projects and the increasing significance of an existing player, all of which injected just short of 2 million gross tonnes of additional ore (averaging 37% manganese content) into the market in 2013, equivalent to some 5% of ore demand excluding local ore supplies. Helped by a favourable foreign-exchange situation due to a weak rand and allowing multiple logistical solutions, South African ore exports reached record levels of 2,200 kt in Q1, 2,300 kt in Q2 and 2,600 kt in Q3 of 2013. New ore producers in South Africa strove to win market shares in the first part of 2013 by aggressive price cutting.

The rich oxide ore price increased some 11% between January and April 2013 before falling some 13% until the end of August 2013 under the pressure of South African supply. Since September, oxide ore has held steady within a price range of between USD5.1 and USD5.3/dmtu.

As regards alloys, the market is suffering from poor visibility due to the difficulties encountered by the mature economies starting in mid-2011: slack growth, the Euro zone debt crisis, etc. All these factors depressed non-Chinese steel production, thus making for greater uncertainty in demand for alloys, even while most producers maintained their pace of production. The surplus ore supply in 2011 even supported the emergence of new production capacities in India and Korea.

In China, which has exhibited a structural overcapacity in alloys since the increase in export taxes, the marked slowing of steel production in the second half-year of 2011 and in 2012 also logically drove down demand for alloys, and hence also depressed prices. This fall in prices, combined with rising production costs (particularly of electricity) caused numerous local silicomanganese producers to reduce or even halt their activity. Forecasts for 2014 point to recovered industrial activity in Europe, and continued recovery in Japan and the United States. The alloy and ore markets appeared to be returning to an even keel at the start of this year, with some price uptrends.

Although China's steel-production growth should be more moderate than at times in recent years, it should still see significant growth in 2014 (between 3% and 4% compared with 2013), like all the emerging countries, which account for an increasingly large proportion of world manganese alloys consumption.

In the medium term, the manganese ore supply capacity will continue to be strongly dependent on South Africa with its new mining projects and logistical capacities. At the same time, Chinese manganese ore production is struggling to meet world demand while its grade (content) is tending to decline, thereby increasing the need to use high-grade imported products. However, this supply remains limited and reserves are tending to decline.

# 2.3.2. Overview of ERAMET Manganese Division \_\_\_\_\_

#### **2.3.2.1.** Key points

# A world leader in manganese ore, throughout the value chain

The Group is a front-runner world-wide in the manganese industry, from the standpoint of both mining and ore processing: it is the world's second-largest producer of high-grade manganese ore and manganese alloys, the world's leading producer of refined alloys and the leading global producer of manganese chemical derivatives. It boasts a long-standing presence in Gabon with high-quality mines (grades and reserves), through its majority shareholding in Comilog, alongside the Gabonese Republic.

In recent years, Comilog has successfully expanded its production to keep pace with the growth in world demand for steel; with the current capital-expenditure programme, in 2014/2015, Comilog will reach the target of 4 million tonnes, doubling its output over some ten years. Comilog also holds a concession to operate the *Transgabonais* railway, through Setrag.

#### Three other significant activity segments are developing in the Manganese Division

Besides the manganese industrial chain, other activities are also developing within ERAMET Manganese:

- the recycling of oil catalysts in the United States (GCMC, a subsidiary of Comilog) and in France (Valdi);
- TiZir (50% owned by ERAMET): The starting-up in the first half-year 2014 of a major new mine in Senegal supplements a new activity segment in mineral sands (zircon and titanium) which also includes the Tyssedal plant in Norway;

• the project to develop in Gabon a potentially very large polymetal deposit of niobium/rare-earth metals/uranium.

#### **2.3.2.2.** History of ERAMET Manganese

**1957:** Founding of Comilog.

1962: Mining of the Moanda deposit begins in Gabon.

**1986:** Start-up of the *Transgabonais* railway allowing the transportation of ore from the Moanda mine to the port at Owendo near Libreville.

**1991-1994:** Comilog acquired Sadacem (manganese chemistry), SFPO (ferromanganese production by blast furnace at Boulognesur-Mer, France) and DEM (alloy production by electric furnace in Dunkerque, France).

**1995:** Comilog acquired the Guangxi and Shaoxing manganese alloy plants (China).

1996-1997: ERAMET becomes Comilog's main shareholder.

Developments since that date are set out in Section 1, in the paragraph headed "History and development of the Company".

#### **2.3.2.3.** Structure

#### Organisation at 31 December 2013

ERAMET Manganese is mainly divided into four activity segments with manganese in the clear lead, but also with two activities and a project that developed gradually within ERAMET Manganese, both exhibiting high synergy with activities elsewhere in the ERAMET group.

#### Manganese: 90% of sales in 2013

The main activity segment is Manganese, which includes ore extraction in Gabon by Comilog (the world's second-largest producer), shipment by rail (including the other transport activities entailed in the *Transgabonais* railway concession) and loading at the port; this segment also includes ore processing activities either by pyrometallurgy processes in the form of manganese alloys (for the steel industry, by far the main use of manganese), or in the form of chemical derivatives (for a diversified panel of chemical-industry customers). This activity segment, of which the core mining activity is situated in Gabon, through Comilog, has a strong international footprint and a complete range of skills in manganese processing.

#### Recycling: 5% of sales in 2013

Oil-catalyst recycling is an activity based mainly in the United States, and supplemented by, and supplemented by the French activities of Valdi (which has a more diversified activities scope). In addition to their environmental-service dimension, these activities include extraction for recycling and processing of different alloy metals: based mainly on molybdenum and vanadium, but also on nickel, cobalt, etc. The technologies used (pyro- and hydro-metal-lurgy) are skill areas in which the ERAMET group is a front-runner. In addition, certain practical areas of synergy are being developed with ERAMET Alloys.

Becoming part of the Group with the acquisition of Comilog, which owned it (GCMC, or "Gulf"), this activity was built up steadily (Bear, ferromolybdenum, ferrovanadium then Valdi). This activity is currently undergoing recovery measures after difficulties of various kinds.

# Zircon/titanium dioxide: 5% of 2013 at sales (50% ERAMET in TiZir)

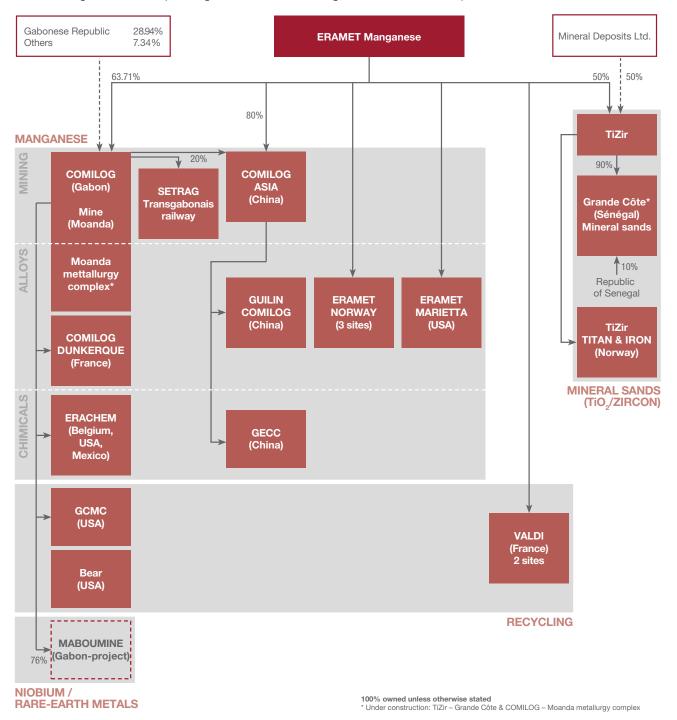
With the starting-up in the first half-year 2014 of the Grande Côte project, the ERAMET group could in the long run and a cruising speed become one of the major world players in zircon and titanium (7% of zircon and 5% of titanium dioxide), an activity which is expected to make an increasingly significant contribution to Group earnings.

Since the acquisition of the Norwegian Tinfos group in 2008, the Group possessed in Norway a world-class pyrometallurgy plant for titanium ore beneficiation, to supply a product with the higher titanium dioxide content to customers producing white pigments. The Group has found the ideal partner for maximising synergy gains: in 2011, through a new 50/50 partnership, ERAMET exceeded in linking this front-running downstream metallurgical asset with

an upstream ore source on the point of being developed: the Grande-Côte project in Senegal, previously developed by the Australian group Mineral Deposits Limited on its own. Grande Côte will, furthermore, become a significant source of zircon in the coming years in which few new capacities are expected to arise.

# The Maboumine project: niobium/rare-earth metals project in Gabon

ERAMET is studying a major development in Gabon, at Mabounié in the region of *Moyen-Ogooué*, through the Comilog subsidiary, Maboumine. It concerns developing a process for turning to account a very large niobium and rare-earth deposit in Gabon; the ore's complexity precludes direct pyrometallurgy processing. After a phase of laboratory research and development, the Group has embarked on preliminary-project studies on factory pilot run designed to enable process validation to continue on a larger scale in Gabon. In the long run, the Mabounié deposit could become one of the main world sources of niobium and rare earth metals, for which long-term requirements are considerable and of which to date a restricted number of suppliers exist.



ERAMET Manganese, the Group's Manganese Division, is now organised into six main companies, outlined below:

- Comilog is a company in Gabonese law and 63.71% owned by ERAMET. Its business activities include:
  - operation of the Moanda manganese mine and sintering plant;
  - operation of SETRAG (holding the *Transgabonais* railway concession);
  - production of manganese alloys in Dunkerque (France);
- the production of manganese-based chemical derivatives, the recycling of metals contained in oil catalysts;
- production of ferrovanadium and ferromolybdenum;
- the Maboumine project (niobium, rare-earth metals).
- Comilog Asia includes the Chinese manganese-processing activities, producing alloys and chemical derivatives.

In alloys, the Group concentrated in 2013 all its Chinese production of manganese alloy at the new Guilin site, which replaces two older, less efficient sites that did not produce refined alloys. These sites were closed in 2011 and 2012.

Comilog Asia also includes, under manganese chemical derivatives, the electrolytic manganese dioxide plant at Chongzuo, for disposable batteries.

- ERAMET Norway operates the three Norwegian alloy plants at Porsgrunn, Sauda and Kvinesdal.
- ERAMET Marietta (US) produces manganese alloys.
- TiZir is the 50/50 joint venture with MDL in mineral sands, titanium dioxide and zircon production. TiZir groups together the titanium-ore pyrometallurgy beneficiation plant at Tyssedal (Norway) and the operation at Grande Côte, in Senegal, which will begin producing mineral sands (zircon and titanium ore) in the first half-year of 2014. Construction was completed in the first quarter of 2014.

# Manganese mining and processing business (manganese alloys and chemicals)

#### The Moanda mine and sintering plant

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

The mine is opencast. The ore is covered by a 4-5 meter thick layer of overburden. This is usually extracted by draglines The runof-mine ore is extracted using mechanical excavators and loaded onto 110-tonne trucks. The ore is processed at the beneficiation plant. The beneficiated ore is subsequently transferred to Moanda railway station by conveyor. Non-marketable ore fines were previously stored in heaps but are now dispatched to the Moanda industrial complex. There they go through dense-medium beneficiation, which increases their content from 43 to 52%. This concentrate is then mixed with coke and sintered in a furnace at 1,300 degrees Celsius to obtain a product containing approximately 58% manganese. This is transferred by conveyor to Moanda railway station, where it is loaded onto wagons. The sintering plant has an annual production capacity of 600,000 tonnes.

The *Transgabonais* railway runs from Franceville to Libreville over a distance of some 600 kilometres. In addition to Comilog's manganese ore, it carries wood and miscellaneous goods as well as transporting passengers. Comilog owns its own locomotives and wagons.

Furthermore, in May 2003, Comilog was provisionally granted the right to manage the *Transgabonais* by the Gabonese Government, after the previous operator was stripped of its concession. This made it possible to considerably improve maintenance and traffic reliability, enabling higher quantities of manganese ore to be shipped.

In February 2004 the Gabonese Government extended the management contract for a period of 18 months.

Finally, from November 2005 Comilog was granted a 30-year concession to operate the *Transgabonais* railway. This enables it to secure its logistics and ship fast-growing amounts of ore.

Comilog, via its subsidiary, Port Minéralier d'Owendo, holds the concession to operate its ore terminal, the port of Owendo, with the capacity to store approximately three months' production. The port can berth 60,000-ton ships and load them in three days.

#### Manganese alloy production

The Group is the world's second-largest producer of manganese alloys and the leading global producer of refined alloys, which are higher-value-added products. The Group possesses seven manganese alloy plants and is the only alloy producer with plant located in the three major consuming areas: Europe, the United States and Asia (China); it can thus provide better service to its customers while protecting itself from market and currency fluctuations. This industrial base will shortly be supplemented by the Moanda Metallurgical Complex in Gabon.

The Group produces a very wide range of alloys: high-carbon ferromanganese, silicomanganese, medium and low-carbon ferromanganese and low-carbon silicomanganese. ERAMET Manganese is gradually increasing the share of refined alloys in its production.

#### Production of manganese alloys for the steel industry

(in thousands of tonnes)	2013	2012	2011	2010	2009	2008	2007	2006	2005
High-carbon ferromanganese (including China)	118	144	227	256	246	287	299	279	290
Standard silicomanganese	267	236	199	196	197	172	191	201	185
Refined alloys	366	350	358	327	174	249	270	271	252
TOTAL MN ALLOY PRODUCTION	750	730	784	779	617	708	760	751	727

#### Manganese alloy production sites

Sites	Country	Production capacity	Furnace type	Products
Dunkerque	France	70 kt	Electric furnace	SiMn
Sauda	Norway	210 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Porsgrünn	Norway	165 kt	Electric furnace	HC, MC, LC FeMn, SiMn, LC SiMn
Kvinesdal	Norway	165 kt	Electric furnace	SiMn, LC SiMn
Marietta	United States	120 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Guilin	China	165 kt	Electric furnaces	HC, MC SiMn
Moanda	Gabon	65 kt	Electric furnaces	SiMn
(1 <sup>st</sup> half-year 2014)		20 kt	Hydro + electrolysis	metallic Mn

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

In China, the industrial facilities were rationalised and repositioned to cope with a market surplus of standard alloys. The two plants at Guilin (an old plant) and Guangxi were closed, and a new plant was commissioned at Guilin in July 2012; this site operates electric furnaces and its production range will include refined alloys.

In the US, ERAMET Marietta is the main manganese alloy producer.

#### **ERAMET Manganese marketing policy**

Thanks to its industrial network and very broad product range, the Manganese Division is able to provide a comprehensive offering and a flexible response to the various manganese needs of its customers.

The Group takes a partnership approach to working with its customers and provides significant technical and sales support to help them derive maximum benefit from its products in their own production processes. Marketing policy is managed by ERAMET Comilog Manganèse, which uses the ERAMET group worldwide marketing network, ERAMET International, to market most of the Manganese Division's products. In countries where ERAMET International does not operate, the Group is represented by agents.

#### **Research and Development**

The Group has extensive research facilities with ERAMET Research. These have been used, in particular, to develop and implement the sintering process at the Moanda (Gabon) manganese fines plant.

Manganese chemistry activities are highly dependent on the joint development of new products with customers, particularly in the electronics sector.

Lastly, in the first half-year 2014, a major milestone will be passed in Gabon with the commissioning of Gabon's first metallurgical plant: the Moanda Metallurgical Complex, which will produce 65,000 tonnes per year of silicomanganese and 20,000 tonnes per year of metallic manganese.

#### Manganese chemistry business

The Group is the global leader in manganese chemical derivatives. The manganese chemistry business is housed under Erachem Comilog and is carried on from five plants:

Location	Products
Tertre (Belgium)	Manganese salts and oxides
Marietta (United States)	Manganese salts and oxides
New Johnsonville (United States)	EMD (electrolytic manganese dioxide)
Tampico (Mexico)	Manganese oxide and sulphate
Chongzuo (Guangxi Province – China)	EMD (electrolytic manganese dioxide)

The main markets targeted by manganese chemical derivatives are:

- portable energy (rechargeable and disposable batteries);
- ferrites (electronics industry);
- agriculture (fertiliser and animal feed);
- fine chemicals.

The manganese chemical activity, in which ERAMET Manganese is among the world leaders, maintained sales, at €165 million, closely similar to those of 2012 and its current operating margin retreated slightly although exceeding 13%.

#### **Recycling business**

This is currently carried on at the following sites:

Location	Products
Tertre (Belgium)	Copper solutions recycling
Freeport (United States)	Recycling of oil catalysts and recovery of metal content (vanadium, molybdenum, etc.)
Butler (United States)	Ferromolybdenum and ferrovanadium production
Valdi – Le Palais-sur-Vienne (France)	Catalyst recycling for the oil industry Processing of other metallic waste

Recycling remained operationally loss-making in 2013 on account of persistent underactivity, but made progress in obtaining Government authorisations in the United States, which will make a valuable contribution to its continued recovery. Areas of synergy with ERAMET Alloys are also being considered.

#### Mineral sands business (TiO<sub>2</sub> and zircon)

TiZir was created in 2011 by ERAMET and the Australian company Mineral Deposits Limited. 50% held by ERAMET, it has two sites.

Sites	Country	Products
Tyssedal	Norway	Titanium dioxide (pigments industry)
		High-purity smelting for the foundry industry
Grande Côte	Senegal	Mineral sands:
(starting up in the 1 <sup>st</sup> half of 2014)		Titanium dioxide (ilmenite, rutile, leucoxene) and zircon

The Tyssedal plant in Norway produces titanium dioxide slurry for use in the pigments industry, as well as performing high-purity smelting using ilmenite ore sourced from several suppliers. Grande Côte is a mineral-sands mining project located in Senegal.

# TiZir 50% held by ERAMET: a major player in the titanium dioxide and zircon markets in process of formation

In 2011, ERAMET and the Australian company, Mineral Deposits Limited ("MDL") formed a joint venture investing in 100% of the titanium dioxide and high-purity smelting plant at Tyssedal in Norway, previously operated by ERAMET Titanium & Iron ("ETI"), and 90% of the Grande Côte mineral sands in Senegal, which were owned by MDL. The remaining 10% are held by the Republic of Senegal. In combination, these two assets will constitute a verticallyintegrated entity, and a major player in mineral sands: the Tyssedal plant will enjoy security from having a new source of high-quality ilmenite – a titanium ore – supplied from the Grande Côte project, thereby assuring the sale of a large proportion of the latter's production over the long term.

Today, the Tyssedal plant sources from other ore suppliers, including a Norwegian producer of ore suited to titanium dioxide production by sulphate processing.

The linking of the plant with the Grande-Côte deposit affords it several options for evolving and developing in the future, some of which would incorporate titanium dioxide production by chloride processing, also a technology it controls.

#### Mineral sands, a source of zircon and of titanium dioxide

Mineral sands are mineral raw materials in which the minerals have become highly concentrated over time in alluvial areas (river plans, sea coasts or lake shores), or in windswept areas (dunes). Mineral-sand deposits were thus formerly beaches, dunes or river beds. The main products from these sands are titanium dioxide – chiefly occurring in the form of ilmenite (FeTiO<sub>3</sub>), but also as rutile (TiO<sub>2</sub>) and to a lesser extent as leucoxene (FeTiO<sub>3</sub>. TiO<sub>2</sub>) – and zircon (ZrSiO<sub>4</sub>).

The content of these ores in the sand is often of the order of a few per cent. Accordingly, they must be concentrated by a first stage of gravimetric separation, then by magnetic or electrostatic separation. Zirconium and titanium ores are separated at the mine and follow separate logistical paths.

The main mineral-sand deposits exploited today lie chiefly in Australia and South Africa which, between them, account for almost 50% of the titanium ore supply and over half the supply of zircon.

# The titanium dioxide market: high growth potential, driven by the emerging countries

While metallic titanium is well-known for its aerospace uses, as at ERAMET Alloys, 90% of the titanium units are consumed in the white pigments industry in the form of titanium dioxide.

#### Use of TiO<sub>2</sub>-based white pigments

Paints	56%
Plastics	25%
Paper	9%
<ul> <li>Others</li> </ul>	10%

The  $TiO_2$ -based pigment is a very pure white used in paints, plastics, textiles and paper; it has the advantage of being non-toxic.

World-wide, this market is growing some 3.8% per year.

## Significance of the main producers of titanium dioxide for white pigments

DuPont	19%
Cristal	13%
Huntsman	10%
Kronos	9%
Tronox	6%
Sachtleben	4%

Source: TZMI.

#### Pigment producers need a raw material rich in TiO<sub>2</sub>

Rutile contains over 95% of  $TiO_2$ ; synthetic rutile is produced from high-grade ilmenite;  $TiO_2$  slag is obtained by melting ilmenite, and is produced among others by the Tyssedal plant, which is now part of TiZir. Melting/reduction of ilmenite is also a smelting production method which, if the process is properly controlled, may yield a valuable by-product: this is currently the case at Tyssedal, which supplies high-purity smelted products for use by foundries and in applications such as wind turbine hubs.

## Significance of the main suppliers of TiO<sub>2</sub> units to producers of titanium dioxide for white pigments

Rio Tinto (1)	27%
lluka	13%
Tronox	11%
Kenmare	6%
Kronos	6%
Ostchem	6%

Source: TZMI.

(1) With 100% of Richards Bay Minerals.

After a long phase of stability, prices soared on the titanium dioxide market, throughout the value chain, with spot prices as much as trebling at the 2012 peak.

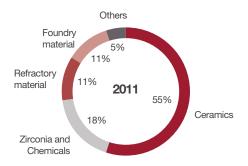
This resulted in a correction of overpricing, leading to de-stocking which appears to be drawing to a close.

#### The zircon market

Zircon is particularly used in ceramics (55% of demand in 2011) as an opacifier, imparting brilliance and smoothness to ceramic items. Ceramic tiles or washbasins contain zircon: zircon sand is finely ground then added directly to the ceramic preparation.

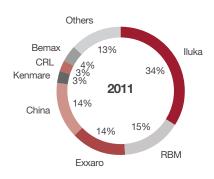
This mineral also has very important refractory properties, making it useful in certain industrial segments as a component of moulding materials in high-precision foundry. The chemical derivatives of zircon are used in a multitude of applications such as abrasives, wear-resistant materials or some catalysts. Lastly, metallic zirconium is used among others in the nuclear industry, constituting the protective sheath of fuel rods (highly heat-resistant and permeable to neutrons).

#### Zircon consumption in 2011



Zircon production is concentrated in Australia and South Africa, which in 2011 accounted for 70% of supply. In 2011, the five leading zircon producers accounted for over 70% of world production (Iluka, Rio/BHP, Exxaro, Bemax and DuPont).

#### Main zircon producers in 2011

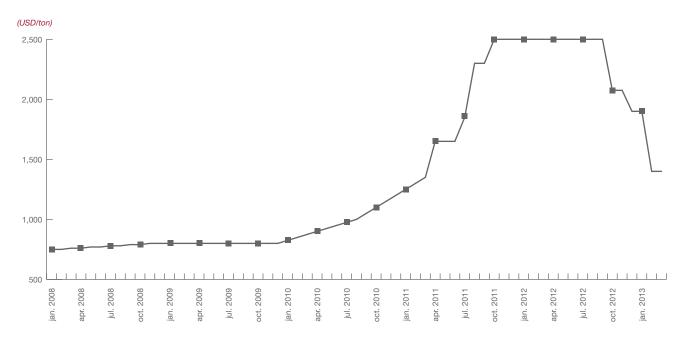


As with titanium dioxide, the zircon market experienced high prices in 2012, with tension on the physical commodity market, accentuated by stockpiling throughout the industrial chain.

In 2013, the trend reversed. For most of the year, the market underwent a de-stocking phase, with a sizeable fall in prices, while some consumers made technical adjustments to their consumption patterns so as to optimise their use of zircon.

#### ACTIVITIES

2.3. ERAMET MANGANESE



#### Bulk Australian zircon - indicative FOB prices

The mineral sands sector has suffered for several decades from a lack of significant investment, particularly in exploration and mining development. Today, the deposits which formerly supplied a large portion of demand are becoming depleted and the new mining projects will not suffice to satisfy demand for zircon, buoyed by the urbanisation of and growth in the emerging markets.

TiZir will be a key player in this new sector and, for the ERAMET group, will constitute a genuine avenue for both sectoral and geographical diversification, since the various applications for mineral sands provide new outlets for the Group, thus widening its exposure outside the steel industry. ERAMET will thus also gain a foothold in Senegal via TiZir's subsidiary, Grande Côte S.A.

#### The Tyssedal plant

The Tyssedal plant is one of the two industrial sites that joined the ERAMET group in 2008 with the acquisition of Tinfos.

This plant employs 165 persons, producing titanium dioxide slag mainly for the pigments industry, with an annual capacity of 200 kt, and high-purity pig iron with an annual capacity of 120 kt, sold to foundries for various applications, particularly the production of parts for wind turbines. The site also has unrivalled access to hydroelectric power, being located near sizeable waterfalls exploited for this purpose. The particularly complex technology involved in processing ilmenite, the flexibility of the Tyssedal process and its unique access to a competitive energy source make the Tyssedal plant a key asset in the titanium industry.

#### The Grande Côte project

The Grande Côte mineral sands Grande Côte project lies along the Senegalese coast. It starts some 50 km north of Dakar and extends northwards for over 100 km. On the basis of an expected exploitation lifespan of at least 14 years, estimated annual production from Grande Côte is some 85,000 tonnes of zircon, 575,000 tonnes of ilmenite and approximately 16,000 tonnes of rutile and leucoxene. This site is one of the few new projects worldwide that can take advantage of the expected supply shortfall in the mineral sands industry.

The large scale of the deposit and the ease of its exploitation will enable the project to achieve a creditable level of profitability. Construction of the project started in the third quarter of 2011 and was completed in February 2014; production is expected to start in the ensuing weeks, for a total estimated investment cost of some USD650 million. The investments include the construction of a dredger and a floating concentration unit to recover the sand and separate the main heavy minerals; a separating plant will also be constructed, together with an electricity generating station. Logistics are a crucial factor for the success of this mining project. Accordingly, a railway line, port and storage infrastructures at Dakar have also been constructed.

#### ERAMET Manganese return on capital employed

ROCE: Current operating profit (loss) restated for provisions or reversals on fair-value tests / Capital employed at 31 December of year y-1 (Consolidated equity capital plus net financial debt, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets, excluding the capital expenditure on the Moanda metallurgical complex).

#### Manganese ROCE (before tax)

%	2009 (1)	2010 (1)	<b>2011</b> <sup>(1)</sup>	2012 <sup>(2)</sup>	2013
Manganese	(3)	49	35	20.3	11.8
(1) Not restated following the application of revised standard IAS 19.					

(1) Not restated for one wing the application of revised standard IAS 19.
 (2) Restated for retroactive application of revised standard IAS 19.

2.4. ERAMET ALLOYS

### 2.4.1. The business lines of ERAMET Alloys: an uprange metallurgy operator positioned upstream in strategic industries \_\_\_\_\_

ERAMET Alloys deploys its activities in two main subsidiaries: Aubert & Duval and Erasteel, both positioned uprange in alloys and metallurgical expertise.

## Aubert & Duval is among the world-leading suppliers of high-performance metal alloys, of critical importance to strategic industries.

Aerospace, the Defence industries, energy production (particularly nuclear technology, but also gas turbines) are the preferred areas of Aubert & Duval, a group renowned for its high quality and the ability to provide metallurgical solutions to the most exacting problems. Aubert & Duval is also well-represented in the new very-high-capacity aircraft models (A380, B787, etc.). It ranks among the world leaders in uprange metallurgy.

#### Aubert & Duval is both a steel producer (upstream) and a maker of steel products (downstream, by nature in contact with industrial concerns), but producing very specific items using highly specific tools.

Aubert & Duval's scope of activity is wide, covering both the raw materials melting phase, i.e. alloy making, with a wide range of processes described later, and the full array of treatments that can be applied to hot alloy: forging (for parts making, but also semi-finished products such as bars, etc.), rolling, closed die-forging, etc.

## To simplify, however, for most of its activities, Aubert & Duval can be stated to be:

- A producer of high-performance steels, as well as nickel-based alloys; Aubert & Duval is thus positioned at the top of the "steel pyramid" (see below). It produces limited quantities of tool steels for specific niche markets.
- A parts producer using high-power closed die-forging for aerospace (ranking 1<sup>st</sup> to 3<sup>rd</sup> worldwide according to material). This process involves hot-shaping metal with a press or a ram, using specific tooling for every part to be manufactured. In this business line, Aubert & Duval works in four key materials: high performance steels, superalloys (nickel-based), aluminium and titanium. High power denotes forces greater than 30,000 tonnes, and up to 80,000 tonnes (see below).

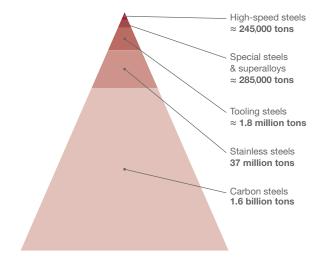
#### Erasteel is the historic leader in high-speed steels and retains leadership uprange in these steels, used for machining, drilling and cutting tools, etc., with high industrial performance.

This type of steel is very hard, and has a high alloying-metal content, being used for high-performance tools with high operating speeds at the upstream end of industries with stringent requirements, such as vehicle production. These tools embody fast-moving steel components in working contact for machining, cutting and drilling other types of steel and non-ferrous metals.

Erasteel is a specialist and even leads the world in powder metallurgy processing, which procures high-alloy-content steel while retaining very high-grade metallurgical quality. Backed by this high degree of expertise, Erasteel has begun related developments in other powder-metallurgy products, which are a high-growth area.

## 2.4.2. ERAMET Alloys, positioned uprange \_\_\_\_\_

The materials and products marketed by the ERAMET Alloys Division sell for much higher prices than those for carbon steel or even stainless steel delivered unworked. Moreover, market volumes, and hence market size, are far smaller.



## Moving towards the top of the pyramid, the following are met in order, but not exhaustively:

### **2.4.2.1.** Tool steel (some 1.8 million tonnes)

Tool steels are alloy steels containing approximately 5-15% alloying elements. These are chiefly vanadium, chromium, nickel, tungsten, cobalt and molybdenum.

Tool steels are used to make tools for shaping metals, plastics and glass. The tool users are generally subcontractors in the automotive, domestic appliance and electronics industries, etc.

Their main characteristics are hardness, which provides great resistance to deformation during denting, perforation or shearing, wear resistance and tensile strength (ability to bear high stresses without sudden breakage), which is often combined with good fatigue resistance (ability to withstand repeated stress).

Tool steel demand is mainly influenced by the launch of new models (vehicles, domestic appliances, etc.), requiring the creation of new tooling. The tool steels market is considered less cyclical than other steel sectors.

There are three families of application:

cold working (manufacture of tools for cutting and stamping);

- hot working (manufacture of tools for embossing, extrusion and light alloy injection);
- plastic-injection moulds.

### **2.4.2.2.** High speed steel (some 245,000 tonnes)

High-speed steels have a high carbon content and also contain tungsten, molybdenum, vanadium, chromium and sometimes cobalt. They contain no nickel. After heat treatment, high-speed steels are extremely wear-resistant and so are mainly used to make cutting tools.

Long products account for most of the total market and are used to make bits, taps, cutters, trimming cutters and reamers, etc. Flat products are used to make saw blades, cutting disks and industrial cutters.

These markets require distribution channels tailored to the specific requirements of each customer.

Outside the cutting tools market, there are several other applications for high-speed steels, particularly for metal shaping and high-wear automobile parts.

Western consumption of high-speed steels has been affected by competition from tungsten carbide. Another development is the partial relocation of industries consuming high-speed steel to emerging countries, in particular China and, to a lesser extent, Brazil, particularly for less technology-intensive applications (DIY, etc.). Thus, the Western market in high-speed steel has followed a downtrend, becoming increasingly focused on more sophisticated powder-metallurgy-based tools, or on specific products (bimetal, for targeted use of high-speed steel in blades, etc.).

However, in China, demand for tools containing high-speed steels is growing fast as a result of the country's economic and industrial development, which has reached the phase in which new consumers purchase their first vehicles. China has actually taken the world lead in car registrations.

This makes the tooling industry an important and even strategic base for facilitating China's fast-expanding industry. Competitors producing large volumes of low-cost high-speed steel, of lesser quality than Western producers have rapidly developed in China to satisfy this demand, with some producing both high-speed steel and the tools, and having privileged access to certain primary and secondary raw materials in which China holds strong positions (tungsten, molybdenum, etc.) on account of China's manifestly anticompetitive regulations. World total high-speed steel production is estimated at 245,000 tonnes.

# **2.4.2.3.** Alloys with highly advanced characteristics and nickel alloys (approximately 285,000 tonnes)

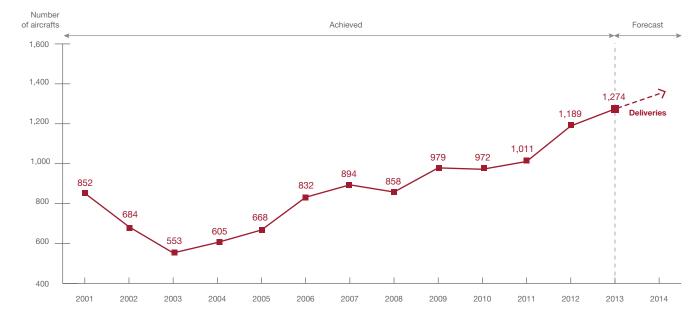
There are several types of nickel alloy that can be grouped together on the basis of the specific property required:

- alloys with special physical properties: low-expansion alloys, alloys with magnetic properties mainly for electronics industries, electrical elements (for industrial and domestic heating appliances) and alloys for transporting liquefied natural gas;
- corrosion-resistant alloys (chemistry, food industry, offshore platforms, nuclear power and environment);

 alloys exhibiting high mechanical strength at high temperatures (superalloys).

Superalloys contain 40-75% nickel. It is alloyed with chromium (15-30%) and, depending on the required grade, may contain cobalt, molybdenum, titanium, aluminium or niobium. Their main outlet is aerospace (engines) and the gas turbine sector. The third focus of development is the automotive sector.

Demand for superalloys is mainly driven by aerospace, where annual medium to long-term growth is generally estimated at 5%. This line of business, however, is strongly cyclical in nature. The new-engine business is also complemented by the maintenance of existing engines.



#### Number of aircraft delivered by Boeing and Airbus.

Source: Airbus - Boeing.

# 2.4.3. Production processes for steels with highly advanced characteristics and superalloys \_

The processes used by ERAMET Alloys for its steel manufacture are appropriate to this degree of expertise and to the required performance guarantees. These processes differ from the processes used in producing stainless steel and carbon steel.

### 2.4.3.1. Production of steels with highly advanced characteristics and superalloys (upstream)

The production of steels with highly advanced characteristics and superalloys involves the production of an alloy with a perfectly controlled composition by melting recycled alloy scrap and primary metals in an electric furnace.

Several types of process are used, depending on the product.

#### Air metallurgy

The alloying elements are melted in an arc furnace. This is followed by metallurgical processing in an AOD converter or ladle furnace to add other alloying metals, remove impurities (inclusions and gases) and obtain the required chemical composition.

Conventionally, two solidification methods are used: ingot casting, which is more suited to small quantities – being the only process for re-melted steel – and to products with specific characteristics; and continuous casting, which is more suited to large quantities.

#### Vacuum metallurgy

This process is used to make alloys that withstand higher stresses (and contain nitrogen- and oxygen-reactive alloying elements). It is carried out in vacuum induction melting (VIM) furnaces.

#### Remelting

Remelting takes place in slag (ESR furnace – Electro Slag Remelting) or in a vacuum (VAR furnace – Vacuum Arc Remelting). For some types of alloy used in aerospace, the two processes are carried out one after the other. Remelting allows better control of segregations and inclusion morphology, and reduces gas content. This significantly improves the characteristics and mechanical reliability of materials. Remelting is needed for some critical parts for the aerospace, power generation and tooling sectors.

### Powder metallurgy

This process, which follows melting in a furnace, consists of spraying a jet of liquid metal in the form of fine droplets that cool to form a powder. This is then turned into a perfectly dense material by hot isostatic compacting. This process is suited to highly alloyed grades with very advanced properties. It is also used in loose powder form for applications such as surfacing, MIM and additive manufacturing.

### **2.4.3.2.** Alloy shaping (downstream)

After an alloy has been made, various techniques are used to shape the material mechanically, and usually using hot processes. Beyond shaping the material, these operations also optimise its mechanical characteristics by work hardening (modification of its microstructure under the effect of deformation and temperature).

- Closed die-forging consists of shaping the material into closed die-forged blanks by hot pressing between two moulds machined in the shape of the parts. Closed die-forging is carried out with a press or ram. It is usually followed by machining and finishing operations.
- Forging involves shaping bars (typically 200-600 mm in diameter) or simply-shaped blanks in order to guarantee geometry and properties. This operation is conducted using heat and a press, a forging machine or even a ram, with a series of pressing runs between simple tools.
- Rolling consists of shaping the material into sheets, bars (typically 20-200 mm in diameter) or wire (5-20 mm in diameter) in order to assure geometry (section), surface condition and use characteristics. The operation is carried out through a series of runs between rolling cylinders.

## 2.4.4. ERAMET Alloys competitors \_\_\_\_\_

The table below lists the main producers in the Alloys Division's various business activities.

		I	Metals produce	ed		Proc	duction m	nethod	High-p	ower clos	ed die-forgir	ng			
Companies	High- speed steels	speed Tool special Super-				High- performance Super- special steels alloys Aluminium Titanium			Titanium	Isothermal closed die-forging	Open forging	Ring- rolling			
Alcoa (USA & Russia)															
ATI – Ladish (USA)															
Böhler + Buderus (Austria/ Germany) voestAlpine															
BGH (Germany)															
Carpenter – Latrobe (USA)															
Cogne (Italy)															
Tata Steel (India & UK)															
Ellwood (USA)				///											
ERAMET ALLOYS					1										
Firth Rixson (USA & UK)															
Gloria (Taiwan)															
Kalyani (India)															
HeYe (China)															
Hitachi Metals (Japan)															
Midhani (India)															
Nachi Fujikoshi (Japan)															
Otto Fuchs (Germany)/Weber (USA)															
PCC (Wyman Gordon & SMC)															
Shultz (USA)			/////												
Shanghaï Baosteel (China)															
Schmolz & Bickenbach (Germany & USA)															
Snecma (France)															
Thyssen Krupp (Germany)															
Tiangong (China)															
Valbruna (Italy)															
VSMPO (Russia)														///	

In recent years several underlying trends have become discernible:

- "three-dimensional" consolidation: vertically (from fusion of alloys to closed die-forging and even recycling); horizontally (closed die-forging, foundry, etc.); and cross-materials (titanium) in the United States, around two centres of expertise, ATI and Precision Castparts, with even a third such centre, Carpenter;
- the emergence of new competitors resolved on penetrating their domestic markets and reducing their dependence: Japan, China, and even India, etc.;
- transcontinental movements: the development of Firth Rixson in the United States, the Chinese subsidiaries of several groups;
- the strong rise of VSMPO in titanium, and the initiatives of new players in response to the expected growth in demand for this material in new and future aircraft (Kazakhstan, China, India, etc.).

ERAMET Alloys boasts the following specific features:

- its expertise in closed die-forging for the four main groups of material: aluminium, titanium, steels and superalloys;
- upstream integration (production) in steels and superalloys.

ERAMET Alloys has entered into several strategic partnerships:

- UKAD in titanium forging, backed upstream by the Kazakhstan primary producer UKTMP;
- HeYe in China for high-speed steels;
- India (SQUAD).

ERAMET Alloys has conducted its own developments in new materials, at the upstream end (vacuum furnace for superalloys and other nickel-based alloys), powder metallurgy production (Sweden), or forging (aluminium, lithium, etc.).

## 2.4.5. Structure of ERAMET Alloys \_\_\_\_\_

### **2.4.5.1.** Key points

The key points concerning ERAMET Alloys are as follows:

- global leadership in a number of respects: the second-largest global producer of high-speed steels (Erasteel) and the secondlargest global producer of closed die-forged parts for aerospace (Aubert & Duval), the leading producer of gas-atomised metal powders;
- a strategy based on technological expertise and niche markets;
- the commissioning in 2011/2012 of four strategic capital projects: a new titanium press (UKAD, a 50/50 joint venture), a new powder-metallurgy atomising tower (Erasteel), a new VIM furnace for vacuum alloy production and an aluminium press (both Aubert & Duval);
- new partnerships in China and India.

### 2.4.5.2. History of ERAMET Alloys

Within the Group, the Alloys Division began to develop with the formation of Erasteel between 1990 and 1992. Then in 1999, the Alloys Division acquired its present profile and size with the different companies contributed by the S.I.M.A. group, most of which are grouped together under Aubert & Duval. ERAMET Alloys developed mainly through organic growth, with the addition of some keenly-targeted acquisitions.

#### **History of Erasteel**

**1676:** Metallurgical production on the Söderfors (Sweden) site dates back to 1676 (anchor production).

**1846:** Metallurgical production at the Commentry (France) site dates back to 1846 (rail production).

**1956:** Founding of Commentryenne des Aciers Fins Vanadium Alloys company.

**1982:** Kloster Speedsteel was founded in Sweden by merging the high-speed steel divisions of Üddeholm and Fagersta.

**1983:** Kloster Speedsteel acquired Les Aciers de Champagnole, a French high-speed steel production site founded in 1916.

**1990:** ERAMET acquired Commentryenne des Aciers Fins Vanadium Alloys, the world's third-largest producer of high-speed steels.

**1991:** ERAMET acquired Kloster Speedsteel, the world's largest maker of high-speed steels.

**1992:** ERAMET founded Erasteel, bringing together Commentryenne and Kloster Speedsteel; industrial reorganisation and commercial integration.

#### History of Aubert & Duval

**1907:** Founding of Aubert & Duval, a company specialised in the sale and processing of special steels. At the time, special steels were little-known in France, while British steelworks had a substantial technical edge.

**1920/1939:** The development of special steels allowed the company to take off. Plants opened at Les Ancizes and Gennevilliers. Aubert & Duval enjoyed its share of the manufacturing boom in automobiles (engines, gearboxes) and in aircraft engines, increasingly containing special steels.

**1945/1960:** The Group positioned itself in cutting edge sectors, the development of which played an important role in the post-war reconstruction of France, such as aerospace and nuclear power which require high-quality steels and alloys. Aubert & Duval is one of the leading European companies in the development of vacuum processing and consumable electrode remelting, particularly for the jet engine market.

**1970-1980:** Aubert & Duval weathered the steel industry crisis (resulting from the fall in orders for the automotive, public works and construction sectors) thanks to its policy of specialities primarily for high-tech markets.

1977: Founding of Interforge (with Aubert & Duval holding 13%).

**1984:** Aubert & Duval was converted into a holding company of the same name with the founding of a wholly owned operating company, Aciéries Aubert & Duval.

**1987:** Stake acquired in Special Metals Corporation (SMC).

**1989:** Aubert & Duval holding company was renamed SIMA.

**1991:** The Aciéries Aubert & Duval operating company was renamed Aubert & Duval.

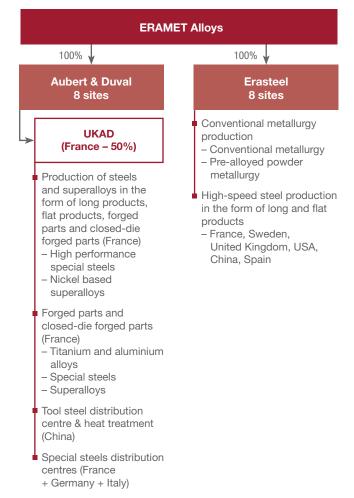
**1994:** Agreement by SIMA and Usinor to contribute assets for the founding of an intermediate holding company: CIRAM, 55% held by SIMA and 45% by Usinor: CIRAM is a group of five complementary companies: Aubert & Duval, Fortech, Tecphy, Interforge (94%) and Dembiermont.

**1997:** Dilution of SIMA's stake in SMC from 48 to 38.5% following SMC's IPO on the NASDAQ via a capital increase. Usinor sold 40% of CIRAM's capital to SIMA, which thereafter held 95%. FISID, the holding company for Tecphy and Fortech, was renamed HTM.

**1999:** SIMA's businesses were incorporated into the ERAMET group, in which the shareholders of SIMA became the largest shareholder. Erasteel and the companies contributed by S.I.M.A. (comprising the current scope of the Alloys Division) are consolidated within the ERAMET group.

For developments since that date, please refer to Section 1, at the paragraph headed "History and development of the Company".

## 2.4.5.3. Organisational structure as at 31 December 2013



### 2.4.5.4. ERAMET Alloys production

#### Erasteel

#### **Erasteel production**

Erasteel addresses the specialist market for high-speed steels of which it is the world's second-largest producer. Its competitors are general steel companies: Böhler-Uddeholm (Austria), Carpenter/Latrobe (United States), Hitachi (Japan), HeYe (China), Tiangong (China).

This specialisation gives Erasteel great control over the quality of its production and enables it to optimise its processes. Its product catalogue covers all the grades and dimensions required by customers in the sector. Erasteel is also one of the few producers with a presence in all global markets.

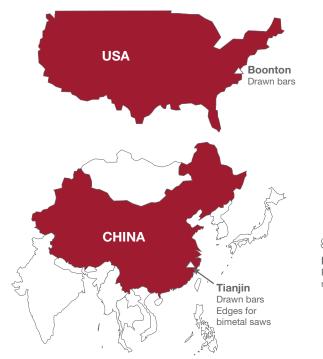
Erasteel is also the world leader in gas-atomised metal-alloy powders, and has recently doubled its capacity with the commissioning in 2011 of a new atomising tower in Sweden.

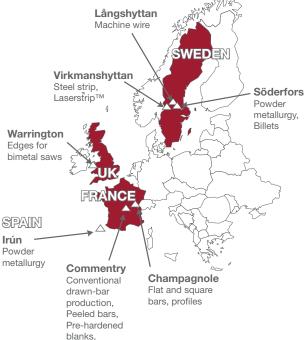
#### ACTIVITIES

2.4. ERAMET ALLOYS

#### Erasteel industrial organisation

Erasteel's industrial activity is now organised around eight production sites in France, Sweden, the United Kingdom, the US and China.





#### Aubert & Duval

Aubert & Duval has consistently pursued a strategy of focusing on speciality products that are technically advanced and intended for customers seeking high repeatability and reliability as touchstones of product quality. In line with this strategy of high value-added specialities, Aubert & Duval has a comprehensive set of industrial assets that enable it to meet stringent and highly diverse requirements.

Aubert & Duval's business activities can be broken down into four sectors:

- closed die-forging;
- Iong products;
- tooling, a sector shared with Erasteel;
- individual forged parts and other specialities.

#### Aubert & Duval's closed die-forging sector

The closed die-forging sector is Aubert & Duval's top segment in terms of sales. Aubert & Duval is the world's second largest closed die-forger and specialises in large parts and high closed die-forging power in excess of 12,000 tonnes.

Aubert & Duval is one of the few producers that closed dieforges all four types of material: steels, superalloys, aluminium and titanium. Steels and some of the superalloys are produced internally at Aubert & Duval. Aluminium alloys and titanium are bought from third-party suppliers.

Closed die-forging is carried out at the Issoire and Pamiers sites.

#### The closed die-forging sector's industrial assets

The sector has the following equipment:

- closed die-forging presses from 4.5 kt to 65 kt;
- rams from 1 to 16 tonnes;
- various finishing (grinding), heat treatment, facilities for nondestructive testing and machining (lathes, milling machines).

The Issoire site is specialised in the closed die-forging of aluminium alloys and the Pamiers site, of steels, titanium and superalloys.

#### The Interforge press

Interforge, located in Issoire, was founded in the mid-1970s around a 65,000-tonne press that is the most powerful in the western world. Interforge carries out subcontracted closed die-forging solely for its shareholders and in proportion to their shareholding (94% for Aubert & Duval and 6% for SNECMA).

The press is a key strategic advantage, as it positions the Aubert & Duval group favourably in comparison to global and particularly US competition:

Its capacity enables it to make parts that would be difficult to produce on competitors' presses, which are limited to 40,000/50,000 tonnes. Only three western producers apart from Aubert & Duval have presses with capacities over 30,000 tonnes.  Two 75,000-tonne presses exist in Russia (aluminium producer Russal and titanium producer VSMPO).

#### The Airforge press

The Airforge closed die-forging plant at Pamiers was completed in mid-2006 Built around a fully integrated 40,000 tonne press, it is particularly suited to the closed die-forging of aircraft engine parts. It has been fully operational since 2007.

#### Closed die-forging markets

In the large part market (closed die-forging power of over 12,000 tonnes), the main outlets are:

- the aerospace industry: this market is divided into two segments: engine parts (customers such as General Electric, SNECMA, Pratt & Whitney, Rolls Royce, IHI, MTU, ITP, etc.); and structure, landing-gear and equipment parts (Airbus, Boeing, Spirit, Dassault Aviation, Messier-Bugatti-Dowty, Asco, Liehberr, Goodrich, etc.);
- the gas turbine industry: turbine makers such as General Electric (Power Systems), Siemens and Alstom.

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

In recent years, Aubert & Duval has strengthened its strategic position in the closed die-forging segment through:

- an innovative research & development policy for its products: new steel and superalloy grades, expertise in large parts in line with growing equipment size (jumbo jets, high-power gas turbines, etc.);
- an innovative research & development policy for processes: closed die-forging to near-final dimensions to optimise material use, and high-speed machining;
- optimisation of industrial performance, in terms of production costs, product quality and service reliability (specialisation of production plants, launch of Lean Manufacturing).

The closed die-forging business was strengthened in 2007 by a new plant featuring a 40,000-tonne press in Pamiers, France. At that site, Aubert & Duval has automated workshops and industrial facilities with much shorter cycle times, favourably positioning it to meet the ever more complex requirements of its customers, particularly in aerospace engine parts.

Aubert & Duval is also developing its positioning along the value chain by capitalising on its upstream integration capacity (material production and closed die-forging) and growing downstream in machining functions.

#### Closed die-forging competitors

In the high-performance steel and superalloy field, Aubert & Duval's main competitors are the US groups PCC, Schultz and Ladish and the Austrian group Böhler.

For the closed die-forging of aluminium, its two main competitors are Alcoa (US) and Otto Fuchs (Germany).

Finally, for the closed die-forging of titanium, its main competitors are the VSMPO (Russia), PCC, Otto Fuchs, Schultz (United States) and ATI-Ladish groups.

#### Aubert & Duval's other business sectors

Industrial assets for other sectors include:

- arc furnaces of up to 60 tonnes, combined with ladle metallurgy tools (ladle, AOD or VOD furnaces);
- VIM furnaces of up to 20 tonnes for vacuum alloy production;
- powder metallurgy production units;
- vacuum or slag remelting furnaces with capacity up to 30 tonnes;
- rolling mill trains for making long products with diameters of 5.5 mm-200 mm;
- forging presses and machines with forces of up to 4,500 tonnes;
- machining facilities (for milling, turning, reaming or drilling);
- heat treatment equipment, accommodating parts of up to 50 tonnes or 20 metres in length, as well as surface treatment equipment (case hardening or nitriding);
- non-destructive testing equipment (sweating, ultrasound, X-ray, magnetic particle inspection, etc.).

All these tools have computerised management and supervision systems and are certified in line with the requirements of hightechnology markets (aerospace, energy, armaments, automotive, medical, etc.).

#### Long products sector

These are products with advanced characteristics and are intended for conversion or machining. Aubert & Duval target critical applications: Aerospace, medical, automotive (valves, etc.).

The number of customers is limited. Sales are characterised by regularly-recurring contracts and a high number of marketed grades, often in small quantities.

The main competitors are the Carpenter (US), Latrobe (US), Allvac (US), Corus (UK) and Böhler Üddeholm (Austria) groups, which are positioned more on relatively standardised products.

#### Tooling sector

This sector's products are large forged blocks, which may be pre-machined, and long products, usually with large sections. Target markets are the usual outlets for tool steels, namely hot working, cold working and plastic injection moulds. The market is both fragmented (a large number of customers) and regional. As a result, distribution plays an important role. The main players on the tool steels market are the Böhler Uddeholm, Thyssen, Hitachi and Daido groups.

Aubert & Duval is specifically positioned up-range, providing a high technical-consulting content. Aubert & Duval also plans to develop

this business geographically by strengthening its distribution side, particularly in China, with the tool steels distribution centre in Wuxi, commissioned in early 2006.

#### Individual forged parts and specialties sector

This area combines various related activities calling for highly specific expertise:

- Individual forged parts, made in short runs for the defence, oil drilling and shipbuilding markets;
- Cast parts: highly technical small runs and SPF tools intended for aerospace;
- Remelting alloys;
- Powder metallurgy: semi-finished products for turbine disk closed die-forging and surfacing powders.

### **2.4.5.5.** Marketing policy and products

#### Erasteel's marketing policy and products

Erasteel works in close long-term partnership with its customers. It has its own sales subsidiaries in the main Western countries that consume high-speed steels. In certain countries, Erasteel is supported by the ERAMET International sales network.

In other countries, sales are made by local agents. To support this sales network, market managers are responsible for the whole range of products within their respective remits. Erasteel possesses a comprehensive product offer to respond to the needs of its markets.

## Aubert & Duval's sales policy: close relations with major buyers

Multi-year contracts (typically 3-10 years) with aerospace principals usually specify the market shares to be ordered each year.

Shipments therefore move in step with aircraft production rates and, consequently, are dependent on the state of the aerospace market. Changes in raw material purchasing prices (cobalt, nickel, chromium, molybdenum, scrap iron, etc.) are passed on in selling prices.

Special-order single-part tooling (as is the case for closed dieforging) is usually financed by customers. This situation is a barrier to entry for new competitors once the initial contract has been awarded.

A high level of integration is a key requirement in this business segment, starting with part design in cooperation with the major buyers' research departments; Aubert & Duval's sales engineers work closely with those departments.

## 2.4.5.6. ERAMET Alloys research and development

The Alloys Division carries out extensive research and development. This mostly takes place at its two research centres in Söderfors (Sweden) and Les Ancizes (France). Both centres are also supported by ERAMET Research.

The Alloys Division ploughs back some 4% of its value added into R&D. Work is conducted on both process improvement and the development of new alloys and products.

## 2.4.5.7. ERAMET Alloys' return on capital employed

ROCE: Current operating profit (loss) restated for provisions or reversals on fair-value tests / Capital employed at 31 December of year y-1 (Consolidated equity capital plus financial debt, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets).

#### Alloys ROCE (before tax)

%	2009 (1)	2010 (1)	<b>2011</b> <sup>(1)</sup>	2012 <sup>(2)</sup>	2013
Alloys	(14)	7	3	(0.6)	(3.7)

(1) Not restated following the application of revised standard IAS 19  $\,$ 

(2) Restated for retroactive application of revised standard IAS 19

#### A major development in progress

ERAMET Alloys has set itself a profitability target for end 2015 at an annual rate of:

- Operating margin: ROC/Sales: 10%;
- Return on capital employed: ROCE: 15%

## 2.5. ORGANISATIONAL STRUCTURE OF ERAMET SA/ ERAMET HOLDING COMPANY

ERAMET SA is the consolidating parent company, grouping together operationally two main functions:

- a pure holding company called ERAMET Holding bringing together the various support departments such as General Management, the Administration & Financial Department, the Human Resources Department, the Communications and Sustainable Development Department, the Legal Department, and the Purchasing Department; and
- a section of the Nickel Division (General Management and the Sales and Marketing Department).

The costs of these various departments are re-invoiced to the three Divisions under management fee contracts. The 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 of the parent company. The main subsidiaries concerned are:

 ERAMET Research: ERAMET's research centre responsible for research and development;

- ERAMET Ingénierie: a project and technology company;
- ERAMET International: a company that centralises the ERAMET sales network for certain activities of the three Divisions.
   ERAMET International has subsidiaries and branches across the globe. ERAMET International is generally paid for its work under agency agreements.
- Metal Securities: the Group's treasury management company which pools surplus cash and short-term funding requirements of the Group as a whole.
- Metal Currencies: the Group's foreign exchange management company, which carries out the foreign exchange hedging for the Group as a whole;
- ERAS: a reinsurance company.

At consolidated level, the ERAMET Holding section thus encompasses the holding role for ERAMET SA and its consolidated subsidiaries (Metal Securities, Metal Currencies and ERAS).

## **2.6.** ACTIVITY OF THE DIVISIONS IN 2013

## 2.6.1. ERAMET Nickel in 2013 \_\_\_\_\_

### **2.6.1.1.** Key figures

(to IFRS, € million)	2013	2012 (1)
Sales	704	898
Current operating profit (loss)	(222)	(38)
Net cash generated by operating activities	(116)	42
Capital employed	824	778
Industrial capital expenditure	172	146
Average workforce	3,015	3,045

(1) Restated for retroactive application of revised standard IAS 19.

### **2.6.1.2.** Comments

ERAMET group sales fell 22% compared with 2012, to €704 million. ERAMET Nickel's production was 53,000 tonnes in 2013, marking a slight retreat in line with market trends. Deliveries were closely similar to production, at 52,400 tonnes. ERAMET Manganese returned a current operating loss of -€222 million in 2013, compared with -€38 million in 2012.

These results reflect difficult conditions on the nickel market:

Despite 5% growth in world stainless-steel production, the nickel market was impacted by the slump in prices, particularly towards the year-end. At USD6.8/lb, LME nickel prices in 2013 were 14% lower than in 2012, when they were at USD8.0/lb. Nickel prices continued to fall in the second half of 2013, averaging USD6.3/lb;

- This further fall in nickel prices results from the persistently and excessively high growth in production attributable to China at all levels of the nickel and stainless steel value chain: Chinese nickel pig iron production using ore imported from Indonesia and the Philippines virtually trebled within three years, now reaching approximately a quarter of the world supply;
- Nickel ore prices for sales in China have roughly halved within one year, considerably cutting the production cost of Chinese nickel pig iron;
- This development materialised, further accentuating the rise in nickel stocks, already in surplus, to very high levels, particularly on the LME;
- In addition, the ban by Indonesia on exporting unprocessed ore (announced in 2009 for implementation in 2014) triggered extensive stockpiling in China, artificially inflating exports from Indonesia and the Philippines. The coming into force in January 2014 of this ban on exporting unprocessed ore from Indonesia is undoubtedly good news and will support nickel prices in the long run.

In view of the worsening of the nickel market in 2013 and the short-term nickel-price prospects, ERAMET, in agreement with

## 2.6.2. ERAMET Manganese in 2013 \_\_\_\_\_

its partners Mitsubishi Corp. and Pt Antam, viewed conditions as unfavourable to an investment decision in 2014 concerning the Weda Bay project.

- The very depressed nickel prices precluded satisfactory financing of the project. Exchanges are continuing with the Indonesian Government, with the aim of clarifying certain points in the regulatory and tax framework which would apply to this project.
- This postponement of the project led to the ERAMET group recognising at 31 December 2013 €224 million in impairment (as ERAMET's share) of investment in assets for the Weda Bay project.
- The postponement decision in no way reflects on either the project's quality, grounded in one of the most sizeable worldclass nickel deposits, or the performance of the hydrometallurgy process successfully developed by the ERAMET teams to work this type of deposit.

Lastly, as concerns Le Nickel-SLN, new plans to improve productivity and reduce costs have been devised for 2014. Global discussions have also been undertaken on major cutbacks to ERAMET Nickel's overhead expenses.

### **2.6.2.1.** Key figures

(to IFRS, € million)	2013	<b>2012</b> <sup>(1)</sup>
Sales	1,562	1,560
Current operating profit (loss)	218	240
Net cash generated by operating activities	314	172
Capital employed	1,406	1,400
Industrial capital expenditure	346	399
Average workforce	5,813	6,293

(1) Restated for retroactive application of revised standard IAS 19.

### **2.6.2.2.** Comments

ERAMET Manganese's results remained very firm in 2013. ERAMET Manganese's sales were stable at €1,562 million. Group current operating profit remained firm at €218 million, compared with €240 million in 2012.

World steel production rose by more than 3% in 2013, reflecting slower production outside China and a 7% rise in China. Manganese ore demand grew faster, through the need to re-stock after the low stocking levels reached at end 2012.

Spot CRU prices CIF China for high-grade manganese ore grew an average 10% in 2013 compared with 2012, buoyed by sizeable

steel production in China and by low stock levels at end 2012. The two half-years were nevertheless contrasting, with prices weakening gradually in the second half to close the year at some USD5.1/dmtu.

ERAMET Manganese continued its policy of renewals and capacity extensions at existing sites, as well as strengthening its positioning in high-value-added products:

New production records were achieved in the two chief areas of ERAMET Manganese's leadership: high-grade manganese ore and refined manganese alloys. Ore and sinter production reached 3.7 million tonnes (increasing 22%) in Gabon. External ore deliveries grew 29%.

The manganese chemical activity, in which ERAMET Manganese

In Gabon, the research and development work in Gabon on the

Maboumine project (niobium, rare-earth metals, tantalum and

retreated slightly, although exceeding 13%.

uranium) made for significant progress in 2013.

is among the world leaders, maintained sales, at €165 million,

closely similar to those of 2012 and its current operating margin

Manganese alloy production increased by close upon 2% to 746,000 tonnes, with record production of refined alloys (366,000 tonnes), particularly thanks to the commissioning of the New Guilin production site in China. Manganese alloy prices were impacted by overcapacity on the Chinese market. Also in 2013, ERAMET Manganese completed the concentration of all its Chinese production of manganese alloy at the new Guilin site, which replaces two older, less efficient sites that did not produce refined alloys.

## 2.6.3. ERAMET Alloys in 2013 \_\_\_\_\_

### **2.6.3.1.** Key figures

(to IFRS, € million)	2013	<b>2012</b> <sup>(1)</sup>
Sales	904	997
Current operating profit (loss)	4	(5)
Net cash generated by operating activities	34	22
Capital employed	760	787
Industrial capital expenditure	64	84
Average workforce	4,611	4,638

(1) Restated for retroactive application of revised standard IAS 19.

### **2.6.3.2.** Comments

ERAMET Alloys sales fell 9% in 2013 from 2012.

Thanks to sizeable productivity efforts in 2013 ( $\in$ 31 million), a current operating profit was earned of  $\in$ 4 million, an improvement on the - $\in$ 5 million in 2012. The European economic climate nevertheless remains high unfavourable to certain ERAMET Alloys activities, and is continuing to depress its profitability.

ERAMET Alloys performance in 2013 showed considerable contrasts between its different activities:

 Sales to the aerospace industry rose slightly (by 2%) despite the deferral of certain new-aircraft programmes.

- Sales to the tools sector slumped 27%, remaining mainly hampered by the crisis in the European automotive industry. Sales for energy-generating equipment are also down by 22%.
- In view of the overcapacity of high-speed steel production plant set up in recent years, Erasteel's repositioning is under consideration, with emphasis on its strengths in powder metallurgy and processing.

## 2.7. PRODUCTION SITES, PLANT AND EQUIPMENT

Generally speaking, the Group owns its production plant and the equipment therein. Some large equipment items are financeleased (the 40,000-tonne press in the Alloys Division, the Tiébaghi washing unit and the mining equipment in the Nickel Division) and are restated in the consolidated financial statements. A breakdown of property, plant and equipment by Division is set out below. Close upon 80% of the value of these non-current assets belongs to some ten industrial sites:

(€ million)	Gross value	%	Net value	%
Société Le Nickel -SLN (New Caledonia)	1,673	30.26%	659	25.98%
Other	141		42	
Nickel Division	1,814	32.81%	701	27.64%
Comilog S.A. (Gabon)	808	14.62%	518	20.42%
ERAMET Norway A/S (Norway)	368	6.66%	147	5.81%
Grande Côte Opérations S.A. (Senegal) *	247	4.47%	243	9.58%
Setrag (Gabon)	192	3.47%	138	5.43%
GCMC (USA)	152	2.75%	39	1.55%
ERAMET Marietta Inc. (USA)	141	2.55%	42	1.67%
Erachem Comilog SPRL (Belgium)	125	2.26%	12	0.48%
Erachem Comilog Inc. (USA)	113	2.04%	32	1.28%
Other	300		166	
Manganese Division	2,446	44.25%	1,338	52.77%
Aubert & Duval (France)	815	14.74%	405	15.97%
Erasteel Kloster AB (Sweden)	143	2.59%	15	0.61%
Erasteel SAS (France)	131	2.37%	8	0.31%
Other	149		56	
Alloys Division	1,238	22.40%	484	19.08%
Holding Company Division (France)	30		13	
TOTAL	5,528		2,536	

\* 50% ERAMET's share.

## 2.8. RESEARCH AND DEVELOPMENT/RESERVES AND RESOURCES

### 2.8.1. Research and development: R&D spans the entire value chain for metals, from the mine to the products \_\_\_\_\_\_

1) The ERAMET group performs its R&D activities throughout the metal's value chain from mine to products, including recycling. This value chain covers prospecting, mining, extractive metallurgy, process metallurgy (primary processing, remelting processes, powder metallurgy), conversion metallurgy with free forging and closed die-forging. Metals recycling is factored into all stages in this value chain. This positioning provides a strategic opportunity for the ERAMET group to acquire a comprehensive top-down view, including each of the stages in product and process value creation.

More specifically, ERAMET is actively engaged in R&D seeking to generate value from a large number of the elementary metals in the periodic classification table with the following metals, in the order of their atomic numbers: aluminium, titanium, vanadium, manganese, iron, cobalt, nickel, copper, zinc, zirconium, molybdenum, tungsten and rhenium. The Group's major strategic projects also lead it to conduct research into a wide range of complimentary substances such as the following, in the order of the periodic-table classification: lithium, phosphorus, potassium, scandium, yttrium, niobium, the lanthanide series including rare-earth metals such as lanthanum, cerium, praseodymium, neodymium, samarium, europium, dysprosium and the actinide series with uranium.

ERAMET also conducts numerous R&D projects in the fields of superalloys, high-performance steel, aluminium alloys and titanium alloys, and also in powder metallurgy.

This multi-metal and multi-alloy expertise which, in addition, covers the whole value chain, contributes to setting ERAMET's R&D in a unique position.

2) The first field in the ERAMET group's prime expertise is firmly rooted upstream among the major disciplines of <u>extractive</u> <u>metallurgy</u>, namely mineralogy, ore processing, hydrometallurgy and pyrometallurgy.

The second field in the ERAMET group's prime expertise is <u>process metallurgy</u>, covering innovation in new alloy grades and all the processes associated with process metallurgy. Within this field, increasing emphasis is given to powder metallurgy the new developments of which are relevant in areas as critical as aerospace, particularly with the fast-expanding additive manufacture.

The ERAMET group's third field of prime expertise is the conversion of alloys by <u>closed die-forging</u> to produce parts

with dimensions close to the finished products, particularly for the aerospace, nuclear and defence markets.

Lastly the fourth field of prime expertise is <u>manganese chemistry</u> and <u>metal recycling activities</u>.

Digital modelling, applied to areas such as thermodynamics, fluid mechanics, dynamic simulation of reactors, chemical engineering and physical metallurgy, contributes an essential extra ingredient to developments and to process and product optimisation.

3) The Group's R&D is organised to cater for the operational requirements of each of these centres of expertise.

For extractive metallurgy, a dedicated research centre (a whollyowned subsidiary of ERAMET since 2003) is based in Trappes (Yvelines, France). It changed its name to ERAMET Research in 2008. The centre employs some 190 persons, including 150 research scientists, engineers and technicians. in 2013, the activity of the R&D centre for the Group's own purposes reached €26.4 million, having more than trebled since 2006. The R&D centre possesses ultra-high-performance observation tools, such as France's first microscope equipped with the QEMSCAN ore-analysis software, advanced laboratory tools and pilot installations some of which are semi-industrial in scale (rotary furnaces, high- and low-impedance electric furnaces of approximately 1 MW), capable of operating continuously for several weeks.

The technical studies and investigations department (DETI) of Société Le Nickel in New Caledonia is also very active in this area, employing some 30 people.

For process metallurgy (air processing, vacuum processing and remelting) a major centre of expertise is located at Les Ancizes (Puy-de-Dôme) and an R&D team working on closed die-forging is based at Pamiers (Ariège).

Powder metallurgy has two distinct processing channels, each separately organised:

- Atomising, employing 11 people in Sweden, at Söderfors. The unit concerned is PEARL (Powder Expertise Analysis and Research Laboratory);
- Hydrogen reduction processing, with the 15-person Eurotungstène team at Grenoble.

Lastly, manganese chemistry and recycling engage 16 people in R&D activities, mainly split between Baltimore (USA), Tertre (Belgium), Chongzuo (China) and Valdi (France).

In all, the ERAMET group employs some 315 persons wholly dedicated to R&D, not including the industrialisation and process-monitoring teams deployed at all industrial sites. Within the Divisions, these teams coordinate testing and the essential industrialisation phases of the Group's research projects. A total of 1 to 2% of the Divisions' sales is dedicated to R&D.

En 2010, to improve the effectiveness and efficiency of its R&D activities, ERAMET created the Research, Innovation, Engineering and Purchases Department, designed to unify Group-wide the actions to develop these four significant areas of its activity. In 2011, the newly-formed Science and Innovation Department was attached to it.

4) ERAMET targets its research and development efforts in order to meet the needs of its industrial clients, improve its competitiveness, offer new services and identify new development opportunities. Environmental concerns are continually present during the development of new processes, being aimed at reducing the processes' environmental footprint.

A critical advantage in the Group's activities, from mining to products, is effective research. Designed to meet or even work ahead of customers' expectations, the research and development programmes enable the Group to strengthen its positions, in even the most competitive markets.

These programmes are implemented within the Divisions or at the ERAMET Research centre. To ensure that their results are wholly relevant, the ERAMET Research teams work in close collaboration with those responsible for development at the various units, who in turn are in direct contact with the operational teams. This makes for considerable efficiency along the entire chain, from defining programmes to introducing innovations, whether involving products, the processes themselves or productivity.

In 2013, the major research themes were as follows:

- For the Nickel Division: finalising work on the Weda Bay process with several pilot-run campaigns demonstrating the stability of the processing schemes selected (including a full-scale study of the cooling process at the leaching stage), improving productivity of rotary troops and the search for new, complementary raw materials for the Bessemer converters which produce nickel matte at Société Le Nickel-SLN in New Caledonia.
- For the Manganese Division: modelling and optimising the silicomanganese and ferromanganese production processes, research to prolong the working life of the manganese hydrometallurgy furnaces, developing an ore dephosphorising process, increasing capacity at the alloy refining stage, research to increase the capacity to remove arsenic in the process for treating and recycling the Valdi catalysts, and pilot testing of the new metallic-manganese electrolytic process, for the start-up to the Moanda Metallurgy Complex in Gabon. A highly significant volume of R&D was devoted to developing the Pyro claw treatment process for the Mabounié deposit in Gabon, designed to develop niobium and rare-earth extraction.
- For the Alloys Division: developing new products, with new aerospace parts targeting both the market for engines and aeronautical structures, turning to account new patented alloys or superalloys such as AD730. Alongside its product developments, the Alloys Division conducted process

optimisation seeking to reduce costs with a comprehensive powder-metallurgy exercise to target both the oil and gas prospecting markets and the fast-expanding additive manufacturing market. Lastly, for the refrigeration market, development of the process for substituting metallic powders with magnetic and heat-transfer properties for heat-transferring fluids was continued in a partnership with Cooltech.

- For Group projects: evaluation of several processes for extracting lithium from brine contained in different *salars* (salt lakes) in South America, and a production outline proposal for high-purity salt.
- 5) The ERAMET group's R&D is enriched by continuous contact with the academic world and by partnerships with research institutes and other major industrial firms.

In France, in the area of extractive metallurgy, ERAMET has standing partnerships with the Paris postgraduate Institutes Chimie ParisTech, Mines ParisTech and *École centrale*, as well as the Advanced Geology School or the Mining Institute, both at Nancy.

For developing the process for the development of pyrochlores in the Mabounié deposit, ERAMET works in partnership with AREVA (France), GTK (Geologian Tutkimuskeskus, Finland), Hazen Research (USA), Solvay (Belgium), the South African processing research Institute Mintek or the Australian Institutes ANSTO and CSIRO (of which the French counterparts are the CEA and the CNRS), as well as the Ian Wark Institute (Australia) and SGS (Canada).

ERAMET also collaborates with Technip and Ifremer in prospecting studies on marine mineral resources.

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

In France, in the field of alloys, ERAMET is in close partnership with academic research centres contributing specific skills in metal materials (design, structure, thermomechanical treatments, production and forming), being associated with the following higher engineering institutes: Mines Paris Tech, *École centrale de Paris*, the Mining Institutes at Nancy, Saint-Étienne and Albi, IFMA (Clermont-Ferrand), ENSMA (Poitiers). Most of these partnerships take the form of commitments to theses for developing and sharing expertise and innovative techniques in metallurgy, mechanics and process modelling. For the development of new alloys and of products incorporating them, ERAMET is also present in projects initiated within Competitive Clusters (ViaMéca, Aerospace Valley, the Nuclear Cluster in Burgundy) and is in partnership with the M2P technology research institute (Metz, Besançon, Troyes).

Abroad, in the alloys field, the Group continued its partnership with the University of Strathclyde in Scotland, maintaining an active and continuous presence at the University's research and development centre (the AFRC) on the forming and forging of parts for the aerospace industry. A collaborative venture has also been undertaken with the University of Cambridge for developing new steels. The research programmes also continued with the CEIT (the technical studies and investigations centre), a semi-public body in the Spanish Basque Province specialising in powder metallurgy and materials.

#### Conclusion

The Group's R&D spans the entire value chain for its businesses, from the mine to the products. The R&D organisation and governance focus on the creation of value for the Group, striking a balance between the short-term themes of progress for the industrial sites and the marketing of new products, and the longer-term outlook through innovative projects for developing new metals or new deposits. The Group's R&D is therefore an essential component in the deployment of its long-term strategy, while also meeting the operational challenges in the shorter term.

## 2.8.2. Mineral resources and reserves \_

#### 2.8.2.1. Overview

#### Location

Through its subsidiaries, Le Nickel-SLN in New Caledonia and Comilog S.A. in Gabon, the Group operates nickel and manganese deposits respectively. With the development of the Weda Bay Nickel project in Indonesia, ERAMET has acquired the means to ultimately double its nickel production.

In New Caledonia, Le Nickel-SLN mines opencast nickel oxide deposits formed by superficial weathering of ultrabasic rocks. Mining and processing are currently concentrated in the saprolitic part of the weathering profile.

In Gabon, Comilog S.A. mines opencast a rich tabular manganese deposit, located under thin caprock and formed by superficial weathering of volcano-sedimentary rocks.

In Indonesia, the Weda Bay project is progressing with an optimisation phase following completion of the feasibility study conducted during 2013.

In October 2011, ERAMET created a joint venture with the Australian company Mineral Deposits Limited (MDL). On completion of the transaction, ERAMET now holds 50% of TiZir, the company finalising the Grande Côte Heavy Mineral Sands project in Senegal. 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, leucoxene) and zircons. These deposits can be exploited by dredging. After a favourable feasibility study, development of the Grande Côte mine began in the third quarter of 2011. Production is due to start in 2014.

#### Legal claims

The reserves and resources are embodied in mining-claim instruments over which the Group possesses long-term rights: these mainly consist of perpetual concessions foreshortened to the expiry date of 31 December 2048 (Art. 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 periods of 25 years in new Caledonia, a renewable 75-year concession in Gabon and a Contract of Work for a renewable 30-year term in Indonesia.

The mineral deposits at the Grande Côte project lie within a mining concession granted to MDL by the Senegalese Sate in September 2007 for a renewable 25-year term.

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 have been drawn up for Le Nickel-SLN, Weda Bay Nickel and Comilog S.A. by professional full-time Group employees using conventional or geostatistical calculation methods.

Geological reconnaissance, resource and reserve estimation, exploitation planning and mining are supplemented by over 40 years' industrial-scale 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 and when deposits are explored and/or exploited, estimates may move up or down in line with improvements in knowledge of the mass.

#### Estimation methodology

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

The published figures are validated internally by an advisory board and by "Competent Persons" as defined by the JORC code.

The resource and reserve estimates for the heavy-mineral sands project were made by "Competent Persons" as understood by the JORC Code, provided by AMC Consultant, a company independent from MDL and ERAMET.

For Pt Weda Bay Nickel (laterites and saprolites), Comilog S.A. (manganese ore) and Société Le Nickel-SLN (saprolites for use at the Doniambo plant), external audits in 2009, 2011 and 2013 respectively, have certified that the resources and reserves have

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 guaranteeing 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 higher than cut-off grade;
- it is not isolated.

The mass defined by the drillings selected on the foregoing basis is included in mineral resources if its positioning and geometric and chemical characteristics are such that it is reasonably likely to be economically viable.

#### Recoverable mineral resources

Recoverable resources are mineral resources into which mining recovery and ore dressing were factored 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 metallurgical or chemical processing plant. The mining allowances for dilution and losses, and those relating to the ore dressing, are established on the basis of mining summaries comparing production to estimates of volumes already extracted.

Recoverable resources are included in mineral resources.

#### **Exploration results**

Exploration results are given on the same basis as resources.

#### Reserves

Reserve estimates are based on medium to 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 limits, etc.) and constraints on current and foreseeable technical mining and treatment processes.

Reserves are estimated on basis of a complete mining project. No assurance can be given that the whole of the published reserves will be recovered, since market fluctuations and technical developments may affect the economic viability of recovering certain deposits or parts of deposits.

Reserves are included in mineral resources.

#### **Presentation of estimates**

Estimates for mineral resources and for recoverable resources and reserves are given for the mining deposit as a whole. Results may also be compared to production levels, giving an indication of the remaining mine life.

#### Definitions

#### Definitions of 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 that it is reasonably likely that mining will be economically viable. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

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

An **Indicated Mineral Resource** is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content 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 widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

A **Measured Mineral Resource** is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content 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 to confirm geological continuity and/or grade.

#### **Definitions of reserves**

An **Ore Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. Reserves are estimated on the basis of a preliminary or actual feasibility study (a mining project in the broader sense), which takes account of any technical factors (shape of mine, dilution and losses depending on the mining method, yield of facilities), economic, marketing, legal, environmental, labour and governmental factors that exist or can be foreseen at the time of the estimate. The preliminary or actual feasibility study demonstrates at the time of reporting that extraction is viable. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proven Ore Reserves.

A **Probable Ore Reserve** is the economically mineable part of an Indicated reserve, and in some circumstances, a Measured Mineral Resource, whereas a **Proven Ore Reserve** is the economically mineable part of a Measured Mineral Resource.

#### **Exploration results**

**Exploration results** correspond to the same commercially valuable materials as assessed for resources and reserves. The prospecting carried out suggests that an ore zone may be found, but available reconnaissance information is weak.

### **2.8.2.2.** Comilog S.A. reserves and resources

#### **Mineral resources**

The table below sets out the estimates for the mineral resources of Comilog S.A. at 1 January 2014.

#### Bangombé deposit

The estimate for the currently-mined Bangombé deposit was re-estimated at 1 January 2014. The estimate was made by granulometric fractions using the following granulometry breakdown:

- rocky ore corresponds to the +5 mm fraction of the drilling samples;
- "fines" correspond to the 1-5 mm fraction of the drilling samples.

The figures for resources at 1 January 2014 are based on the following parameters:

- the new prospecting findings made since the last estimate, including 440 new drillings;
- a 30% manganese (Mn) cut-off grade (on the rock-ore granulometric fraction);
- the configuration of the mined areas updated at end December 2013.

The criteria for classification of resources remain the same as those used in 2011 following the audit of resources and reserves by the Melabar Geoconsulting firm.

#### Okouma deposit

The Okouma deposit was not re-estimated at 1 January 2014. While awaiting inclusion of the latest prospecting findings, published resources remain identical to those published at 1 January 2013.

On a similar basis to the Bangombé deposit, the resources are established as follows:

- in granulometric fractions according to the same granulometry breakdown:
- rocky ore corresponds to the +5mm fraction of the drilling samples,
- "fines" correspond to the 1-5mm fraction of the drilling samples;
- based on a 30% manganese (Mn) cut-off grade on the rock-ore granulometric fraction.

#### Bafoula, Massengo and Yéyé deposits

Comilog SA's mining concession also covers other plateaux in the Moanda region: Bafoula, Massengo and Yéyé.

Reconnaissance work carried out on Bafoula and Massengo indicates the existence of ore deposits. The quantity and quality of available information is sufficient to estimate inferred resources. For these plateaux, the resources remain as announced on 1 January 2013.

On the other hand, even though the reconnaissance work performed on Yéyé indicates the existence of ore bodies, the quantity and quality of available information are not sufficient to estimate inferred resources.

## General comments for Bangombé, Okouma, Bafoula and Massengo

Recorded tonnages and grades characterise the entire ore layer (with no vertical selection).

Tonnages of manganese content are calculated with humidities of:

- 9% for rock ores;
- 12% for fines.

The figures are stated in millions of Dry Metric Ton Units (Mn DMTU million, where 1 DMTU = 10 kg of manganese).

#### Moulili deposit

The Moulili river bed was filled with a manganese ore deposit of which only the fine fraction is currently taken into account. This fraction corresponds to the 1-10 mm granulometry breakdown of the drilling samples.

From upstream to downstream, the deposit was divided into sections, of which two have been surveyed: MT1 and MT3.

The MT1 section is being mined. At 1 January 2014, the resources update took account of the following:

- the estimate prepared from drillings performed in 2006, and updated using the topographical data gathered at end 2012. The level of knowledge of the MT1 section warranted classification of the resources as measured;
- the configuration of the mined areas updated at end December 2013;
- without applying a cut-off grade;
- with a specific gravity of 2.06 corresponding to the findings of the studies conducted in 2012.

For the MT3 section, the resources update took account of the following:

- the estimate prepared from drillings performed in 2010, and updated using the new topographical data gathered at end 2012. The level of knowledge of the MT3 section warranted classification of the resources as indicated;
- the configuration of the mined areas updated at end December 2013, with a start to mining of the downstream portion of the section;
- without applying a cut-off grade;
- with a specific gravity of 1.88 corresponding to the value arising from the studies conducted in 2012.

		Measure	ed		Indicate	d		Inferred	Ł		Total	
Deposit	kt	% Mn	dmtu.10 <sup>6</sup>	kt	% Mn	dmtu.10 <sup>6</sup>	kt	% Mn	dmtu.10 <sup>6</sup>	kt	% Mn	dmtu. 10 <sup>6</sup>
Rock ore >5 mm												
Bangombé	39,309	44.7	1,757	29,325	46.5	1,363	813	47.2	38	69,447	45.5	3,158
Okouma	28,900	48.3	1,390	52,400	46.3	2,430				81,300	47.0	3,820
Bafoula							23,000	34.0	780	23,000	34.0	780
Massengo							12,000	40.0	480	12,000	40.0	480
TOTAL	68,209	46.2	3,147	81,725	46.4	3,793	35,813	36.3	1,298	185,747	44.4	8,238
Fines 1-5 mm												
Bangombé	14,106	41.1	579	12,321	42.7	526	266	44.0	12	26,693	41.9	1,117
Okouma	9,300	45.3	420	17,400	43.5	760				26,700	44.1	1,180
Moulili	3,518	45.3	159	2,620	39.6	104				6,138	42.9	263
Bafoula							15,000	32.4	490	15,000	32.4	490
Massengo							7,900	38.1	300	7,900	38.1	300
TOTAL	26,924	43.1	1,158	32,341	42.9	1,390	23,166	34.5	802	82,431	40.6	3,350

#### Mineral resources of manganese rock ore and fines at 1 January 2014

#### **Recoverable resources and reserves**

The table below sets out the estimates for the recoverable resources and reserves at 1 January 2014 of Comilog S.A. broken down among the following deposits:

#### Bangombé deposit

Recoverable resources are evaluated on the following bases:

- a 30% manganese (Mn) cut-off grade (on the rock-ore granulometric fraction);
- an ore-bearing thickness greater than or equal to 2m;
- mining and technical factors that allow mineral resources to be converted into recoverable resources or reserves. These calculations were updated by incorporating mining-summary data for 2013;
- commercial specifications. At 1 January 2014, the commercial specifications for rocky ores changed:
- the BIOG grade was deleted,
- the MMR grade was deleted and replaced by the MMA grade, denoting ores with higher manganese contents,
- the MMD grade remains.

Thus, only the MMA and MMD grades (for rock ore) are included in recoverable resources and reserves;

 zone boundaries frozen because of public-easement constraints (aerodrome, and trunk road).

The reserves are included in recoverable resources. Recoverable resources covered by a mining study have been converted into reserves.

Thus, the recoverable resources located on the flanks of the Bangombé plateau (referred-to as edges) have not been converted into reserves. Studies are continuing with the aim of converting these recoverable resources into reserves.

#### Okouma deposit

Recoverable resources for the Okouma deposit were estimated using the same approach as for the Bangombé plateau. However, given the uncertainties regarding the mining-recovery and oreprocessing factors, only indicated recoverable resources have been published for the Okouma deposit.

While awaiting completion of the mining studies, no reserve has been announced for this deposit.

#### Bafoula and Massengo deposits

In view of the uncertainties regarding the mining-recovery and ore-processing factors likely to apply to inferred mineral resources, no recoverable resources have been calculated for the ore deposits at Bafoula and Massengo.

#### Moulili deposit

For the MT1 section, mined since 2010, the figures for recoverable resources are established on the basis of mining and technical factors drawn from production summaries. In 2013, mining surveys, with a particular focus on the perimeter to the rejected quarry, were consolidated and supplemented. This work warranted conversion of the resources into reserves.

For the MT3 section, given the current uncertainties on the mining method and recovery factors, the corresponding mineral resources have not to date been converted into recoverable resources or reserves.

#### Reminder - Heap

At end 2010, the heap, a stock of ore consisting of surplus fines that were not marketed in the past, was fully exploited. The heap therefore does not appear in recoverable resources and reserves published at 1 January 2014.

#### Manganese ore recoverable resources and reserves at 1 January 2014 (dmtu million)

Deposit		Reco			
	Granularity	Measured	Indicated	Inferred	Total
Bangombé	> 8 mm	1,269	803		2,072
Okouma	> 8 mm		2,710		2,710
TOTAL ROCK ORE		1,269	3,513		4,782
Bangombé		457	339		796
Okouma	1-8 mm		1,200		1,200
Moulili	1-10 mm	154			154
TOTAL FINES		611	1,539		2,150

			2013		
Deposit	Granularity	Proven	Probable	Total	shipments
Bangombé	> 8 mm	1,178	100	1,278	
TOTAL ROCK ORE		1,178	100	1,278	97
Bangombé	1-8 mm	427	34	461	
Moulili	1-10 mm	151		151	
TOTAL FINES		578	34	612	63

The production figures indicated in the above table correspond to ore shipments made in 2013, including CIM production: sinter + beneficiated HM fines.

An external audit was carried out in 2011 by Melabar GeoConsulting, which certified that the resources and reserves estimated by Société Le Nickel-SLN were evaluated satisfactorily in accordance with the recommendations of the JORC code.

### **2.8.2.3.** Le Nickel-SLN's reserves and resources

#### Saprolite reserves and resources for pyrometallurgy

An external audit was conducted in early 2013 by Sigma Blue Pty. Ltd., certifying that the estimates for the resources and reserves of saprolitic nickel-bearing ore to be supplied to the Le Nickel pyrometallurgy plant at Doniambo are free from material misstatement and were evaluated in a satisfactory manner overall, in compliance with the JORC code recommendations.

#### Mineral resources

Mineral resources have been grouped together according to their classification, using the criteria defined by the SLN geologists 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 saprolite and not to the saprolitic column as a whole.

For the most part, mineral resources are estimated by modelling 3-D blocks using linear geostatistical methods for all ore deposits, and non-linear, multivariate methods for the Tiébaghi deposit which is developed according to ore quality.

Ore tonnages are indicated in millions of dry tonnes and humidity contents, observed in current production or estimated, range from 22 to 45% according to mass.

#### Changes in mineral resources from 2012 to 2013

		2013			2012		
Mineral Resources	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni	
Measured	29.5	2.41	711	26.8	2.41	646	
Indicated	77.8	2.42	1,884	66.0	2.48	1,638	
Inferred	69.5	2.44	1,694	63.5	2.49	1,581	
TOTAL	176.8	2.43	4,289	156.0	2.47	3,865	

These figures were drawn up with:

- a cut-off grade of 1.8-2.2% nickel for the Tiébaghi and Népoui Kopéto centres with mineralurgical processing of run-of-mine;
- a cut-off grade of 1.8-2.4% nickel for all sites with conventional treatment.

2013 featured the following resource-related events:

- Thio mining centre: Little work done to update the geological models. This has resulted in an increase in indicated resources on outlying mass (RGT). Ore humidity was adjusted in line with the mining summaries produced.
- Kouaoua mining centre: Geological models were updated, with little updating of estimates. A decrease in resources following amendment of mining factors, although reserves are unchanged.
- Népoui mining centre: Geological models and mining projects were updated with reserves increased at Kopéto B1 and an increase in mineral resources for the deposit as a whole. Reconnaissance work will continue henceforth on the Kopéto East deposit.
- Tiébaghi Centre: The main differences from 2013 are the increase in mineral resources on the outlying ore bodies and the precision of the edges of the Alpha mass.
- Tributer mines: the studies of the tributer mining sites have led to reserves being increased.

• Away from mining centres: Discovery of significant resources at the Poro and Tontouta sites.

#### **Exploration results**

The exploration results also correspond to the weathered saprolites phase. At 1 January 2014, they are estimated at 674 kt Ni. The difference from the 2012 figures, of some +20 kt Ni, is explained by the prospecting in 2013 of targets in the Dothio, Kouakoué Ouinné, Kombwi N'Goye, Poro, Kopéto East regions, and in the peripheral deposits at Tiébaghi. Efforts will continue in the coming years to bring these deposits up to mineral resources stage.

#### Recoverable resources and reserves

The table below gives the recoverable resources and reserves of saprolites for the Doniambo pyrometallurgy plant recorded in 2013 and published at 1 January 2014; those published in 2012 are shown in italics.

These figures come from the above-mentioned mineral resources and factor in the following:

- conventional treatment of run-of-mine similar to current practices on Le Nickel-SLN and/or subcontracted sites: approximately 80 mm screening with or without recovery of part of coarser fractions depending on mineralisation;
- mineralurgical processing at Népoui Kopéto and Tiébaghi;
- optimised mining projects in the case of reserves.

		2013			2012		
Resources recoverable	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni	
Measured	18.4	2.62	483	23.0	2.65	610	
Indicated	51.1	2.56	1,305	42.8	2.59	1,109	
Inferred	45.7	2.53	1,155	41.2	2.56	1,055	
TOTAL	115.2	2.55	2.943	107.0	2.59	2.774	

#### Changes in Recoverable Resources and Reserves from 2012 to 2013

	2013			2012		
Reserves	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni
Proven	13.5	2.69	362	14.4	2.72	392
Probable	23.5	2.62	616	22.1	2.67	590
TOTAL	37.0	2.65	978	36.5	2.69	982

Ore tonnages are given in millions of dry tonnes and metal tonnages in thousands of tonnes of nickel contained in the ores.

Recoverable resources and reserves of ore intended for mineralogical processing are estimated as washery concentrate (all for Népoui-Kopéto, 1.8-2.8% Ni range for Tiébaghi).

SLN mining production in 2013 amounted to 60.1 kt Ni (thousands tonnes of Nickel), 7% increased compared with 2012. This figure corresponds to the tonnages of nickel contained in the ore trans-

ported to the various facilities at ports (wharves or mechanical loading machinery).

Reserves are estimated at some 977 kt Ni at 1/1/2014, compared with 982 kt Ni of reserves at end 2012. This corresponds to a renewal rate of 92% of reserves.

The proportion of proven reserves has been holding steady for some years with the introduction of planning surveys (at 37% in 2013 compared with 40% in 2012). The measured recoverable and indicated resources are evaluated at 1,786 kt Ni, compared with 1,719 kt Ni at end 2012. The proportion of recoverable, measured and indicated resources in the inventory total is stable compared with the 2012 figures. The increase in resources is chiefly buoyed by the prospecting results for the peripheral areas of Tiébaghi and Thio. This increase is nevertheless limited by a downward adjustment of mining factors applied to the Kopéto and Kouaoua ore bodies.

Inferred recoverable resources are evaluated at 1,155 kt Ni, 9% higher than at end 2012. This difference chiefly resides in the estimate for ore deposits in the Poro region following additional prospecting in 2013, and in the effects already mentioned which are positive for the Tiébaghi peripheral mines and negative for Kopéto and Kouaoua.

The renewal rate of saprolite recoverable resources for pyrometallurgy was +376%.

SLN constructs 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. In the 2011 long-term mining plan, the sum of reserves and recoverable resources adopted is 2,025 kt Ni (of which 1,030 kt Ni declared as reserves).

#### Mineral resources for hydrometallurgy

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

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

Mineral resources for hydrometallurgy or export have not been audited to date. They have nevertheless been estimated using the methodology defined to estimate 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 the ore estimated to be in the 1% Ni limonites and saprolite strata, without applying any conversion or enrichment factors. The mineral resources are calculated at the 1% Ni cut-off grade, and are broken down by prospect, distinguishing between lateritic and saprolitic products.

The average dry densities of the limonites and earthy saprolites are around 0.8-1.0 according to ore deposit. Rocky saprolitic ores exhibit higher dry densities, with an average value according to mass of around 1.3-1.4. These figures are based on measurements performed in 1999-2001 and 2008-2012.

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

Global resources are calculated by 3-D block modelling performed by the Pt Weda Bay Nickel 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 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 Rahai ore bodies, by the ERAMET and Pt Weda Bay Nickel teams, using multivariate uniform conditioning. Tonnage-content curves have been drawn up from the results obtained, visualising the selectivity effects in the ore bodies concerned.

The figures set out below are derived from local estimates for the saprolites classed as measured or indicated resources, converted into reserves, and from global estimates for resources in the other saprolite ore bodies and for the limonite horizon.

The measured and indicated mineral resources are unchanged from the figures for 2012. Only the inferred mineral resources have been revised upwards, as a result of the continued reconnaissance of the zone between the Kao Rahai and Tofu Blowen mineral ore bodies.

Mineral Resources		2013			2012		
Limonites	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni	
Measured	36.0	1.26	455	36.0	1.26	455	
Indicated	66.4	1.22	809	66.4	1.22	809	
Inferred	20.9	1.20	252	20.9	1.20	252	
TOTAL	123.3	1.23	1,516	123.3	1.23	1,516	

#### Changes in limonite and saprolite mineral resources from 2012 to 2013

#### ACTIVITIES

2.8. RESEARCH AND DEVELOPMENT/RESERVES AND RESOURCES

Mineral Resources		2013			2012		
Saprolites	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni	
Measured	98.8	1.72	1,694	98.8	1.72	1,694	
Indicated	166.0	1.54	2,547	166.0	1.54	2,547	
Inferred	175.8	1.49	2,623	96.0	1.54	1,473	
Total	440.6	1.56	6,864	360.8	1.58	5,714	
TOTAL	563.9	1.49	8,380	484.1	1.49	7,230	

At a constant cut-off grade, the measured, indicated and inferred resources were higher by four million tonnes of nickel than the estimates made at the time of acquisition in May 2006 (8.4 Mt Ni compared to 4.1 Mt Ni).

#### Reserves

The figures below relate to the saprolite and limonite reserves intended for hydrometallurgical processing. These figures remain unchanged from those published on 1 January 2013.

#### Pt Weda Bay Nickel limonite and saprolite reserves at 1 January 2014

Reserve	2013				
Limonites	Mt	% Ni	kt Ni	% Co	kt Co
Proven	31.5	1.27	400	0.17	54
Probable	21.4	1.26	269	0.16	35
TOTAL	52.9	1.26	669	0.17	89

Reserve	2013				
Saprolites	Mt	% Ni	kt Ni	% Co	kt Co
Proven	75.1	1.78	1,334	0.04	28
Probable	47.2	1.62	765	0.03	16
TOTAL	122.3	1.72	2,099	0.04	44
TOTAL	175.2	1.58	2,768	0.08	133

The data on reserves correspond to the conversion of resources discussed in the previous paragraph that are in the ore bodies covered by a mining project, with the application of mining factors based on the following criteria:

- 1% Ni Cut-off grade for the Coastal Deposits ores, earthy saprolites and limonites in the Bukit Limber ore bodies and limonites in the Tofu Blowen and Kao Rahai ore bodies;
- 1.4% Ni cut-off grade in the rocky saprolites at Bukit Limber and all the saprolites at Tofu Blowen and Kao Rahai West. The measured resources of these products established at a 1% Ni cut-off grade were converted into proven reserves following non-linear geo-statistical studies measuring the impact on those products of selectivity at 1.4% Ni.

Mining factors were applied to the tonnages and contents to take account of the technical limits in the exploitation phase in obtaining the selectivity estimated by uniform conditioning. These factors were adjusted for the geometry of the mass and for the estimate method and findings. These factors average 0.98 for Ni content and range from 0.95 to 1 for the ore tonnage.

The experience gathered from a mining test carried out in 2007 and the strong rain patterns observed at the deposits determined the choice of the geotechnical and environmental constraints currently used. In particular, access issues and management of water drained from the mine resulted in the discarding from the project of zones with a natural incline greater than 30° and the average pit slope being limited to 35°. The same reasons determined the use of minimum ore thickness as a selection criterion for mineable zones. At this stage of the study, this varies from 3 m to 12 m according to the climatic, geomorphologic or environmental conditions specific to each mass.

#### Changes in resources and reserves in 2013

The changes in resources and reserves between 2013 and 2014 feature an appreciable increase in inferred resources, while there was no change to the figures for measured and indicated resources and for reserves. Much of the work in 2013 was focused on gaining closer knowledge of the ores in existing deposits and on optimising the mining sequence.

Drilling will continue over the coming years to achieve a closer-set drilling pattern on certain strategic ore bodies; the primary result of this will be to improve confidence levels and resource/reserve classification.

Following the external audit performed by Melabar GeoConsulting in March 2009, the resource classification procedure recommended at the audit was implemented.

Consequently, Melabar GeoConsulting has confirmed that the resources are calculated in a satisfactory manner, and that the conversion of resources into reserves duly factors in certain technical constraints controlled thanks to results acquired from an experimental mine, and that the whole proceeding is compliant with the recommendations of the JORC code.

### 2.8.2.5. TiZir reserves and resources

#### **Mineral resources**

The data on mineral resources are mineral-sand tonnages and heavy-mineral contents (HM).

Ordinary kriging was used to perform the block modelling. The mineral resources have been estimated at a cut-off grade of 1.25% HM, to a depth of 6 m below the natural groundwater level, with no processing or beneficiation factor applied.

Heavy Mineral contents were determined by heavy-liquid gravimetric separation at the cut-off density of 2.85 g/cm<sup>3</sup>.

#### TiZir mineral resources at 1 January 2014

Resources	Run of mine (Mt)	<b>HM</b> (%)	HM (Mt)
Measured	1,002	1.73	17.3
Indicated	74	1.77	1.3
TOTAL RESERVES	1,075	1.73	18.6

The mineralogical blend was determined on composite samples, using Mineral Liberation Analyser (MLA) technology, employing an electron microscope and a microprobe, and using X-ray fluorescence spectrometry.

On average, the heavy mineral concentrates contain approximately 10% of zircon and 75% of titanium-bearing minerals (ilmenite, pseudorutile, leucoxene and rutile).

#### Reserves

The data on reserves correspond to the conversion of resources discussed in the previous paragraph that lie within the area mined by dredging, with the application of mining factors for dilution and loss.

#### TiZir reserves at 1 January 2014

Reserves	Run of mine (Mt)	HM (%)	HM (Mt)
Proven	746	1.8	13.2
Probable	5	1.7	0.1
TOTAL RESERVES	751	1.8	13.3

Pilot testing of the industrial process has demonstrated the technical feasibility of using conventional mineral-processing methods to extract and separate heavy minerals.

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## **3.1.** COMMODITY RISK

The 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, aluminium).

The main Group entities involved are:

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

The manganese and coke exposures are not hedged since there is no organised market in these commodities.

Hedges are contracted with horizons of one to four years, depending on the commodities, and are based on the budget. Only a portion of planned consumption or production is hedged when the initiating policy criteria are met. The Group uses various instruments to hedge and limit its exposure while taking advantage of favourable price trends (futures and options).

At 31 December 2013, the fair value of hedges set up for the various commodities breaks down as follows:

- 0 for nickel (0 at 31 December 2012);
- 0 for fuel oil (0 at 31 December 2012);
- €1 million liability for aluminium (0 at 31 December 2012);
- €3 million liability for electricity (€1 million liability at 31 December 2012).

## **3.2.** SPECIAL RELATIONSHIPS WITH THE GROUP'S PARTNERS

### **3.2.1.** Political risks \_\_

Some of the Group's activities are carried on in countries where political developments may lead to regulatory changes. In particular, the Group produces and/or markets its products in non-OECD countries, some of which may be classed as countries with no long-term political or economic stability. While the Group ensures that appropriate measures are taken to avoid such risks, political and/or economic changes could have a significant impact on its business.

## 3.2.2. Supply and marketing contracts \_\_\_\_\_

The Group has overall control of the contracts relating to the supply and marketing of ore and its by-products insofar as such contracts are entered-into with companies it controls (such as the supply and marketing contract between ERAMET and Le Nickel-SLN and the supply of Manganese Division production sites by Comilog). The other commercial agreements relating to continuing operations do not entail any particular risks or commitments for the Group. Those agreements are mainly for purchases of raw materials (electricity, coke, and special alloys) and freight services (by sea and land). To date, ERAMET has not entered into any material contracts entailing a substantial obligation or undertaking for the Group as a whole, other than those entered into in the normal course of its business.

## 3.2.3. Special relationships with third parties \_\_\_\_\_

To support its various activities and projects, the Group's policy is to develop and maintain firm, sustainable and complementary partnerships with national partners or regional actors. These partnerships can take the form, among others, of equity interests in Group subsidiaries, with a number of special covenants to safeguard the existing balance of interests.

### 3.2.3.1. Nickel Division

## Relations with STCPI and New Caledonia – Le Nickel-SLN shareholders' agreement

Le Nickel-SLN, a subsidiary 56%-owned by ERAMET with 10% held by Nisshin Steel, is 34% held by the Société Territoriale Calédonienne de Participations Industrielles – STCPI.

STCPI is an SAS (simplified joint-stock corporation) whose sole object is to hold this interest in Le Nickel-SLN and an interest of some 4% in the capital of ERAMET. Two directors out of seventeen represent it on the ERAMET Board. The interest in the share capital of Le Nickel-SLN, initially of 30%, was raised to 34% in a share-swap transaction on 23 July 2007, then sold by the French State when ERAMET was privatised. Its political, financial and strategic value resides in its allying local public interests with the Group's mining and industrial interests in New Caledonia. The company represents the three New Caledonian Provinces: the Southern Province (with a population of mostly European origin) on the one hand and the Northern and Island Provinces (a mainly Melanesian population) on the other hand. The Board members and observer are selected so as to ensure equal representation of the Southern Province, on the one hand, and the Northern and Island Provinces on the other.

The Le Nickel-SLN shareholders' agreement of 13 September 2000 followed on from the agreement of 17 July 2000 between the State, the Provinces of New Caledonia and representatives of the island's main political parties. In 2010, the shareholders' agreement was extended for a first period until 31 December 2011. Since 2010, it has been extended each year for a yearly period. Its terms include the following:

- a distribution of the directorships on the following basis, at present: eight for ERAMET (including the representative of Nisshin Steel), and four for STCPI, with the latter 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, "of which the 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 shares being sold to another shareholder or of a share capital increase, each party shall retain the same interest in the share capital or voting rights as they had previously, either by adjusting transfers of shares or by joint exercise of the subscription rights in a share capital increase.

In response to a press release from STCPI on 27 June 2008, proposing the opening of discussions regarding the level of its interest in Le Nickel-SLN, ERAMET's Board meeting of 11 July 2008 resolved that there was no reason to change the share-ownership structure of Le Nickel-SLN, which represents a satisfactory balance.

Following the meeting of its Board of Directors on 19 November 2009, Le Nickel-SLN announced that it was instituting new, modernised 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 discuss amendments to the shareholders' agreement. Its guiding principles would remain unchanged, but the amendments would take account of the full array of industrial, commercial and technological changes both within Le Nickel-SLN and in its environment since the conclusion of the original agreement. The extensions of that agreement in 2011, 2012 and 2013 until 31 December 2014 have allowed the discussions in progress to continue.

#### Supply contract with Nisshin Steel

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 which accounts for 10% of sales in the Nickel Division. This agreement was renewed in 2001 and 2007 and is designed both to guarantee ferronickel deliveries over several years and to smooth nickel price fluctuations.

#### Relations with Pt Antam and Indonesia (Weda Bay project)

The Indonesian company, Pt Weda Bay Nickel, is the project and prospecting company created to develop the Weda Bay nickel and cobalt project, located on Halmahera Island in Indonesia. 90% of its capital is held by Strand Minerals (Indonesia), with the remaining 10% in the hands of 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 one director on the Board of Directors of Pt Weda Bay Nickel (out of a total of five directors of whom three are representatives of ERAMET) and also possesses an option to increase its interest to 25%.

Pt Weda Bay Nickel carries out its exploration and mining under a Contract of Work with the Indonesian Government.

#### Relations with Mitsubishi Corporation (Weda Bay project)

On 19 February 2009, Mitsubishi Corporation acquired a 33.4% interest in Strand Minerals, which owns 90% of the capital in the Indonesian company, Pt Weda Bay Nickel. In December 2011, Mitsubishi Corporation decided to sell a 3.4% interest in Strand Minerals to the Japanese company, Pacific Metals Co. Ltd (Pamco). The shareholders' agreement between ERAMET and Mitsubishi Corporation was amended to allow the inclusion of Pamco. Under this amended shareholders' agreement, Mitsubishi Corporation is represented on the board of directors of Strand Minerals by two directors out of a total of six, as well as by one director on the board of directors. Pamco is not represented on any of these boards.

#### 3.2.3.2. Manganese Division

#### Relationship with the State of Gabon

Comilog has a special relationship with the State of Gabon, which has been a shareholder since 1973 and is represented by four members on the Board of Directors. From the outset, the State has supported Comilog through both tax concessions (a mining agreement and a special tax agreement to finance the sintering complex) and industrial measures (as Comilog's partner in constructing the Owendo Port, operated under a concession by the Comilog subsidiary, Port Minéralier d'Owendo). More recently, the Gabonese State also granted a railway concession to Setrag, in which Comilog is the leading partner, alongside other Gabonese shareholders. 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.

Under its project to construct two silicomanganese and metallicmanganese metallurgical units at Moanda in the Upper Ogooué (called the "Moanda Metallurgy Complex"), Comilog signed two agreements with the Gabonese authorities in Libreville on 7 January 2010; the first agreement laid down among others 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 dedicated financing facility has been set up, with guarantees provided by ERAMET and the Gabonese Republic who are the reference shareholders.

ERAMET signed an agreement with the Gabonese Republic on 20 October 2010, to increase the Gabonese Republic's shareholding in Comilog. Under its terms, from 2010 to 2015, ERAMET will transfer in stages to the Gabonese Republic an additional interest of up to 10% of Comilog SA's capital, which would increase the Gabonese Republic's shareholding in Comilog SA to 35.4%. The first transfer stage involves 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 its meeting on 21 March 2013, the ERAMET Board of Directors appointed as corporate supervisor Mr. Michel Antsélévé, a personality proposed by the Gabonese Government. The Board further proposed to the General Meeting of Shareholders, in accordance with the Shareholders' Agreement, on a joint proposal by SORAME, CEIR and the FSI, that Mr. Antsélévé be appointed a director. His appointment was passed by the 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 joint venture, 50%-owned by each partner, to hold a 100% interest in TiZir Titanium and Iron (TTI) (Norway) and 90% of the Grande Côte mineral sands project in Senegal. The Grande Côte project will afford TTI a supply of good-quality ilmenite as feedstock for its titanium dioxide slurry production. The zircon production from the Grande Côte project will assure a strong position for TiZir on this also very promising market. Lastly, TiZir will be backed by ERAMET's strengths in ore processing, metallurgy, R&D, logistics and marketing, and by the MDL teams' experience in both project development and the exploitation of mineral sands.

## **3.3.** MINING AND INDUSTRIAL RISKS

## 3.3.1. Risks entailed in evaluating mining reserves and resources \_\_

Mining reserves and resources may evolve over time, particularly with changes in the technical and economic assumptions used in mining (geological data, mining cost factors, mining technology). Accordingly, resource and reserve estimates are revised each year, both quantitatively and qualitatively. Details of the estimates and assumptions used for this purpose are given in Section 2, "Reserves and resources" sub-section in this document.

## 3.3.2. Mining project development risks \_\_\_\_\_

In view of their capital-intensiveness and the time they involve, studies for the launch of new mining operations or for the renovation of existing operations are capital-expenditure decisions which, in addition to full technical feasibility studies, require the making of prior 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 slowing demand, some of these decisions may be delayed or cancelled, which may have an impact on a mining operation's profitability.

## 3.3.3. Safety and environmental risks \_

## **3.3.3.1.** Industrial activity that factors in Sustainable Development

ERAMET's Communications and Sustainable Development Department (DC2D) is responsible for monitoring the technical aspects of Sustainable Development in close cooperation with the three operating Divisions and the Group's Human Resources and Legal Departments.

In its investment procedure, the Group factors in the various environmental and societal implications of sustainable development, and the environmental managers of the different Group entities are systematically represented on the committees managing significant projects. Given metals' unique property of being almost indefinitely recyclable, the Group's business activities naturally dovetail with a Sustainable Development approach in a global context of scarcity and, accordingly, of the maximum re-use and optimisation of natural resources. Nevertheless, these products, although durable and recyclable, may at some stage in their conversion or use present hazards or risks. The Group therefore has to face the challenge of identifying all such hazards, preventing and controlling the resulting risks to its sites and to the outside environment, while contributing to the sustainability and development of its business activity.

In addition to its Environmental Charter adopted in 2002, the Group has operated a Sustainable Development policy since January 2010.

As regards regulatory compliance, ERAMET has set itself a "Zero Dispute" goal, as described below. Also reviewed are the various industrial-risk issues of site and soil pollution related to the Group's activities, and the due control of industrial risks.

### 3.3.3.2. Industrial risk-control policy

#### Group crisis management procedures

These procedures set out best practices and communication requirements for three scenarios:

- crisis prevention: identification and operational taking into account of faint signs, crisis simulation exercises designed to ensure that each person knows his role and to continuously improve emergency plans (in coordination with the relevant standard insurance procedure);
- serious-incidents management: definition of a serious incident, Group reporting, feedback, communication;
- in a crisis: criteria for identifying crisis situations, Group reporting, organisation during crises (operations management, communication, recourse to experts, crisis unit), feedback.

These procedures have been rolled out at all sites. In 2013, especial attention was paid to crisis simulation exercises. Out of the 42 sites currently monitored, 80% conducted one or more exercises in 2013, some of them in coordination with the Fire Brigade. Overhauling and deployment of the emergency plan is in progress at each of the eight other sites.

#### Risk-analysis methodological assistance

The Group provides assistance to the sites for their hazard studies. These analyses seek to exhaustively identify major accident scenarios, their causes and impacts, in the light of which, prevention and/or protection safeguards (important for safety) are installed to reduce the likelihood or seriousness of contingencies. In 2013, this chiefly concerned Le Nickel-SLN, Aubert & Duval at Pamiers and the Ecotitanium project.

## Action plans to counter the risks of contact between water and molten materials

Following a major industrial accident in late June 2011 at the Valdi Feurs site (Loire, France), an action plan was decided-upon, with the aim of eliminating the risk of explosions caused by contact between water and molten materials (molten slag or metal), or to reduce such risks as far as possible.

The 18 other sites whose processes involve liquid metal are:

- Alloys Division: Aubert & Duval at Firminy (Loire), Imphy (Nièvre) and Les Ancizes (Puy-de-Dôme), Erasteel at Commentry (Allier), at Söderfors (Sweden) and Metallied at Irun (Spain);
- Manganese Division: ERAMET Norway at Porsgrunn, Sauda and Kvinesdal (Norway), ERAMET at Marietta (United States), TiZir TTI at Tyssedal (Norway), Comilog at Dunkerque (Nord), Comilog at the Moanda Metallurgical Complex, GLC at Guilin (China), GCMC at Freeport (United States), Valdi at Le Palais (Vienne);
- Nickel Division: Société Le Nickel-SLN at Doniambo (New Caledonia);
- ERAMET Research.

This action plan comprises three phases:

Phase 1: Hazard studies

Each site must review the hazard studies already conducted, with a focus on the relevant events.

Phase 2: Plant visits

Visits are conducted with an outside expert, involving a detailed study of the furnaces and their environment in order to examine, with the persons concerned at the sites, their hazard studies, the appropriateness of the (preventive/protective) measures taken and to consider any additional measures.

Phase 3: Site action plans

These take account of the hazard-study findings and the expert's recommendations.

## DC2D/RI monitors the progress in these action plans half-yearly

Phase 1 was completed during the second half of 2011.

Phase 2, deployed in 2012 and 2013, has been completed, and each of the 18 sites concerned has received an official expert report listing the comments and recommendations of the independent expert.

A Group summary was circulated, setting out the main recommendations common to all the sites, and critical points to be dealt-with at each site.

The following overall observations were made:

- a high degree of commitment by all sites on this subject;
- a generally good standard of control of these risks;
- practical pointers for improvement, some applicable generally, and others specific to certain sites;
- one of the main actions to undertake is the training of personnel assigned to at-risk work positions, and the periodical checking of personnel knowledge of equipment and procedures.

Under phase 3, which will continue in 2014, meetings were held in 2013 to summarise and review the action plans with the Industrial Divisional managements and the industrial-risk coordination units of the Alloys and Manganese Divisions.

## Preventive engineering required under the Group's damage insurance policy

In 2013, ERAMET continued its policy of biannual engineering visits (preventive audits) to all industrial sites, in close cooperation with the insurer and the Group Insurance Department.

The following sites were visited:

#### Alloys Division:

- Brown Europe at Laval-de-Cère (Lot), CMM at Landevant (Morbihan), UKAD (Puy-de-Dôme), AD TAF at Gennevilliers (Hauts-de-Seine);
- Aubert & Duval at Imphy (Nièvre) and Pamiers (Ariège), Airforge at Pamiers (Ariège) and Supa;
- Erasteel at Stubs (United Kingdom) and Kloster (Sweden) (3 sites).
- Manganese Division:
  - Comilog in Gabon (Mine, CIM, DFIP DEV and CMM), Setrag (Gabon);
  - ERAMET Norway at Porsgrunn and Sauda (Norway);
- ERAMET at Marietta, BMC at Butler and GCMC at Freeport (United States);
- Erachem Comilog at Tertre (Belgium), GECC at Chongzuo (China), GLC at Guilin (China).

The follow-up indicators for the actions decided as a result of these visits are included in a summary report issued twice a year, covering compliance with standard fire safety procedures and the actions to protect strategic industrial facilities (version at end September 2013 released in November).

As always, close involvement of the Group's on-site industrial-risk officers and the leading insurer's engineering teams in all capital-expenditure programmes mean that insurer recommendations are factored into new plant from design stage onwards. In 2013, the chief focus of studies was on the Ecotitanium project, the downstream rolling mill project at Les Ancizes, the CMM project in Gabon, the protection of fuel tanks and critical electrical rooms and the new coal workshop project at SLN, the biomass boilers project at Sandouville, the new dust separator at Marietta, the SO<sub>2</sub> gas scrubber at GCMC, etc.

#### Environmental insurance policy - Risk-control visits

In 2007, ERAMET signed an extension of its Group Civil Liability policy with AXA, including an Environmental Damage component (Ecosphère).

Accordingly, under a site-visit programme since 2008, the insurers have assessed the risk of environmental harm at 13 sites, in addition to the exchanges of information and the questionnaires completed by all the entities covered by this policy. Each visit includes ascertaining the site's situation with regard to the regulations, assessing the existing action plans and physically inspecting the terrain.

The insurers' recommendations, ranked according to priority, are then followed up in action plans at the sites and are reviewed half-yearly on a Group-wide, consolidated basis.

In 2013, the Aubert & Duval site at Firminy and ERAMET Norway's Sauda site underwent their first visits, and a second visit was held at Erasteel Commentry.

In agreement with the AXA insurers, two new visits will be conducted in 2014.

All these on-site assessments conducted by AXA are additional to the internal Health and Safety audits performed by the Group.

## 3.3.3.3. "Zero Dispute" goal

The ERAMET group promotes a policy of strict regulatory compliance, transparency and dialogue with the supervisory authorities, particularly in the event of temporary difficulties or special operating conditions. Since 2007, it has worked towards a "Zero Dispute" goal, aiming for a complete absence of any formal notices or legal proceedings liable to arise from any breach by Group sites of binding regulatory requirements.

Since 2009, the "Zero Dispute" assessment scope has extended to all the Group's working mines and industrial sites.

Fulfilment of this goal monitors three levels:

- Level 1: A letter from the authorities conveying a specific request (excluding a site inspection report) which, if not acted upon, could escalate to formal notice requiring compliance with regulatory obligations.
- Level 2: Formal notice served by, or an official complaint from the supervisory authority relating to a breach on our part of the regulatory obligations, liable to result in criminal proceedings or a fine.
- Level 3: Legal proceedings brought to trial and/or formal notice expired with consequent legal proceedings.

The "Zero Dispute" score for 2013 reflects a number of situations in combination similar to the score for the previous year.

The following should nevertheless be noted:

- the outcome of a level 3 dispute begun in 2009 on the GCMC Freeport (United States) site was a fine of USD7.5 million; continuous monitoring was instituted of atmospheric and waterborne emissions, together with the monitoring of action plans instituted in response to non-compliance notifications;
- the emergence of a new level 3 dispute concerning the Erasteel Kloster Söderfors site (Sweden), following an accidental oil spillage on the ground;
- the "stabilisation" of the number of formal notices served at seven new cases for the second consecutive year, confirming the improvement announced in 2012, and attesting to the dialogue and transparency maintained by all the Group sites with their respective Government authorities (for the record, 13 formal notices were served in 2011).

	201	12	2013		
	Number of formal notices	Ratio of formal notices/ operating permits	Number of formal notices	Ratio of formal notices/ operating permits	
Arisen	7	0.037	7	0.035	
Not resolved	10	0.053	12	0.059	

Lastly, as illustrated by the table above, it is important to put into perspective these few dispute situations set against the whole body of detailed requirements contained in the many operating permits and with which the different Group sites are required to comply. The number of operating permits in 2013 was 203 (compared with 190 in 2012 and 169 in 2011), each one including at least 10 monitoring parameters to be complied with on an annual, quarterly, monthly or even sometimes continuous basis, together with a significant number of operating constraints.

## 3.3.4. Transportation-related risks \_\_\_\_\_

### 3.3.4.1. Sea freight

The Group makes extensive use of shipping to transport its products; first, in various stages, to production sites, and then for deliveries 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. To protect itself against sharp rises in freight costs, the Group seeks to contract long-term at predefined prices and to reserve some ships on a long-term basis. During periods of low sales activity, on the other hand, this may entail renegotiation of some contracts.

The risk of property damage is covered by specific insurance policies.

### 3.3.4.2. Rail transport

The Group was awarded the concession to operate the *Transgabonais* railway in Gabon 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 at Owendo (Libreville).

An interruption in sea or rail transportation or a sharp rise in transportation prices, notwithstanding long-term contracts, would nevertheless have a negative impact on the Group's performance.

## **3.4.** LEGAL AND TAX RISKS / DISPUTES

# 3.4.1. The Group's dependency on the legislative and regulatory environment \_\_\_\_\_

### **3.4.1.1.** Specific regulations

Mining operations are subject to specific regulations depending on extraction locations and activities. These regulations relate mainly to:

- mining and prospecting permit and concession regimes;
- obligations specific to mining operations;
- environmental and biodiversity limits and controls; and
- site restoration after depletion.

These regulations may change, with possible incidence on the operation and performance. This is currently the case in Gabon,

where the authorities are reforming the Mining and Environmental Codes.

Independently of mining, industrial operations are also subject to specific, site-related regulations. These regulations mainly cover:

- the regimes governing the operating permits and authorisations;
- compliance with limits on effluent discharge into the natural environment during site operation, catering for major industrial risks and health hazards entailed in operations, and the management and elimination of industrial waste;
- the obligations entailed in restoring the site after cessation of operations, particularly factoring in the risks relating to polluted sites, ground pollution and wastes.

These regulations may change, with possible incidence on industrial operations, particularly where additional capital expenditures for the environment are required in response to changes in the regulations.

### 3.4.1.2. Tax framework

The Group's business is subject in part to a special tax framework (fees, duties and taxes). Its companies and units in mainland France are taxable at the standard French tax rate. The current corporate income tax rate is 33.33%, excluding both an additional social security contribution of 3.3% and a special surcharge of 10.7% applicable since 2013.

It should be noted that ERAMET is the parent company of a tax consolidation group that comprised 22 companies at 31 December 2013.

The following notes apply to subsidiaries outside mainland France:

Le Nickel-SLN is liable to the New Caledonia mining and metallurgical corporation tax at the rate of 35%. Since 1975, the company has enjoyed a tax freeze which has been renewed several times. The last renewal was for a term of 15 years as from 1 January 2002 pursuant to a local order of 13 June 2002. Moreover, some of the subsidiary's capital expenditure programmes in New Caledonia have enjoyed the tax exemption measures introduced by the Paul and Girardin Acts and the relief granted under the New-Caledonian Tax Code on capital expenditure in metallurgy.

On 1 September 2011, the New-Caledonian Congress requested the Government to undertake a comprehensive reform of direct and indirect taxation and other levies on the mining and metallurgical industries; this reform would have no impact on businesses' expenses and would include among its aims the introduction of a uniform local business VAT, termed the "TGA" (taxe générale sur les activités) as from 1 January 2013. To date, the TGA rate has not been set, and the introduction of this new tax has been postponed until 1 July 2014, while the mining royalty project is still under study. SLN and the other mining and metallurgical businesses undertook major consultations, and proposed to the New Caledonian Government amended conditions for application of the TGA regime and the desired principles for introducing a mining royalty per tonne of ore mined and exported. The mining business community in New Caledonia will be watchful for any impacts of this reform on companies' competitiveness and any conflicts with current and future tax-freeze arrangements.

- The Weda Bay investment project is governed by a Contract of Work defining among others the tax regime applicable to the production activity at the start of the site's operations. Tax matters currently under discussion with the Indonesian Government concern the issues of State revenues (royalties, tax incentives, VAT). The outcome of these discussions will be decisive for the success of the investment and its profitability.
- For its part, the Comilog subsidiary is subject to income tax at 35%, to export duty and mining royalties that represent approximately 6% of the pithead value of the mined products (close to FOB value), and to a 15% tax on dividends. This tax framework is frozen until 2032 under 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, superseding the earlier convention of 21 April 1966. The current convention was published in the Official Journal of the Republic of Gabon of 24 to 31 July 2011. The Mining Code is being radically re-drafted, and the authorities have submitted a draft wording to the Assembly for ratification in the first half of 2014. The mining business community in Gabon will be watchful of any impacts of this reform on current and future mining agreements.

- Note that, since 1 January 2008, substantial reforms have been introduced to Chinese taxation, among others the discontinuing of systems favouring certain foreign companies and the introduction of a uniform 25% corporate income tax rate. This reform has had no particular implications for the ERAMET group's Chinese companies.
- Under the Agreement signed with the Senegalese Government in 2005 and its addendum No.1 signed in 2007, Grande Côte Operations (GCO) enjoys a mining concession regime for a term of 25 years from November 2007. Pursuant to the Mining Code, that company has full exemption for 15 years (exemption from VAT, customs duties, corporate income tax, licence fees and land tax, etc.) not including the capital-investment construction period.

Furthermore, as regards mining royalties, and notwithstanding the Mining Code which sets those royalties at 3% of the pithead value, GCO consented in 2007 to raise the royalty to 5% and to apply 10% production sharing less a number of costs.

Generally, subsidiaries based abroad are subject to standardrate local taxation and have benefit of the double-taxation conventions in force. Tax is not withheld on dividends paid to the parent company by the subsidiaries in Norway, Sweden, the United States, China and Belgium. On the other hand, withholding tax is charged on dividends paid by Comilog (Gabon) and SLN (New Caledonia) at the rates of 15% and 5% respectively.

### 3.4.2. Major lawsuits \_\_\_\_\_

Apart from the matters detailed below, no government, judicial or arbitration proceedings exist, including any proceedings of which the Company is aware, whether pending or threatened against it, that is liable to have or, in the last 12 months, has had material effects on the financial position or profitability of the Company and/or the Group.

#### **Carlo Tassara France litigation**

On 17 December 2009, Carlo Tassara France issued a writ against the SIMA, SORAME and CEIR companies, together with members of the Duval family, summoning them to appear before the Paris Commercial Court. The summons states that these proceedings are being brought in the presence of ERAMET. The facts are detailed in Note 36 to the consolidated financial statements set out in Section 6 of this document. On 2 December 2011, the Paris Commercial Court dismissed all the claims of Carlo Tassara France as inadmissible, on the grounds that the legal limitation period had expired. Carlo Tassara France appealed that ruling. On 19 March 2013, the Paris Court of Appeal upheld the ruling of the Paris Commercial Court in every respect. Carlo Tassara France appealed to the supreme judicial tier in civil litigation, the Court of Cassation.

## 3.4.2.1. Nickel Division

## SLN executives litigation

In 2012, some 50 serving and former executives of SLN sued their employer before the Nouméa Employment Tribunal, claiming for the period not barred by limitation, arrears of salary corresponding to an end-of-year bonus. The claimants contest the applicability to them of a change made at end 1992 whereby this bonus was included in annual remuneration paid monthly in twelve instalments.

The prescribed conciliation procedure failed, and the decision of the Nouméa Employment Tribunal judgement panel is expected in the coming months.

## 3.4.2.2. Manganese Division

## Claim by Kazakh companies

In 2006, an anti-dumping complaint was filed with the European Union by Euroalliages on behalf of its members, against Kazakh manganese alloy producers, who contended the complaint to be unfounded and wrongful. Accordingly, on 9 May 2007, the Kazakh producers brought Euroalliages and its members (including ERAMET Comilog Manganèse) before the Belgian Court of First Instance in Brussels, claiming €335 million in damages. ERAMET Comilog Manganèse, in coordination with Euroalliages, has taken all measures to fight this manifestly undue claim, which seeks in reality to place indirect pressure on the European Union. As matters stand, that claim has little chance of succeeding. On 17 February 2009, the Court of First Instance in Brussels ruled in favour of Euroalliages and its members, ruling that only European Union courts have jurisdiction to hear this dispute pertaining to an anti-dumping complaint. The Kazakhstan producers appealed against this ruling and on June 25, 2013, the Brussels Court of Appeal upheld the decision in first instance.

## Former employees of Comilog in Congo

Before the *Transgabonais* railway started operating, Comilog exported its manganese ore via the Republic of Congo, where it then employed close upon 1,000 people. 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 showed no sign of coming to an end, and led to the discontinuation of Comilog's operations in Congo and the dismissal of its Congolese employees. After several years of negotiations delayed by the civil war in the Republic of Congo,

a "a memorandum of understanding for the final settlement of the dispute relating to the discontinuation of Comilog's operations in the Republic of Congo" was agreed by the Republic of Congo, the Gabonese Republic and Comilog on 19 July 2003. Under this agreement. Comilog and the Republic of Congo put an end to all past and future disputes, with that State taking over all liabilities and obligations resulting from Comilog's operations in the Republic of Congo. In fulfilment of this agreement, Comilog paid to the Republic of Congo one billion two hundred million CFA francs as compensation for the employees dismissed, over and above the very sizeable body of movable assets and property transferred free of charge by Comilog. Disputing the terms of this agreement, 867 former Comilog employees in the Republic of Congo served a summons to appear on 9 October 2008 before the Conciliation Panel of the Paris Employment Arbitration Tribunal, on three French subsidiaries of Comilog, none of which had at any time been the employer of those employees, and on Comilog. In a decision on 26 January 2011, the Judgement Board of the Employment Arbitration Tribunal declared itself territorially competent. The applicants disputed that declaration in a referral to the Paris Court of Appeal. Six claimants challenged the ruling of the Employment Arbitration Tribunal judgement panel, which had declared itself territorially incompetent. In a ruling of 20 June 2013, the Paris Court of Appeal ordered two French subsidiaries of Comilog to produce several documents to it and adjourned the proceedings between the parties to a hearing on 5 June 2014. Comilog and its subsidiaries appealed to the Court of Cassation against this ruling. In view of the weak grounds for these actions, the various defendant companies have not funded any provision.

## Sacinter dispute

Arbitration proceedings were undertaken in the dispute between Comilog and Sacinter, the former majority shareholder in the Port Minéralier d'Owendo company (PMO). These proceedings concerned the price of the PMO shares held by Sacinter and acquired by Comilog in 2008. Sacinter was seeking payment by Comilog of 49 million Swiss Francs. The arbitration hearing was held on 8 March 2013. The arbitration ruling issued on 20 June 2013 held Comilog liable to pay 4.5 million Swiss Francs in compensation of the opportunity lost by Sacinter of a higher share price under the conditions laid down in the 2008 contract.

## Moanda environmental dispute

Four NGOs (non-governmental organisations), an inhabitants' protest group (*collectif d'habitants*) and a former *député* (Member of Parliament) made a number of applications to the Libreville Court of First Instance, in February and March 2011, instituting civil actions seeking reparation from Comilog SA and ERAMET for environmental damage alleged to have been caused in the past by the operation of the Moanda mining site.

On 13 November 2012, the Libreville Court of First Instance upheld the application by Comilog SA and the other defendants by declaring itself territorially incompetent. The claimants' appeal against this judgement was dismissed as inadmissible by the Libreville Court of Appeal on 16 May 2013. The appellants appealed to the Court of Cassation in September 2013 against the ruling by the Libreville Court of Appeal. The arguments so far put forward by the claimants fail to substantiate their claims.

## Gulf Chemical & Metallurgical Corp.

Starting in 2009, the TCEQ (Texas Commission for Environment Quality) complained of a number of breaches by the American company GCMC (Gulf Chemical & Metallurgical Corp.), a subsidiary of the Group, of its mining licence terms. A first agreement, avoiding criminal proceedings, was signed in 2011 with the State of Texas authorities. In July 2013, a second agreement was signed with those authorities to bring to an end the civil liability proceedings, for an amount of USD 6 million ( $\in$ 4.6 million), which amount had been provisioned at 31 December 2012.

In February 2013, the Group was informed of civil proceedings against Group companies, seeking reparation of alleged damage to residents living close to the plant at Freeport, Texas, USA. As of the date of filing of this document, no formal notice has been received and the amount of damages likely to be sought is not known.

## **3.4.2.3.** Alloys Division

## Les Ancizes asbestos classification

The Aubert & Duval site at Les Ancizes has never produced or processed asbestos nor sold materials that are wholly or partly made of asbestos. This material has been for that company's site only a constituent of some of the materials used in its heat transfer equipment (furnaces). For example, refractory materials containing asbestos, used in the past at the Les Ancizes site, represent less than 1% of all refractory materials used at the site. Employees at sites where a significant proportion of workers have had significant exposure to asbestos may, regardless of the positions occupied, avail themselves of the regulatory scheme for early retirement of workers in asbestos. The Employment Minister has responsibility for assessing whether such exposure is significant and of entering the sites concerned on the list of sites at which employees are entitled to avail themselves of this scheme. Four successive investigations with *inter partes* representation were conducted at the initiative of the Employment Ministry concerning the Les Ancizes site, and they concluded that this site did not satisfy any of the regulatory criteria warranting its inclusion in that list.

In its ruling of 7 May 2013, the Lyon Administrative Court of Appeal nevertheless ordered the Employment Minister to enter the Les Ancizes site on the list of sites whose employees were entitled to benefit from this scheme, for the period prior to 2005.

Aubert & Duval appealed to the French Council of State, submitting an application to have that ruling quashed. Aubert & Duval also petitioned the Council of State to grant a stay of execution of the ruling insofar as it ordered the Employment Minister to classify the Les Ancizes site for the asbestos risk. This application for a stay of execution was grounded among other reasons by the operational risk of disorganisation and loss of know-how that would be incurred to the company by the early retirement of numerous highly-experienced employees.

On 1 August 2013, the Council of State granted the stay of execution of the lower-court ruling for the period after 1992 and rejected the application for the period prior to 1993.

An interministerial order of November 2013 classified the Les Ancizes site for the period prior to 1993.

The Council of State will deliver its ruling in the coming months on the appeal by Aubert & Duval for the period subsequent to 1992.

## 3.5. LIQUIDITY, MARKET AND COUNTERPARTY RISKS

## 3.5.1. Liquidity risk \_\_\_\_\_

The Group has a comfortable liquidity position via:

- the wholly unutilised syndicated Revolving Credit Facility (RCF) for €981 million, maturing mainly in January 2018;
- the Commercial Paper programme for €400 million, of which €148 million was issued at 31 December 2013;
- €911 million in cash surpluses, of which €742 million classified as cash and cash equivalents. Cash surpluses are mostly transferred to Metal Securities, the Group's special-purpose entity responsible for pooling and investing Group cash surpluses.

Group net debt amounted to €218 million at 31 December 2013. ERAMET SA set up the following, among others during 2013:

- a German-law agreement for a €60 million Schuldschein private-placement loan maturing in June 2020;
- a €400 million issue of listed bonds placed with institutional investors on the Eurobond market, maturing in November 2020.

## Covenants

The main covenants at Group level are described in the Notes to the consolidated financial statements (Note 24).

## 3.5.2. Market risks \_\_\_\_\_

The Group is primarily exposed to three types of market risk: foreign currency risk, interest rate risk and commodity risks. These three types of risk are measured and managed by the Group Treasury Department in accordance with Group policies.

## 3.5.2.1. Foreign currency risk

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

- currency-transaction 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**

Since 2003, the Group has pooled its subsidiaries' foreign-currency transaction risks. Each Group company reports to Group Treasury

its exposure in currencies other than its functional currency. This management scheme is part of a multi-year policy under procedures approved by the Executive Committee, with monthly reporting to its members.

Since 2007, currency hedging transactions have been carried out via the special-purpose entity, Metal Currencies. The subsidiaries concerned determine the amount of their net exposure. The associated risks are then hedged if the net amount is greater than  $\notin$ 2 million or the equivalent 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.

These hedges are detailed in the Notes to the consolidated financial statements (Note 24).

At 31 December 2013, the fair value of currency hedges covering currency-transaction risks represented an €11 million net asset (31 December 2012: a net asset of €17 million).

Foreign-currency denominated sales and purchases (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, trade payables and bank-account balances are restated at the hedging rate indicated by the Group's Treasury Department on the basis of hedging transactions performed. Any differences between:

- the monthly exchange rate applied to recognise sales and receipts / purchases and payments; and
- the contractual settlement rate for hedges,

are recognised by each company under current operating profit (loss) on sales (under "Translation adjustments on sales") or purchases (under "Cost of goods sold").

A change of plus or minus 10% in the dollar rates would have an impact on the hedges recognised in shareholders' equity of around +€18 million were rates to rise and approximately €24 million were rates to fall.

## **Balance sheet risks**

The ERAMET group manages part of the foreign currency risks to the balance sheet by issuing financial liabilities denominated in the same currency as the net assets in question.

The Group manages the foreign currency risk to the balance sheet for each case individually.

## 3.5.2.2. Interest rate risk

a) As regards its gross debt position, the Group looks at its debt position and market trends when deciding whether interest rate hedging is necessary. The Group's Treasury Department is responsible for setting up hedges.

A change in rates of 10 basis points would have an annual impact of  $\notin 0.3$  million on the whole of the Group's variable-rate debt.

b) The cash surpluses managed by Metal Securities are mainly invested in vehicles linked to the EONIA (Euro OverNight Index Average) or EURIBOR (Euro InterBank Offered Rate).

Under these conditions, a drop of 10 basis points in the EONIA/ EURIBOR rates would have a negative annual impact of approximately  $\notin 0.1$  million on financial income.

## 3.5.3. Counterparty risk

The Group is exposed to several types of counterparty risk: they arise from its customers and its financial partners, particularly because of its cash surpluses.

For customer risk, credit insurance is contracted or letters of credit or documentary credits are set up. For unsecured receivables, the Group has a number of different monitoring and hedging tools: business intelligence ahead of transactions (rating and businessintelligence agencies, published financial statements, etc.). Trade receivables are specifically monitored by a credit manager for each Group Division, with a credit committee meeting monthly to set credit and outstanding-balance limits for each customer. In addition, every two months, a Group credit committee exchanges best practices and reviews the commercial situation of the major customer accounts.

For issuers of bonds or negotiable debt securities of more than three months' maturity: the procedure applicable to Metal Securities sets general investment limits according to counterparty rating and maturity. 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 applies in addition to the risk-spreading rules applied by the fund managers themselves to their assets.

## **3.6.** INSURANCE/ COVERAGE OF RISKS LIKELY TO BE INCURRED BY THE ISSUER

## **3.6.1.** The Group's general coverage policy / risk coverage strategy \_\_\_\_

## 3.6.1.1. Group organisation

The Group Insurance Department was established in 2003 with the goal of setting up Group programmes, monitoring the risk-control policy in coordination with the Communications and Sustainable Development Department, and seeking optimal risk / premium / retention solutions, including use of the Group's captive reinsurer.

## **3.6.1.2.** Risk identification and control

When instituting its risk management policy, the Group re-mapped its risks in 2011. The map, currently being updated, furthers the aim of setting up action plans for each risk to prevent their occurrence and limit their impacts, particularly by transferring them to the insurance market whenever possible. On 11 December 2013, the Board of Directors approved the Group's risk management charter designed to coordinate top-down approaches, initiated by general management and the risks department, with the bottom-up approach by the operating Divisions, particularly as regards their projects.

The charter states among others that risk management is a force for Group management and contributes in particular to achieving the following objectives:

- protecting the Group's main human and financial assets, and its image;
- placing value creation on a secure footing;
- favouring an acceptable level of risk taking;
- complying with the legal and regulatory obligations and with the values promoted by the Group;
- seeking value-creating opportunities for the Group (e.g. new markets, new customers, etc.).

## **3.6.1.3.** Use of the insurance market

As risks are identified and their impact controlled, the Group seeks the most appropriate solutions on the market that offer an optimum cost/benefit balance. Through brokers, the Group has thus put in place global insurance programmes with pools of internationally renowned and financially sound insurers. The Group also uses the 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.

## 3.6.1.4. Reinsurance

The Group also has a captive reinsurance company (ERAS) that enables it to provide primary coverage in some insurance programmes. The Group is thus able to manage premiums more effectively via a retrocession mechanism and to decide retention limits. This encourages the Divisions to develop their own risk-control programmes.

## **3.6.1.5.** Coverage levels

The Group considers that it has established sufficient coverage, in terms of both scope and amounts insured or coverage limits, for the main risks relating to its global operations.

## **3.6.2.** The different types of insurance taken out \_\_\_\_\_

The Group has a varied range of insurance programmes designed to cover the different insurable risks to which it is exposed.

The four main insurance programmes cover civil liability, environmental civil liability, property damage, business interruption and shipping risks.

## 3.6.2.1. Civil liability insurance

## General Civil Liability insurance

This programme covers the legal civil liability incurred by the Group from damage caused to third parties in the course of its business or due to its products, namely: operator's general liability, custody of goods, product liability including aerospace products, contractor's civil liability, sudden and accidental pollution. Coverage is comprehensive meaning that everything not excluded is covered, exclusions being those commonly applied for this type of risk. Coverage is applied on a "claims" basis, meaning that it applies to any claim made during the insurance period (including the subsequent five year period, in line with French regulations). For any claims received, the programme applies from France. If applicable, where local regulations require local policies, this insurance applies on top of those policies and to compensate for differences in conditions and/or limits on a DIC/DIL basis worldwide. In excess of local policies, the scheme is based on a Master policy issued in France covering €50 million and on two additional Excess policy lines of €50 million each bringing the total cover to €150 million; applicable excess levels may vary depending on local policies and are usually around €15,000 per claim. This programme also comes into play beyond the cover limits and amounts provided by several specific sub-programmes, particularly the following: in North America, to cover vehicle and employer civil liability and, in the United Kingdom, to top up compulsory insurance such as employer's civil liability. The annual renewal date for this programme is 1 July. This programme was set up on 1 July 2004 with AXA Corporate Solutions. It has been renewed since without increasing the amount of the flat-rate premiums, but with appreciably improved coverage, especially in 2012.

## **Environmental Civil Liability**

In 2007, a specific environmental civil liability policy was taken out for €10 million to cover certain subsidiaries. The coverage terms for this policy were significantly improved in 2010, among others by raising the amount from €10 million to €25 million. At 1 July 2012, the programme's scope was widened to include ecological harm. The programme was renewed on 1 July 2013 with no increase in the flat-rate premium, but with notably-improved coverage. A similar policy was taken out for USD 25 million in early 2008 for the US and Canadian companies.

## **3.6.2.2.** Property damage and business interruption insurance

This worldwide scheme covers property damage incurred suddenly and accidentally to the insured property, including machine breakage risk, and any resulting business interruption losses for all Group entities. Coverage is comprehensive meaning that everything not excluded is covered, exclusions being those commonly applied for this type of risk. The programme is based on a Master policy issued in France that directly covers the following countries: France, Belgium, Italy, Norway, United Kingdom and Sweden, providing cover on any difference in conditions and/or in limits (DIC/DIL) under local policies. With the inclusion in 2009 of the companies located in China, all Group companies are now covered by the programme. The programme was subscribed with a pool of insurers, of which AXA Corporate Solutions is the leading insurer. It took effect on 1 January 2005 with maximum coverage of €250 million, subject to sub-limits applied to certain events and to commonly accepted exclusions. Since then, a number of underwriting improvements have been made to the coverage under the programme. Furthermore, it has been systematically renewed on satisfactory terms, particularly having regard to variable claims incidence from one year to the next. Particular attention is given to recommendations made by the insurers based on site risk-control visits. This makes it possible to customise both the risk-control programme and the coverage terms for the sites.

## **3.6.2.3.** Shipping insurance

On 1 January 2008, a Group global shipping insurance programme was established. This programme covers all Group entities worldwide for all types of shipping: sea, river, land or air. It covers all types of goods, freight or equipment shipped. The programme comprises three policies: a "marine cargo" policy for goods shipping, a "charterer" policy with RAETS Club and a "hull and

machinery" policy contracted with AXA Corporate Solutions. The introduction of this programme secured in due course particularly favourable terms for both coverage conditions and premiums. In late 2012, a new call for tenders was issued, limited to the "cargo" policy. Once again, AIG was awarded the contract. A two-year long term agreement was concluded on appreciably-improved cover and premium terms.

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# **4.1.** REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

## Approved by the Board of Directors on 20 February 2014

Pursuant to the provisions of Article L. 225-37 of the French Commercial Code, this report covers, on one hand, the composition of the Board of Directors, the application of the principle of balanced representation of men and women on the Board, the conditions governing the preparation and organisation of the Board's work and, on the other hand, the internal control and risk management procedures in place within the Company.

## 4.1.1. Composition of the Board of Directors and conditions for the preparation and organisation of its work \_\_\_\_\_

## **4.1.1.1.** 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 those recommendations for reasons detailed in the table set out in the Appendix to this report.

## 4.1.1.2. Board of Directors

## Membership / independence

In accordance with the Shareholders' Agreement of 16 March 2012, amended on 21 March 2013, between SORAME and CEIR, on one hand, and the Fonds Stratégique d'Investissement (FSI), on the other, the Board of Directors has been comprised of seventeen members, since 15 May 2013, including:

- five directors, put forward by the SORAME-CEIR concert party, (of whom, one (Manoelle Lepoutre) has "qualified person" status, being one of five such persons referred to here below);
- three directors put forward by Bpifrance Participations;
- two directors put forward by STCPI;
- one director put forward by mutual agreement between SORAME-CEIR and Bpifrance Participations;
- five "qualified persons", three put forward by the SORAME-CEIR concert party and two by Bpifrance Participations, selected in view of their expertise and their independence from the party that proposes their appointment and from 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.

The number of Board members was raised from 15 to 17 at the General Shareholders' Meeting of 15 May 2013. Furthermore, in accordance with the law of 14 June 2013 concerning job security, as the Company satisfies the criteria established by law, two directors representing employees will be appointed and will take up their duties within six months, at most, following the Ordinary General Shareholders' Meeting called to approve the financial statements for the year ending 31 December 2013 which will take place on 14 May 2014.

Full details of membership of the Company's Board of Directors and of its General Management, at 31 December 2013, can be found in the table set out in the Appendix to this report.

The Afep/Medef code considers that a director is independent "when he has no relationship of any kind whatsoever with the Company, its Group or the management of either that could compromise his freedom of judgement" and also identifies a certain number of criteria that have to be analysed in order to decide whether a director may be classified as independent:

- "not being a salaried employee or corporate officer of the Company, a salaried employee or director of its parent company or of a company which it consolidates, and not having been so during the course of the previous five years";
- "not being a corporate officer of a company in which the Company holds a directorship, directly or indirectly, or in which a salaried employee is appointed as such or a corporate officer of the Company (currently or having held such a position within the past five years) holds a directorship";
- "not being (or being directly or indirectly bound with) a major customer, supplier, merchant banker or commercial banker of the Company or of its Group, or one of the aforesaid for whom the Company or its Group represents a significant percentage of its business activity";
- "not being related by close family ties with a corporate officer";
- "not having been an auditor of the Company during the past five years";
- "not having been a Company director for more than twelve years".

Based on an examination of these criteria by the Board, at 31 December 2013, the Board was comprised of six independent directors out of a total of 17 board members; therefore, one third of board members are independent, in accordance with Afep/ Medef Code recommendations. At its meeting of 16 February 2011, the Board of Directors reasoned that Mr. Treuille, first appointed as a director of the Company in July 1999, could continue to be considered independent owing to his far-reaching experience and expertise. Furthermore, at its meeting of 21 March 2013, the Board of Directors also considered that Mr. Tona, who has had no ties with AREVA since May 2012, satisfied the requisite criterion of independence.

In accordance with the provisions of Act 2011-103 of 27 January 2011, 17% of the directors on the Board of ERAMET were female at 31 December 2013.

Under Article 10 of the Articles of Association, directors may not be over seventy years of age when they are appointed 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, Board members' terms of office are not staggered. Fourteen 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 2014 and three terms of office will end at the General Shareholders' Meeting called to approve the financial statements for the year ended 31 December 2014 and three terms of office will end at the General Shareholders' Meeting called to approve the financial statements for the year ended 31 December 2014.

#### Other participants at Board meetings

#### Observers

At its meeting of 12 April 2000, drawing on the option provided for in Article 18 of the Articles of Association, the Board of Directors decided to provide two Observer posts on the Board and to appoint Group employees to that role, in addition to Works Council representatives. In practice, the two Observers are appointed at the recommendation of the European Works Council; if an Observer quits his/her membership of the Council, the Board will order an early termination of his/her term of office. On 27 July 2012, the Board reappointed Daniel Signoret and Pierre Lescot as Observers for a further four years. Subsequently, the Board meeting of 26 July 2013 appointed Jean-François Rebatel to replace Pierre Lescot.

In addition, Michel Antsélévé was appointed an Observer by the Board of Directors on 21 March 2013. His term of office as an Observer ended when he was appointed to the Board as a director on 15 May 2013.

In view of the new provision specifying mandatory representation of employees on the Board, introduced by the law of 14 June 2013 concerning job security, at the General Shareholders' Meeting to be held in May 2014, the Board will propose an amendment to article 18 of the Company's Articles of Association, to remove the option currently offered to the Board of Directors to appoint Observers. The terms of office of the two Observers currently in office will continue to run until their expiry, under the conditions provided at present by the Articles of Association.

#### Company Works Council Delegates

Béatrice Peignot, Odile d'Erceville, Nicolas Lehmann, Florian Viger.

#### **ERAMET Directors' Charter**

The duties and obligations of the directors are set out in the Directors' charter, provided for under Article 11-4 of the Articles of Association. Sub-section 6 of Article 12 of the Articles of Association also states that "it is the directors' duty to defend ERAMET's interests in all circumstances and, whilst carrying out their duties, they shall refrain from any and all actions, or inaction, that may compromise those interests".

All new directors elected by the General Shareholders' Meeting or co-opted by the Board, whether he or she is a director in his/ her own right or the permanent representative of a legal entity, signs up to the charter which gives a general description of the directors' mission, the principles governing their actions and the rules of conduct imposed by current legislation and the Company's Articles of Association.

The charter, which was adopted for the first time in 1999, places particular emphasis on directors' competence, their duties as regards disclosure and obtaining information, their attendance at Board meetings and, insofar as possible, at General Shareholders' Meetings and their independence. In particular, Board members are asked, at all times, to ensure that there is no direct or indirect conflict of interest existing between the Company and any company in which they may hold a position. Such a situation, which must be notified to the Board, may result in a refusal to appoint or a resignation (structural conflict) or an abstention (one-off conflict), depending on the case in point. At the time of writing this report, to the Company's knowledge, no directors were involved in a conflict of interest within the meaning of paragraph 14.2 of Appendix 1 to EC Regulation No.809/2004.

No member of the Board of Directors has entered into a service contract with the Company or one of its subsidiaries.

The duty of confidentiality and of refraining from dealing in the Company's shares when in possession of unpublished material information is also repeated. Since 2005, the rule prohibiting dealing in the Company's shares has been set down in a procedure that applies to corporate officers and executives and whose circulation list is regularly updated. At the Board meeting of 16 February 2011, the procedure itself was updated and reassessed and the Board adopted a securities' trading code of conduct for the ERAMET group. The securities trading code of conduct, aimed at preventing insider trading offences and infringements, 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.

#### **By-laws**

At its meeting of 25 May 2012, the Board of Directors reviewed the by-laws which specify its rules of organisation, first adopted in 2006. The by-laws may be requested from the Secretary of the Board of Directors at the Company's registered office. It is specified therein that the Board approves the Group's strategic objectives and strategic investments, as well as any transaction, particularly acquisitions or disposals that may significantly affect Group results

#### 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

or the Group's structure, balance sheet or risk profile. Prior to each Board meeting and according to the agenda, directors receive the accounts, the budget and forecasts. Board members will also examine press releases related to the financial statements or to acquisitions or disposals, prior to their distribution, except in duly justified urgent cases.

The by-laws also specify the membership, organisation and operation of the Committees, as described here below. The Committees may, within the scope of their respective competencies and having first informed the Chairman, confer with members of the Group's management. They report on the information and advice obtained.

### **Code of conduct**

At the recommendation of the Audit Committee, on 20 January 2010, the Board of Directors adopted the provisions of the Group's code of conduct. The complete text of the code of conduct is available on the ERAMET website. The purpose of the code of conduct is to formalize a base of essential common principles of behaviour for everyone in the Group to refer to and comply with in all situations. These principles apply, in the first instance, to the Group, but the Group encourages all its partners to adhere to the same standards. The principles of the code of conduct are as follows: combat all kinds of fraud or corruption, avoid any conflict of interest, respect competition rules, protect Group information, respect and protect health and safety at work, supply quality products and services while observing security and environmental protection standards, promote the Group's territorial and civic responsibility, supply quality information to the Group's local partners and provide reliable and comprehensive information to its shareholders.

This code of conduct, translated into the Group's twelve languages, was distributed to all Group employees in 2010. It is passed on by members of the Comex, the Management Committee of each Division and the main Corporate managers. An Ethics Officer has specific responsibility for monitoring the appropriate application of the code of conduct. During 2013, the internal audits initiated in 2012 were continued in several of the Group's main subsidiaries, with the support of independent specialists.

The code of conduct was redrafted in 2013 to further develop and better illustrate the principles guiding the Group's actions and those of its employees.

## Evaluation of the work of the Board of Directors

At its meeting of 28 July 2010, the Board of Directors reviewed the conclusions of the last evaluation of its work. Further evaluation of the work of the Board of Directors was undertaken in 2013.

#### Meetings

#### Meeting notice

Meetings are called as often as necessary by the Chairman who addresses an invitation to all Board members, in accordance with the law. Invitations may be sent to members by any means, including email, in principle one week prior to the date of the meeting. With the exception of telephone conference calls that may be held during the year, the Board's meetings are usually held at the Company's head office (Tour Maine-Montparnasse).

#### Board meeting procedures

At each Board meeting, a dossier containing files on most of the items on the agenda is given to every participant in the Meeting.

The meeting usually begins with a preliminary report by the Chairman on the main events having occurred since the last meeting, followed by a presentation given by the three Division Managers on the market conditions relevant to each Division. Particularly important projects with respect to the Group's strategy may also be presented.

At the end of the meeting and particularly when the Board is approving the financial statements, a draft press release is usually submitted to directors for their approval and is published at the end of the day or the next day, before markets open, in order to report to the market on the main developments affecting the Company and the Group.

#### **Minutes**

The Secretary of the Board (in principle, the Company's Director of Legal Affairs) draws up the minutes for each Board meeting, which the Chairman submits to directors for approval at the next Meeting, the draft minutes being sent to each participant (Directors, Observers and Group Works Council members), together with the invitation and agenda, approximately one week prior to the scheduled meeting date.

## Work in 2013

The Board of Directors met eight times in 2013. The attendance rate of its members was 90%.

In addition to examining recurring items relating to the Group's business, Board meetings were concerned, in particular, with:

- approval of the 2012 financial statements of the Company and the Group and convening the General Shareholders' Meeting;
- review of the 2013 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 Group's mid- and long-term financing plan (including the bond issue carried out in November 2013 for €400 million).

In order to carry out its work, the Board is also aided by the work of four Committees which it has set up. Each Committee may refer to independent experts, as necessary, on matters within their area of expertise.

## Audit Committee

The charter specifying membership of the Audit Committee (minimum three members, maximum five members, two thirds being independent directors, in compliance with the Afep/Medef corporate governance code), its operation and its responsibilities was reviewed by the Board on 25 May 2012. In accordance with article L. 823-19 of the French Commercial Code, this Committee has particular responsibility for monitoring (i) the preparation of financial information (ii) the effectiveness of internal control and risk management systems (iii) statutory audit of the individual and, as applicable, consolidated financial statements, by a Statutory Auditor, and (iv) the independence of the Statutory Auditor.

To that end, it is the responsibility of the Committee to (i) review the suitability and proper application of the accounting methods used (ii) analyse the interim and annual financial statements (iii) examine the internal audit plans and conclusions (iv) monitor major disputes (v) examine the Group's foreign currency and commodity risk management policy and its hedging and investment policies (vi) render an opinion to the Board concerning proposals for the appointment of Statutory Auditors, and (vii) examine the Chairman's report on the preparation and organisation of the Board's work and internal control procedures. It meets at least two days prior to the Board's review.

The Company refers to the AMF working group's report on Audit Committees to organise the Committee's work (AMF recommendation of 22 July 2010).

Audit Committee meetings are attended, in particular, by the Chief Financial Officer, the Statutory Auditors, the Group's Internal Audit Manager, the Accounting and Tax Manager, the Financing and Treasury Manager and the Director of Risk Management and Group Insurance.

The Audit Committee is currently comprised of four directors: Caroline Grégoire-Sainte-Marie (independent director), Michel Somnolet (independent director) and Antoine Treuille (independent director).

Caroline Grégoire-Sainte-Marie, a graduate of IEP Paris and a Corporate Director, has worked in General Management and in the Finance Departments of industrial and pharmaceutical groups.

Michel Somnolet, a graduate of HEC, is a former director, Deputy Chairman and CFO of L'Oréal.

Antoine Treuille, a graduate of ESSEC with an MBA from the University of Columbia, USA, is Executive Managing Director of Altamont Capital Partners LLC, a private equity firm based in New York.

The Audit Committee met three times during 2013 and the attendance rate of its members was 89%.

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 the report on audits for the year as well as the audit programme for the following year. The examination of the financial statements by the Committee is assisted by a presentation given by the Statutory Auditors describing the conclusions drawn from their work and the main issues concerning works carried out.

In addition to the review of the annual and interim financial statements, in 2013, the Committee examined the following points in particular:

 the Chairman's report on the work of the Board of Directors and on internal control;

- the work of the Internal Audit Department in 2013 and its scheduled work plan for 2014;
- the latest changes to IFRS;
- follow up of the improvement plan for competitiveness of the Alloys Division;
- future cash flow needs;
- the Group's risk management structure;
- development of the Group's information technology systems.

#### **Compensation Committee**

The charter specifying membership of the Compensation Committee (three members), its operation and responsibilities, was reviewed by the Board of Directors on 25 May 2012. The main responsibility of this Committee is to make proposals to the Board of Directors with regard to the remuneration of ERAMET group corporate officers appointed by the Board of Directors.

The Committee is assisted in its work by the Group Human Resources, Health, Safety and Security Manager who also holds the position of Committee secretary.

The Compensation Committee is currently comprised of three members: Michel Somnolet (independent director), Claude Tendil and Antoine Treuille (independent director).

The compensation policy for corporate officers established by the Board of Directors is based on the following items:

- Remuneration is comprised of a fixed portion and a variable portion, decided annually by the Board following recommendations from the Compensation Committee.
- The variable portion is based on a certain number of criteria and on specific goals, the choice and weighting of which are approved by the Board of Directors every year, at the recommendation of the Compensation Committee; for example, in 2013 it was based on: (i) actual economic performance (Current Operating Profit) (ii) financial performance (net cash position) (iii) the completion vis-à-vis the budget and schedule of major capital expenditure programmes, industrial projects or acquisition and development activities, and (iv) "managerial" results in terms of team motivation and leadership, strategic proposals, projects and goals in the fields of health, safety, the environment and industrial risk. For reasons of confidentiality, these results, compared against carefully defined targets set by the Compensation Committee and the Board of Directors, may not be disclosed to the general public. The variable portion may not exceed 70% of gross annual fixed remuneration (140% for the Chairman and CEO).
- In addition, in respect of profit-sharing, 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 Compensation Committee. Since the Board meeting of 23 July 2007, corporate officers are required to retain 20% of shares acquired under performance share plans, throughout the term of their appointments. Given this mandatory requirement, imposed upon acquisition of the shares, that a significant level of shares acquired should be retained, the recommendation set out in the Afep/Medef code that an additional quantity of shares

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in the Company should be purchased when the share grant becomes available, is not imposed. Share grants are awarded annually, at the same time of year, and are not discounted. The share plan regulations prohibit hedging operations. In 2013, a total of 37,830 performance shares, in the form of existing shares, all conditional upon the fulfilment of specific performance conditions, were granted to corporate officers. The performance conditions, calculated over a three-year period, are 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 composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions being fully achieved if the ERAMET share is ranked in the top 15% of the panel) and the intrinsic performance achieved over a three-year period of certain financial indicators for two-thirds of the share grant (50% operating margin (current operating income / revenue), and 50% operating cash-flow, with annual targets related to the Company's budgeted targets and the performance conditions only being fully achieved in the event of significant out-performance of these targets). No share subscription or purchase options were granted during the financial year to these same beneficiaries.

- Corporate officers are 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 a settlement of their pension entitlement 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 internal plan regulations, with said reference salary being limited, in the same regulations, to 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 taken into account 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. 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 <sup>(1)</sup>, provides the whole pension plan with a balanced structure. Based on the latest actuarial calculation, the present value of the estimated portion of the four corporate officers in question, who were still working as at 31 December 2013, out of total commitments in respect of the past service of all beneficiaries of this supplementary pension plan, amounted to €18.7 million at the end of December 2013, with the total amount of commitments being measured under IFRS at €43.4 million.
- Should the Chairman and CEO leave the Company, his entitlement to severance pay, as provided for in his corporate officer contract, is conditional upon the fulfilment of performance conditions: the sum of gross variable remuneration (itself subject to specific performance conditions) received over the last three

complete years of his/her term of office must be 20% or more of the total gross annual fixed remuneration received during the same three-year period. Consequently, these arrangements exclude payment of such a benefit should the Chairman and CEO fail to achieve his targets. The amount of severance pay which may fall due is equal to three times the last gross annual fixed remuneration plus three times the average gross annual variable remuneration received in the last three complete years prior to his departure. Following the reappointment of the Chairman and CEO to that role, decided by the Board of Directors on 11 May 2011, and at the recommendation of the Compensation Committee, on 27 July 2011 the Board of Directors reached a unanimous decision (the Chairman and CEO abstaining), to retain all elements of his remuneration and all the provisions of his corporate officer's contract dated 20 February 2008 (incorporating all the amendments decided since by the Company's Board of Directors), including the provision related to severance pay, in order to preserve the general balance of the corporate officer's contract of 26 April 2007, drawn up when he joined the ERAMET group. In accordance with the provisions of article L. 225-42-1 of the French Commercial Code, shareholders approved the upholding of these arrangements at the General Shareholders' Meeting of 15 May 2012. In addition, in accordance with Afep/Medef code recommendations, Patrick Buffet does not hold a contract of employment with the Company.

The other corporate officers do not benefit from a commitment or promise relating to the granting of a severance payment in respect of their offices. The employment contract between the Deputy CEOs and the Company is suspended until their respective terms of office expire. The suspended employment contracts of Messrs Madelin and Vecten provide for the payment, in the event of dismissal, retirement or pensioningoff, of a customary payment, calculated on the basis of the national collective bargaining agreement for executives in the metallurgy industry and on the basis of their reference remuneration (fixed plus variable). The collective bargaining agreement provides for a maximum of 18 months' remuneration for maximum length of service of 28 or 30 years depending on the age of the persons concerned upon their departure. The suspended employment contract of Georges Duval contains a clause making provision for the payment, in the event of his dismissal, retirement or pensioning-off, of a contractual indemnity amounting to 18 months' salary, calculated on the basis of his reference remuneration (fixed plus variable) as an employee, which is not combined with the customary payments calculated by application of the national collective bargaining agreement for executives in the metallurgy industry. Édouard Duval's employment contract contains an identical clause.

No payment relating to a non-competition commitment has been provided for corporate officers at the end of their respective terms of office, with the exception of Cyrille Duval whose employment contract provides for the right for his employer to invoke a one-year non-competition obligation, renewable once for the same term, against payment of compensation equal to

(1) In 2013, the annual social security ceiling was  $\in$  37,032.

50% of his average fixed remuneration for the twelve months preceding contract termination, regardless of the reason. In the event of his dismissal, the compensation is raised to 60% of this average.

In the event of a change in control of ERAMET and the termination of an employment contract deemed as being attributable to the employer, a specific guarantee, which may not be combined with other indemnities applicable under contracts or collective bargaining agreements, was decided upon in 2005 and implemented. At 31 December 2013, this guarantee applied to 15 of the Group's senior executives (Messrs Madelin and Vecten, the only corporate officer beneficiaries, certain members of the Group Executive Committee who are not corporate officers and members of the Comex pertaining to the Divisions). This guarantee, which represents compensation equal to three years' remuneration (fixed plus variable) for each beneficiary manager, was estimated at a total of €6.9 million at 31 December 2013. Patrick Buffet does not benefit from this guarantee.

Under their employment contracts, certain employees also benefit from contractual indemnities, including an indemnity payable upon retirement, calculated on the basis of one to two years' salary (fixed plus variable) and including the rights vested under the collective bargaining agreement to which they are subject.

- The Comex members also benefit from a supplementary healthcare plan and a supplementary disability and life insurance scheme, offered to all ERAMET group employees.
- Members of the Comex who are non-executive corporate officers also benefit from a collective discretionary profit-sharing scheme. The sums paid under the scheme in 2013 with respect to 2012 amounted to a total of €44,574, in line with the legally prescribed ceiling.

The Compensation Committee met four times during 2013 and the attendance rate of its members was 92%.

During the year, besides validating the proposed 2012 bonuses and 2013 targets for corporate officers which the Board of Directors approved, the Committee also proposed to the Board of Directors, and the latter approved, a 2013 EraShare worldwide bonus share grant plan, as part of the annual performance share grant plan for corporate officers and senior executives of the Company and its subsidiaries, granting two bonus shares to all employees of the Company and its subsidiaries, and a selective performance share plan for 2013, granting a total of 145,040 performance shares to 209 Group executives (including 37,590 performance shares to corporate officers).

## **Selection Committee**

Comprised of four members (three directors and the Chairman), it recommends the appointment of the corporate officers heading up each of the Group's three Divisions and the Group's Chief Financial Officer. The charter specifying its membership, operation and responsibilities, was reviewed by the Board of Directors on 25 May 2012. With regard to the consideration of proposals for the appointment of new directors, the Selection Committee ensures that no legal incompatibility or conflict of interest exists and, concerning proposals for the appointment of new independent directors, it studies the extent to which potential candidates meet the independence criteria laid down by the Afep/Medef code. Finally, with regard to the replacement of executive corporate officers in the event of an unforeseen vacancy, it examines and renders an opinion on solutions for such replacement.

The Committee is currently formed by Patrick Buffet, Cyrille Duval, Édouard Duval and Jean-Yves Gilet (who replaced Thomas Devedjian in February 2014). This committee does not have an independent director among its members. This is due to the specific rules of the shareholders' agreement designed to structure relationships between the controlling shareholders of the Company.

The Selection Committee met once in 2013, to examine applications from candidates for two new directorships submitted to a vote at the General Shareholders' Meeting of 15 May 2013.

## **Strategic Committee**

It was decided that a Strategic Committee should be set up comprising seven members (six directors and the Chairman). A charter specifying its composition, how it operates and what tasks it performs, is currently being prepared.

The Committee is formed by Patrick Buffet, Claire Cheremetinski, Cyrille Duval, Édouard Duval, Jean-Yves Gilet, Thierry Le Hénaff (independent director) and Manoelle Lepoutre (independent director).

## **4.1.1.3.** 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.

## 4.1.1.4. General Management

## **Company Management Method**

At its meeting of 26 March 2003 and in line with the discussions of the General Shareholders' Meeting of 23 May 2002 and Article 14 of its Articles of Association, the Board of Directors of the Company adopted a traditional management organisation for the Company with a Chairman & Chief Executive Officer responsible for both the general management of the Company and the chairmanship of the Board of Directors, considering this choice to be most suited to the organisation and the composition of the Company's share capital.

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 to assist him/her. The Company's CEO and deputy CEOs must be nationals of a member state of the European Union and may not hold the position beyond the age of 70.

## Membership of General Management

The General Management of the Company and of the Group is organised as follows:

#### Chairman and CEO

Patrick Buffet.

At its meeting of 25 April 2007, the Board of Directors granted him all the powers permitted by French law to a Chairman and CEO of a public limited company. At its meeting of 11 May 2011, the Board of Directors renewed his powers and those of the Deputy CEOs. The Board also granted the Chairman and CEO powers to substitute and delegate, under his or her responsibility, to such persons as he sees fit, with the possibility of sub-delegating such part of his powers as he feels appropriate, by giving special powers for one or more specific purposes.

In line with the provisions of Article 13, Subsection 2 of the Articles of Association, the Chairman and CEO exercises full authority subject to the proviso that, "no decision relating to the Company's major strategic, economic, financial or technological issues may be taken without first being discussed by the Board."

In line with Article 13, Subsection 4 of the Articles of Association, "acts affecting the Company are signed either by the CEO, the Deputy CEO or by any specially authorised person."

#### **Deputy CEOs**

The following individuals were appointed in that capacity:

- Georges Duval (with effect from 23 May 2002), ERAMET Alloys,
- Bertrand Madelin (with effect from 1 January 2008), ERAMET Nickel,
- Philippe Vecten (with effect from 23 May 2007), ERAMET Manganese.

Each of the three deputy CEOs is also a Division Manager. The China Department reports to Philippe Vecten. The Administration and Finance Department, the Human Resources, Health, Safety & Security Department, the Communications and Sustainable Development Department, the Research, Innovation, Engineering and Purchasing Department, the Strategy and Development Department, the Project Leaders Department, the Group Financial Communication and Economic Studies Department, the Legal Department and ERAMET International, all report to the Chairman and CEO. The Chief Financial Officer, Jean-Didier Dujardin, also supervises IT systems, internal audit, management control, treasury, risk management and insurance, financing and accounting.

Monthly Division meetings chaired by the Chairman and CEO enable monitoring of monthly reporting and the definition of essential operating choices for the Divisions.

Since September 2004, the Company's management method has also included an Executive Committee (Comex) and an International Management Committee (IMC), which are both chaired by the Chairman and CEO.

The Executive Committee is comprised of the Chairman and CEO, the Division Managers, the Human Resources, Health, Safety and Security Manager, the Chief Financial Officer, and the Communications and Sustainable Development Manager. The Corporate managers of support departments (Human Resources,

Health, Safety and Security Department, Administration and Finance Department and Communications and Sustainable Development Department) are Comex members, thereby strengthening the effectiveness and consistency of their actions. The aim is to enable the cross-company departments to carry out three essential roles: an operational role, a supervisory role and a service role for the Divisions.

The International Management Committee meets on a quarterly basis and is attended by members of the Executive Committee, the CEO of Aubert & Duval and Erasteel, the Chairman of ERAMET International, the CEO of Société Le Nickel-SLN, the Weda Bay Nickel Project Manager, the Leaders' Programmes Manager, the Manager of ERAMET in China, the Executive Director in charge of Group development in Africa, ERAMET's General Representative in Gabon, the Research, Innovation, Engineering and Purchasing Manager and the Group Director of Legal Affairs.

## 4.1.2. Internal control procedures \_\_\_\_\_

## 4.1.2.1. The Company's internal control goals

In accordance with the AMF reference framework issued in January 2007, 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 accurately reflects the Company's business activities and position;
- ensure that procedures and/or programmes are put in place to protect assets against the various risks of loss 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 have been totally eliminated.

## 4.1.2.2. Overview of the audit procedures in place

## Internal control players

Owing to the diversity of its business activities, ERAMET is organised into three independent Divisions, each with all the functions required for its operations (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 cohesion. The following are the main participants involved in internal control:

 the Executive Committee (Comex), whose membership is set out in the "General Management" section above, meets every two weeks. The International Management Committee, whose membership is also set out in the "General Management" section above, deals, more specifically, with organisational matters. It meets four times a year;

- the Internal Audit Department reports to the Chief Financial Officer (CFO). Based on an Audit Plan approved each year by the Comex, the department carries out assignments in the various Group units as defined in the Plan and instructed by the Chairman. It reports quarterly to the Comex and annually to the Audit Committee on the results of its assignments and the progress achieved with the resulting action plans. Each year the Audit Committee reviews the internal audit plan of the Group and of its subsidiaries (current plan and plan for the following year) and proposes any adjustments it considers necessary to the Board of Directors;
- the Group Planning and Management Control Department reports to the CFO. It sets out the structure of ERAMET's management controls and monitors the Division's management systems projects to ensure they are consistent with the Group's goals. The department defines the relevant key performance indicators for the Group, at each level, and helps to implement them for each Division and entity. It is also responsible for Group reporting;
- the Legal Department reports to the Chairman and CEO. As a service centre, it provides the whole Group with legal support on all issues within its area of expertise;
- the Financing and Treasury Department, reporting to the Chief Financial Officer (CFO), manages, in liaison with the specialist committees of the main subsidiaries, hedging of foreign currency and commodity risk, particularly with regard to nickel and oil, and is in charge of financial resource management (investments and borrowings) for the whole Group;
- the Group Risk Management and Insurance Department, reporting to the CFO, coordinates risk management procedures. With the assistance of the Group Risk Manager, it steers the deployment of the risk management function within the Group, performs regular risk mapping updates and ensures that action plans are implemented to increase levels of risk control. It reports to the Comex and to the Audit Committee on risk management measures taken. It is also responsible for arranging and monitoring all insurance policies subscribed by the Group;
- the Tax Department is part of the Accounting, Tax and Consolidation Department and reports to the CFO. As a service centre, it assists the Group's various subsidiaries with their respective tax obligations and fulfils those of the parent company;
- the Communications and Sustainable Development Department. It assists the various Divisions in controlling and reducing the Group's environmental impact, thereby ensuring the sustainability of ERAMET's business activities, products and markets in line with legislative, political and social developments;

- the Group Human Resources, Health, Safety and Security Department. It manages the Company's human resources and ensures that HR policies are consistent across the Group's various entities. The department coordinates Safety and Security policies within the Group and formalises health issues via a network of local contacts at the sites;
- more generally, every management level in the Company is responsible, within its field of expertise, for defining, implementing and steering internal control items, under the management of the relevant Manager who is a member of the Comex.

#### **Risk management**

#### **Risk Management Charter**

On 11 December 2013, the Board of Directors adopted the terms of the ERAMET group Risk Management Charter. The ERAMET group defines risk management objectives as follows:

"Our plan of action for Risk Management is a lever for Group management and contributes, in particular, to achieving the following:

- protect our main human and financial resources, and our corporate image;
- ensure value creation;
- encourage risk-taking at an acceptable level;
- comply with legal and regulatory obligations, and with the values promoted by the Group;
- seek out value-creating opportunities for the Group (e.g. new markets, new clients, etc.)."

The full text of the Charter is available on the ERAMET website.

Because of the constant change taking place in the economic and regulatory environments encompassing the Group's activities, ERAMET must be knowledgeable of the internal or external risks that could prevent it from achieving its objectives or that could impact on any of its main assets or key business processes. The Group has implemented a two-step approach: the identification and assessment of major risks on the one hand, and risk management on the other.

#### Risk identification and assessment

- At the end of 2011, the Group performed a Group risk mapping exercise with the assistance of a consulting firm. The method used enabled identification of the major strategic, operational, financial and compliance risks which could affect Divisions and, in a broader sense, the Group.
- In 2013, the risk identification and assessment measures were continued, with the aim of implementing best practice in this respect:
- updating Division risk maps;
- implementation of a risk monitoring tool;
- the risk management charter and related procedures were validated by the Audit Committee on 24 July 2013 and approved by the Board of Directors on 26 July 2013.

• The main operational and financial risks faced by the Group are described in the 2012 Registration Document, in chapter 3, Risk Factors, and, for financial risks, in the notes to the 2013 consolidated financial statements.

#### Treatment of risks

In 2014 and thereafter, the main risks identified by risk mapping are treated in two different ways:

- Action plans aimed at strengthening the existing control mechanisms are deployed for the major risks identified. The Group Risk Manager is responsible for monitoring this procedure.
- The results obtained from risk mapping are integrated, as far as possible, in the Group's internal audit plan: the goal of this procedure is to ensure that mechanisms are put in place to control the risks.

The operational risks are mainly managed at Division level, in a manner adapted to the specific business activities. Industrial and environmental risks are monitored by the Divisions, together with the Communications and Sustainable Development Department.

Liquidity, interest rate, foreign currency and commodity risks are managed by the Treasury Department for the whole Group, together with the relevant contacts in the larger subsidiaries.

Finally, the Financing and Treasury Department, together with Division managers, establishes the insurable risk coverage policy for all the Group's companies. The various insurance programmes are described in the Group's 2012 Registration Document. Any additions to those insurance programmes will be detailed in the Group's 2013 Registration Document.

## Summary of internal control procedures implemented in the Group

- Existing charters: the Audit Committee, Internal Audit, Legal Department, Risk Management and Group Insurance Department, Management Control, Tax Department and IT Department have each published a charter. The purpose of these charters is to specify the operating rules of the various committees or departments and to formalise relationships with other parties. Finally, at the recommendation of the Audit Committee, on 20 January 2010, the Board of Directors adopted the provisions of the Group's code of conduct.
- Signing authority, other powers: the three Division Managers, who are Deputy CEOs, have all the powers granted by law. The Group CFO has the power granted by the Chairman and CEO to operate the Company's various bank accounts and to execute with a co-signer, named on a list for that purpose, all financial transactions up to a maximum of one hundred million Euros. He may also carry out alone, up to a maximum of the same amount, exchange, loan, advance or borrowing transactions over the telephone, and send any transfer order by

fax, in favour of third parties with a confirmation call by the bank should the fax systems not be operational. These transactions should be confirmed in writing with a co-signer whose name appears in the aforementioned list.

- IT systems: The role of the Group IT Department is to make IT systems more harmonised across the Group and to assist the various subsidiaries. It has set up a worldwide network and a single Group email system. Security has been improved through the auditing of certain systems and the implementation of specific tools. A standard for office technology (hardware and software packages) has been established. Several projects to improve management systems are ongoing in the Divisions, including the implementation of integrated procurement applications for better control of liabilities and separation of tasks throughout the supply chain. The "Spring" project was launched in 2011 to provide better security and to modernise our IT infrastructure. A global organisational structure, covering the whole Group and its subsidiaries, is in the process of being implemented. The modernisation work involves three aspects:
- a redesigned workstation, encompassing the latest technologies for office systems, communications, data security and internet navigation, is currently being rolled out;
- the main servers are consolidated in regional centres. The global network is to be reinforced and, if necessary, doubled in size, to support that new technical architecture;
- concerning business applications, a study has been set up to modernise our main ERP platforms around the SAP solution in a harmonised fashion across the whole Group. An initial pilot project was launched to manage the European Manganese business.
- General organisation of procedures: ERAMET has drawn up, and published within the Company and its subsidiaries, internal procedure manuals on capital expenditure, foreign currency hedging, management procedures (budgeting, operational planning, long-term financing plans, updating forecasts, analysis of over/under-runs, etc.), the consolidation manual and shared accounting rules, travel and expense accounts and financial procedures in relation to cash. Three procedures relating to crisis scenario prevention and management have been established and distributed. These relate to the anticipation and identification of weak signals, major incidents and crisis management in respect of issues or events relating to the safety of facilities, property or persons, and the control of industrial and environmental risks.
- Legal and operational control of subsidiaries by the parent company:
  - owing to the diversity of their businesses, day-to-day running of the Divisions is managed independently. Each Division has a Management Committee that takes all decisions within its area of responsibility, reporting to the Group Comex on a regular basis;

- the Legal Department acts as Secretary to the Board for the main companies (Société Le Nickel-SLN, Comilog S.A.);
- in 2008, the Board of Directors of Comilog SA set up an Audit Committee and a Compensation Committee. At the meeting of the Board of Directors of Le Nickel (SLN), held in November 2008, the directors representing ERAMET also proposed the establishment of three committees: a Strategy Committee, an Audit Committee and a Compensation Committee, as part of a modernised corporate governance structure. This was implemented at the SLN Board meeting of 17 November 2009 and has since proved very successful. This arrangement was modified at the SLN Board meeting of 4 December 2012 to take into account the separate functions of Chairman and CEO of the Company and the appointment of new persons to those offices, replacing the Group's Chairman and CEO;
- Division management meetings: monthly meetings are organised with the management of each Division to review monthly performance and to analyse budget over/under-runs and the resulting action plans. Management/Accounting and Treasury Committee meetings are also held monthly, bringing together Division and parent company CFOs, accountants, management controllers and treasurers, respectively, to deal with common issues and provide the necessary coordination. Specific meetings take place every month to discuss sales, accounting, treasury, insurance and other issues with the Divisions. Finally, specific budgeting, forecast updating and planning meetings to address these issues;
- implementation of the internal audit plan: the internal audit carried out 11 assignments in 2013 throughout the Group's subsidiaries;
- control of strategic investments: Under the Capital Expenditure Procedure, all projects exceeding €4 million are submitted for approval at Division meetings on the basis of specific procedures (presentation dossier, approval meetings, followup, etc.). Capital expenditure projects are controlled and approved from a technical perspective by the Engineering Department, which reports to the Group Strategy and Development Manager and, from a financial perspective, by the Administration & Financial Department. Strategic projects are presented to the Board of Directors of ERAMET;
- monitoring of commitments given and received: independently of the abovementioned procedure, quarterly accounting reporting provides information on these commitments. Moreover, the Legal Department provides support for major contract negotiations or in the event of disputes.

## Internal control system for the preparation of financial and accounting information

 Organisation of the accounting department within the Group: the Accounting Units of the parent company and of its subsidiaries record daily transactions (purchases, sales, cash flow, etc.) and ensure that the accounting methods comply with the Group's established procedures. The Accounting, Tax and Consolidation Department, within the Group Administration and Financial Department, keeps the parent company's accounts, files tax returns and all those 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 CFOs, accountants and management controllers of the main Divisions and Subsidiaries.

- Procedures for the preparation of consolidated financial statements: Consolidation returns are input into the BusinessObjects Finance programme by each subsidiary and Division-level consolidation is carried out by each Division under the supervision and with the support of the central consolidation department. This department also carries out Group consolidation. 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 for consolidation milestones when preparing the financial statements.
- Budget and management control: The budget for the three-year operational plan, including the budget for the first year, is calculated at the end of the year for the ensuing year and at least three forecast revisions are made to the current annual budget 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 Comex and, subsequently, by the Chairman and CEO of ERAMET. An analysis of the differences 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: The Group Administration and Financial Department, in addition to its pivotal role in managing foreign currency and commodity risk, 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 and assists them in establishing payment methods for at-risk countries. At the end of 2004, the Group incorporated Metal Securities, a cash-pooling company 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.

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Work of the Board of Directors' Audit Committee: the Audit Committee reviews the interim and annual financial statements, monitors major disputes and ensures compliance with foreign currency and commodity risk management policy procedures and hedging policies. It reviews the internal audit plan and the actions decided upon based on the audits carried out.

Paris, 20 February 2014

The Chairman of the Board of Directors

Liaison with the Statutory Auditors: the Auditors carry out half-yearly reviews of the financial statements which are validated at meetings held with the Division and Group Finance Departments, the Division Managers, the Group CFO and, thereafter, with the Chairman and CEO of ERAMET.

Afep-Medef code recommendations not applied	Explanation			
Recommendation 17.1 (referring to 18.1) – composition of the Selection Committee: <i>"It should not include any executive corporate officers and should be comprised mainly of independent directors. It should be chaired by an independent director".</i>	The Selection Committee does not include an independent director and the Chairman and CEO is a member of the Committee. This is due to the specific rules of the shareholders' agreement designed to structure relationships between the controlling shareholders of the Company.			
Recommendation 17.2 – prerogatives of the Selection Committee With regard to the selection of new directors, the Selection	It is not the remit of the Selection Committee to propose candidates for directorships to the Board of Directors.			
Committee "is responsible for proposing candidates to the Board of Directors".	This situation is due to the particular rules of the Shareholders' Agreement, intended to structure relationships between controlling shareholders of the Company, which only make provision to the effect that the Selection Committee "is responsible for proposing, to the Company's governing bodies, the appointment of candidates to senior management positions within the Company's various Divisions and to the position of Financial Director of the ERAMET group". However, the Selection Committee Charter specifies that "with regard to the examination of proposals for the appointment of new independent directors, the Selection Committee is responsible for examining, whilst adhering to the provisions of the Shareholders' Agreement, the extent to which possible candidates satisfy the independence criteria put forward by the AFEP/MEDEF code and to report to the Board of Directors on its findings in that respect" and that "with regard to the examination of proposals for the appointment of new directors, the Selection Committee is responsible for ensuring, whilst adhering to the provisions of the Shareholders' Agreement, that candidates for directorships do not present any legal incompatibility or conflict of interest".			
Recommendation 23.2.4 – performance shares:	Given the mandatory requirement, imposed upon the acquisition			
"The granting of performance shares to executive corporate officers should be made conditional [], pursuant to procedures established by the Board of Directors and disclosed upon the granting of said shares, upon the purchase of a given number of shares when the performance shares granted become available."	of shares, that a significant level of the shares acquired should be retained (20% of shares throughout the entire term of office), the requirement that an additional quantity of shares in the Company should be purchased when the share grant becomes available, is not imposed.			
Recommendation 23.2.5 – Chairman and CEO severance pay: number of years of pensionable service taken into account: two years of fixed and variable remuneration.	Severance pay is calculated on the basis of three times the last gross annual fixed remuneration plus three times the average gross annual variable remuneration received in the last three complete years prior to departure. These arrangements have been upheld in order to preserve the general balance of the corporate officer's contract of 26 April 2007.			
	Finally, for the record, Patrick Buffet does not hold a contract of employment with ERAMET, nor does he hold a contract of employment suspended during his term of office on the Board, unlike the three deputy CEOs who are also corporate officers.			
Recommendation 23.2.6 – supplementary pension plans:	The rules concerning the progressive increase of potential pension			
"Potential pension entitlements should be increased gradually according to the number of years of pension plan membership and must not represent more than 5% of the beneficiary's remuneration	entitlements are not in line with this recommendation. This is due to the Group's need to have the capacity to attract highly experienced staff with significant career history.			
each year."	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, provides the whole pension plan with a balanced structure.			

## **Appendix** – Implementation of the "Comply or Explain" rule

4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

## Appendix – Composition of the Board of Directors and of General Management at 20 February 2014

#### List of directors and their positions

Surname, forename 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
Buffet Patrick	Director:	Reappointments:	In Group companies
Director <sup>(3)</sup> <sup>(5)</sup>	Co-opted by	General Shareholders'	<ul> <li>Director of Le Nickel-SLN</li> </ul>
Chairman and CEO since	the Board on 7 March 2007	Meetings of 25 April 2007	<ul> <li>Director of Comilog S.A.</li> </ul>
25 April 2007	Chairman and CEO:	and of 11 May 2011	In non-Group companies
Born 19 October 1953 (60 years)	Board meeting of 25 April 07	for a four-year term. Expiry date:	<ul> <li>Member of the Supervisory Board of Arcole Industries (unlisted)</li> </ul>
French nationality		General Shareholders'	Director of Bureau Veritas and Banimmo
Business address:		Meeting called to	(Belgium) (listed companies)
Tour Maine-Montparnasse		approve the 2014	Offices held and completed
33, avenue du Maine		financial statements	during the past five years
75015 Paris, France			<ul> <li>Director of Rhodia (until 21 October 2011)</li> <li>Chairman and CEO of Société Le Nickel-SLN</li> </ul>
Mr. Buffet is a mining engineer. He was Senior Executive Vice President of Suez until 2007.			• Charman and CEO of Society Le Nicker-SLN (until 31 December 2012)
Antsélévé Michel	General Shareholders'	Expiry date: General	In non-Group companies
Director	Meeting	Shareholders' Meeting called to approve	Director representing the Presidency of the
Born 19 February 1965 (48 years)	of 15 May 2013	the 2016 financial statements	Gabonese Republic on the Boards of Directors of Société de Développement des Ports (Gabon), Compagnie Minière de Belinga
Gabonese nationality			(Gabon) and Société Nationale de Gestion et
Business address:			de Construction du Logement Social (Gabon)
Présidence de la République			Offices held and completed
Libreville			during the past five years
Gabon			Director representing the Gabonese Republic     on the Board of Directors of Compagnie
Mr. Antsélévé is Special Advisor to the President of the Gabonese Republic, Head of the Mines, Hydrocarbon, Energy and Hydraulic Resources Department.			de Navigation Intérieure (Gabon)
Cheremetinski Claire	Co-opted by the	Expiry date:	In non-Group companies
Director representing the State (5)	Board meeting of 14 December 2011	General Shareholders'	<ul> <li>Director of Française des Jeux</li> </ul>
Born 2 May 1976 (37 years)	(Confirmation by	Meeting called to approve the 2014	Member of the Supervisory Board of AREVA,
French nationality	General Shareholders'	financial statements	of Électricité Réseau Distribution France (ERDF) and of RTE EDF Transport
Business address:	Meeting of 15 May 2012)		Offices held and completed
Agence des Participations de l'État	01 13 Way 2012)		during the past five years     Director of AREVA NC
139, rue de Bercy			
Teledoc 229			
75012 Paris, France			
Ms. Cheremetinski is Deputy Director for Energy and other shareholdings at the French Government Shareholding Agency (APE).			
(1) Audit Committee.			
(2) Compensation Committee.			
(3) Selection Committee.			
(1) Indonandant Director			

(4) Independent Director.

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Surname, forename 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	
FSI Equation	Co-opted by the	Expiry date:	In non-Group companies	
Director <sup>(3) (5)</sup> Represented by	Board meeting of 25 May 2012	General Shareholders' Meeting called to	Executive Director ETI/ of Bpifrance Participatic	
Jean Yves Gilet	(Confirmation by General Shareholders' Meeting	approve the 2014 financial statements	<ul> <li>Member of Board of Directors of Eiffage and Orange</li> </ul>	
Born 9 May 1956 (57 years) French nationality	of 15 May 2013)		Offices held and completed during the past five years	
Business address:			<ul> <li>CEO of Fonds Stratégique d'Investissement</li> </ul>	
6-8, boulevard Haussmann 75009 Paris, France Mr. Gilet is Executive Director ETI/GE of Bpifrance.			Member of Board of Directors of ArcelorMittal France, ArcelorMittal Stainless International, ArcelorMittal Europe, ArcelorMittal Stainless France, ArcelorMittal Stainless Belgium, ArcelorMittal Inox Brasil	
Duval Georges	General Shareholders'	Reappointment:	In Group companies	
Director Deputy CEO Born 3 May 1946 (67 years) French nationality Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Brother of Édouard Duval, cousin of Cyrille and Patrick Duval Mr. Duval is Deputy CEO of ERAMET, Manager of SORAME and CEO of CEIR.	of 21 July 1999 Deputy CEO: Board meeting of 23 May 2002	General Shareholders' Meetings of 21 May 2003, 25 April 2007 and 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements	<ul> <li>Chairman of: Aubert &amp; Duval (SAS); ERAMET Holding Alliages (SAS); ERAMET Alloys; Erasteel (SAS)</li> <li>In non-Group companies (unlisted companies)</li> <li>Manager of SORAME SCA</li> <li>CEO of CEIR</li> <li>Offices held and completed during the past five years</li> <li>Chairman of UKAD (SA)</li> </ul>	
Duval Édouard Director <sup>(3)</sup> <sup>(5)</sup> Born 2 December 1944 (69 years) French nationality Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Brother of Georges Duval, cousin of Cyrille and Patrick Duval Mr. Duval is Chairman of ERAMET International, Chairman of the Management Board of SORAME and CEO of CEIR.	General Shareholders' Meeting of 21 July 1999	Reappointments: General Shareholders' Meetings of 21 May 2003, 25 April 2007 and 11 May 2011, for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements	In Group companies • Director of Société Le Nickel-SLN • Chairman of ERAMET International (SAS) • Deputy CEO of ERAMET Holding Alliages (SAS) In non-Group companies (unlisted companies) • Chairman of the Management Board of SORAME SCA • CEO of CEIR	

(2) Compensation Committee.

(3) Selection Committee.

(4) Independent Director.

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Surname, forename 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	General Shareholders'	Expiry date:	In Group companies
Director represented by	Meeting of 11 May 2011	General Shareholders'	<ul> <li>CEO of ERAMET Holding Alliages</li> </ul>
Duval Patrick	01 11 Way 2011	Meeting called to approve the 2014	In non-Group companies (unlisted companies)
Permanent representative of		financial statements	Chairman of CEIF
CEIR to the Board of Directors			<ul> <li>Manager of SORAME SCA</li> </ul>
Born 15 May 1941 (72 years) French nationality			Director of Cartonneries de Gondardennes SA
Address:			<ul> <li>Manager of SCI Compagnie Franroval SCI Les Bois de Batonceau, SCI de la Plaine</li> </ul>
c/o ERAMET			SCI Les Bois de Batoliceau, SCI de la Plaine SCEA Les Terres d'Orphir
Tour Maine-Montparnasse			
33, avenue du Maine			
75015 Paris, France			
Brother of Cyrille Duval, cousin of Georges and Édouard Duval			
Mr. Duval is Chairman of CEIR and Manager of SORAME.			
SORAME	Genral Shareholders'	Expiry date:	In Group companies
Director <sup>(3) (5)</sup> represented by	Meeting	General Shareholders'	<ul> <li>Deputy CEO of ERAMET Holding Alliages</li> </ul>
Duval Cyrille	of 11 May 2011	Meeting called to approve the 2014	<ul> <li>Director of Comilog S/</li> </ul>
Permanent representative of SORAME to the Board of Directors		financial statements	<ul> <li>Permanent representative of ERAME Holding Alliages to the Board of Director of Metal Securitie</li> </ul>
Born 18 July 1948 (65 years)			Chairman of Brown Europ
French nationality			and of Forges de Monplais
Business address:			Manager of Transmet and of SCI Grande Plaine
Tour Maine-Montparnasse			In non-Group companie
33, avenue du Maine			<ul> <li>Director of Nexans (listed company</li> </ul>
75015 Paris, France			(unlisted companies
Brother of Patrick Duval, cousin			CEO of CEI
of Georges and Édouard Duval			Manager of SORAMI
Mr. Duval is Secretary General of the Alloys Division, Manager of SORAME and CEO of CEIR.			Offices held and complete during the past five year • Chairman of AD TA
Grégoire-Sainte-Marie	Co-opted by the	Expiry date:	In non-Group companies
Caroline	Board meeting	General Shareholders'	<ul> <li>Director of Groupama SA (listed company)</li> </ul>
Director (1) (4)	of 25 May 2012	Meeting called to	and FLSMIDTH (Denmark
Born 27 October 1957	(Confirmation by General Shareholders'	approve the 2014	Observer of Safran (listed company
(56 years)	Meeting	financial statements	Offices held and complete
French nationality	of 15 May 2013)		during the past five year
Business address:			<ul> <li>Chairman and CEO of Frans Bonhomme Chairman and CEO of Tarma</li> </ul>
c/o ERAMET			
Tour Maine-Montparnasse			
33, avenue du Maine			
75015 Paris, France			
Ms. Gregoire-Sainte-Marie has worked in various General Management positions at the Frans Bonhomme, Tarmac and Lafarge groups, in an investor capacity.			
(1) Audit Committee.			
(2) Compensation Committee.			
(3) Selection Committee.			
(4) Independent Director.			

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Surname, forename 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
Le Hénaff Thierry Director <sup>(4)</sup> <sup>(5)</sup> Born 4 May 1963 (50 years) French nationality Business address: ARKEMA 420, rue d'Estienne-d'Orves 92705 Colombes Cedex Mr. Le Hénaff has been Chairman and CEO of ARKEMA since 6 March 2006.	Co-opted by the Board meeting of 25 May 2012 (Confirmed by the General Shareholders' Meeting of 15 May 2013)	Reappointment at General Shareholders' Meeting of 15 May 2013 Expiry date: General Shareholders' Meeting called to approve the 2016 financial statements	In non-Group companies <ul> <li>Chairman and CEO of ARKEMA (listed company)</li> </ul> Chairman of the Board of Directors of ARKEMA FRANCE Offices held and completed during the past five years none
Lepoutre Manoelle Director <sup>(4)</sup> <sup>(5)</sup> Born 8 May 1959 (54 years) French nationality Business address: TOTAL 2, place Jean-Millier La Défense 6 92078 Paris La Défense Cedex Ms. Lepoutre is Director of Senior Management and Management Teams of TOTAL group and is a member	General Shareholders' Meeting of 11 May 2011	Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements	<ul> <li>In non-Group companies (unlisted companies)</li> <li>Director of Fondation Villette-Entreprises Offices held and completed during the past five years</li> <li>Director of Ifremer (until 2011), and of Total E&amp;P Norway (until 2010)</li> </ul>
of CODIR. Mapou Louis Director Born 14 November 1958 (55 years) French nationality Business address: STCPI Immeuble Carcopino 3000 98845 Nouméa Cedex Mr. Mapou is Chairman of STCPI.	Co-opted by the Board meeting of 29 March 2001 (Confirmed by General Shareholders' Meeting of 30 May 2001)	Reappointments: General Shareholders' Meetings of 21 May 2003, 25 April 2007 and 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements	<ul> <li>In non-Group companies (unlisted companies)</li> <li>Chairman of STCPI (New Caledonia)</li> <li>CEO of Sofinor (New Caledonia)</li> <li>Offices held and completed during the past five years</li> <li>Director of Société Le Nickel-SLN</li> </ul>
Quintard MichelDirectorBorn 1 August 1946 (67 years)French nationalityBusiness address:BP 110998845 Nouméa CedexMr Quintard is technical advisorto the Chamber of Commerceand Industry of New Caledonia,which he has chaired from 1998to 2005.	Co-opted by the Board meeting of 15 December 2010 (Confirmed by General Shareholders' Meeting of 11 May 2011)	Reappointment: General Shareholders' Meeting of 15 May 2013 Expiry date: General Shareholders' Meeting called to approve the 2016 financial statements	<ul> <li>In non-Group companies (unlisted companies)</li> <li>Director of Société Le Nickel-SLN         <ul> <li>In non-Group companies</li> <li>Manager of Locauto, subsidiary of the CFAO Group</li> <li>Foreign trade advisor, technical advisor to the CCI of NC</li> <li>Offices held and completed during the past five years</li> <li>Director of Vale NC</li> </ul> </li> </ul>

(1) Audit Committee.(2) Compensation Committee.

(3) Selection Committee.(4) Independent Director.

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Surname, forename 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	
Somnolet Michel	General Shareholders'	Reappointments:	In non-Group companies	
Director (1) (2) (4)	Meeting	General Shareholders'	Director and member of the Compensation	
Born 6 February 1940 (73 years)	of 21 May 2003	Meetings	Committee of L'Oréal USA	
French nationality		of 25 April 2007 and 11 May 2011	<ul> <li>Chairman of the Board of Directors of CSTC (Tanzania)</li> </ul>	
Business address:		for a four-year term	Offices held and completed	
c/o ERAMET		Expiry date:	during the past five years	
Tour Maine-Montparnasse		General Shareholders'	Director and Vice-Chairman	
33, avenue du Maine		Meeting called to	of the Board of L'Oréal Morocco	
75015 Paris, France		approve the 2014	Director of Perinvest Dividend Equity Fund	
Mr. Somnolet is former Director, Vice-Chairman and CEO in charge of Administration and Finance of L'Oréal (until 2002).		financial statements		
Tendil Claude	Co-opted by the	Expiry date:	In non-Group companies	
Director (2)	Board meeting of 25 May 2012	General Shareholders' Meeting called to approve the 2014 financial statements	Chairman of the Board of Directors of General France, Generali Vie and Generali IARE     Chairman of the Develop (Chairman	
Born 25 July 1945 (68 years)	(Confirmation by General Shareholders'			
French nationality			<ul> <li>Chairman of the Board of Directors of Europ Assistance Holding and</li> </ul>	
Business address:	Meeting of 15 May 2013)		of Generali France Assurance	
Generali France	01 13 Way 2013)		Director of SCOR SE	
7-9, boulevard Haussmann 75309 Paris Cedex 09			<ul> <li>Chairman of the Board of Directors of Europ Assistance Italy</li> </ul>	
Mr. Tendil is Chairman of the Generali Group in France.			<ul> <li>Permanent representative of Europ Assistance Holding to the Board of Europ Assistance Spain</li> </ul>	
			Offices held and completed during the past five years	
			Director of Assicurazioni Generali S.p.A (until April 2010)	
Tona Frédéric	General Shareholders'	Expiry date: General	In non-Group companies	
Director (4)	Meeting	Shareholders' Meeting	Director of OMM (OSEAD Mining Morocco)	
Born 27 August 1947 (66 years)	of 15 May 2013	called to approve the 2016 financial	(Morocco), of CMT (Compagnie Minière	
French nationality		statements	de Touissit) (Morocco) and of Minrex SA (Morocco)	
Business address:			Offices held and completed	
c/o ERAMET			during the past five years	
Tour Maine-Montparnasse			• Director of OSEAD SAS (France),	
33, avenue du Maine			SOMAIR (Niger), Cominak (Niger),	
75015 Paris, France			Imouraren (Niger) and CFMM (France)	
Mr. TONA is an independent consultant in the mining field.			<ul> <li>Director of ERAMET in his capacity as representative of AREVA until May 2011, then in his own name until 25 May 2012</li> </ul>	

(1) Audit Committee.

(2) Compensation Committee.

(3) Selection Committee.

(4) Independent Director.

## 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Surname, forename 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
Treuille Antoine	General Shareholders'	Reappointment:	In non-Group companies (unlisted companies)
Director <sup>(1) (2) (4)</sup> Born 7 October 1948 (65 years) Business address:	Meeting of 21 July 1999	General Shareholders' Meetings of 21 May 2003,	Chairman of: Altamont Capital Partners, LLC (United States), Mercantile Capital Partners LLC (United States)
Charter Pacific Corporation		25 April 2007 and 11 May 2011 for a four-year term	Chairman of Charter Pacific Corporation     (United States)
3239, 47 Street Astoria, NY 11103		Expiry date:	Director: Harris Interactive, Inc. (United States), French American Foundation
USA Mr. Treuille is Chairman of		General Shareholders' Meeting called to approve the 2014	Offices held and completed during the past five years
Altamont Capital Partners LLC.		financial statements	Director of BIC SA (France), Harlem Furniture, LLC (United States) (until 2009), Partex Corporation and Imperial Headwear Inc. (United States) (until 2013)
			Chairman of Partex Corporation (United States)     (until 2013)
Madelin Bertrand	Appointed by		In Group companies
Deputy CEO (non director)	Board meeting of 12 December 2007		Chairman of the Board of Directors of Strand Minerals (Indonesia) Pte Ltd
Born 13 September 1954			(Singapore) • Director of Société Le Nickel-SLN
(59 years) Business address:			Member of the Board of Commissioners of Pt Weda Bay Nickel (Indonesia)
Tour Maine-Montparnasse			Chairman of Eurotungstène
33, avenue du Maine 75015 Paris, France			Offices held and completed during the past five years
Mr. Madelin is Deputy CEO.			none
Vecten Philippe	Appointed by the		In Group companies
Deputy CEO (non director)	Board meeting of 23 May 2007		<ul> <li>Director of Comilog S.A.; Comilog US; Port Minéralier d'Owendo, Maboumine</li> </ul>
Born 22 April 1949 (64 years)			Chairman of the Board of Directors of Setrag and of Eralloys Holding AS
Business address:			CEO of ERAMET Comilog Manganèse
Tour Maine-Montparnasse			Manager of Comilog Holding
33, avenue du Maine 75015 Paris, France			Offices held and completed during the past five years
Mr. Vecten is Deputy CEO.			<ul> <li>Director of Tinfos International (until January 2010) and of Société Le Nickel-SLN (until June 2012)</li> </ul>

(1) Audit Committee.

(2) Compensation Committee.

(3) Selection Committee.

(4) Independent Director.

#### 4.1. REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

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;
- no member of the Board of Directors or of General Management has been associated, in the last five years, 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 been barred by a court, in the last five years, 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.

## Table summarising changes to the composition of the Board of Directors during the 2013 financial year and up to the date of filing of this Registration Document

Appointment of two directors at the General Shareholders' Meeting	Michel Antsélévé, of Gabonese nationality, Special Adviser to the President of the Gabonese Republic.
of 15 May 2013	Frédéric Tona, of French nationality, independent consultant in the mining field.
Departures	In February 2014, Jean-Yves Gilet replaced Thomas Devedjian as permanent representative of FSI Equation.
Reappointment of two directors	Thierry Le Hénaff, Chairman and CEO of Arkema.
at the General Shareholders' Meeting of 15 May 2013.	Michel Quintard, Technical Adviser to the Chamber of Commerce and Industry of New Caledonia.

## **4.2.** STATUTORY AUDITORS' REPORT, DRAWN UP PURSUANT TO ARTICLE L. 225-235 OF THE FRENCH COMMERCIAL CODE, ON THE REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS OF ERAMET

## 2013 Financial Year

To the Shareholders,

In our capacity as statutory auditors of ERAMET and in accordance with article L. 225-235 of the French Commercial Code (*Code de commerce*), we hereby report on the report prepared by the Chairman of your company in accordance with article L. 225-37 of the French Commercial Code (*Code de commerce*) for the year ended 31 December 2013.

It is the Chairman's responsibility to prepare and submit for the Board of Directors' approval a report on internal control and risk management procedures implemented by the Company and to provide the other information required by article L. 225-37 of the French Commercial Code (*Code de commerce*) relating to matters such as corporate governance.

Our role is to:

- report on any matters as to the information contained in the Chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information;
- confirm that the report also includes the other information required by article L. 225-37 of the French Commercial Code (Code de commerce). It should be noted that our role is not to verify the fairness of this other information.

We conducted our work in accordance with professional standards applicable in France.

## Information on internal control and risk management procedures relating to the preparation and processing of accounting and financial information

The professional standards require that we perform the necessary procedures to assess the fairness of the information provided in the Chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information. These procedures consist mainly in:

- obtaining an understanding of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information on which the information presented in the Chairman's report is based and of the existing documentation;
- obtaining an understanding of the work involved in the preparation of this information and of the existing documentation;
- determining if any material weaknesses in the internal control procedures relating to the preparation and processing of the accounting and financial information that we would have noted in the course of our work are properly disclosed in the Chairman's report.

On the basis of our work, we have no matters to report on the information relating to the Company's internal control and risk management procedures relating to the preparation and processing of the accounting and financial information contained in the report prepared by the Chairman of the Board of Directors in accordance with article L. 225-37 of the French Commercial Code (Code de commerce).

## **Other information**

We confirm that the report prepared by the Chairman of the Board of Directors also contains the other information required by article L. 225-37 of the French Commercial Code (*Code de commerce*).

Neuilly-sur-Seine and Paris-La Défense, 21 February 2014 The Statutory Auditors

DELOITTE & ASSOCIES French original signed by: Alain Penanguer ERNST & YOUNG et Autres French original signed by: Aymeric de La Morandière

## **4.3.** REMUNERATION OF CORPORATE OFFICERS

## 4.3.1. Remuneration policy for executive corporate officers \_\_\_\_\_

The remuneration of executive corporate officers who are Comex members is set annually by the Board of Directors at the recommendation of the Compensation Committee. For members of the Comex who are not corporate officers, remuneration is set by the Chairman and CEO of the Group.

Remuneration of each Comex member is broken down into a fixed portion and a variable portion. The goals of executive corporate

officers are determined by the Compensation Committee and submitted to the Board of Directors for approval.

The remuneration policy for executive corporate officers is based on principles set out in detail in the report of the Chairman of the Board of Directors, under the paragraph heading "Compensation Committee".

The table below sets out an individual breakdown of gross remuneration due to corporate officers and members of the Group Executive Committee ("Comex") in 2013:

## Table 1 – Table summarising the remuneration of all executive corporate officers in addition to shares and options granted to each one

	Remuneration due in the year		Value of performance shares/ bonus shares/ options granted during the year <sup>(2)</sup>		Total	Total
(€)	2013	2012	2013	2012	2013	2012
Patrick Buffet (1)	1,589,502	1,662,555	1,223,761	976,662	2,813,263	2,639,217
Chairman and CEO						
Georges Duval (1)	474,939	446,752	277,743	90,810	752,682	537,562
Deputy CEO						
Bertrand Madelin <sup>(1)</sup>	383,868	403,472	216,841	169,361	600,709	572,833
Deputy CEO						
Philippe Vecten (1)	507,482	495,852	258,353	206,593	765,835	702,445
Deputy CEO						
Édouard Duval	318,240	338,335	49,158	78,551	367,398	416,886
Manager ERAMET International						
Cyrille Duval	228,661	228,684	27,310	33,600	255,971	262,284
General Secretary Alloys Division						
Sub-total corporate officers	3,502,692	3,575,650	2,053,166	1,555,577	5,555,858	5,131,227
Michel Carnec <sup>(1)</sup>	416,697	407,376	234,593	187,523	651,290	594,899
Human Resources Manager						
Jean-Didier Dujardin <sup>(1)</sup>	455,682	465,204	271,461	219,306	727,143	684,510
Chief Financial Officer						
Catherine Tissot-Colle (1)	265,596	241,041	157,579	127,134	423,175	368,175
Communications & Sustainable Development Manager						
TOTAL CORPORATE OFFICERS AND COMEX MEMBERS	4,640,667	4,689,271	2,716,799	2,089,540	7,357,466	6,778,811

(1) Comex member.

(2) Calculated according to the fair value of shares on the day of granting by the Board of Directors – No stock options were granted during the financial year.

	Am	Amount for 2013		Amount for 2012	
(€)	Due	Paid	Due	Paid	
Patrick Buffet					
Chairman and CEO					
Fixed remuneration	807,365	807,365	783,850	783,850	
Variable remuneration	712,566	804,479	804,479	650,022	
Directors' fees	62,992	66,500	66,500	65,000	
Benefits in kind (1)	6,579	6,579	7,726	7,726	
Total	1,589,502	1,684,923	1,662,555	1,506,598	
Georges Duval					
Deputy CEO					
Fixed remuneration	326,600	326,600	320,197	320,197	
Variable remuneration	119,145	98,861	98,861	90,704	
Directors' fees	25,000	23,500	23,500	20,000	
Benefits in kind (1)	4,194	4,194	4,194	4,194	
Total	474,939	453,155	446,752	435,095	
Bertrand Madelin					
Deputy CEO					
Fixed remuneration	261,250	261,250	250,000	250,000	
Variable remuneration	96,924	124,556	124,556	102,241	
Directors' fees	22,500	24,500	24,500	25,500	
Benefits in kind (1)	3,194	3,194	4,416	4,416	
Total	383,868	413,500	403,472	382,157	
Philippe Vecten					
Deputy CEO					
Fixed remuneration	306,940	306,940	298,000	298,000	
Variable remuneration	156,191	150,699	150,699	120,558	
Directors' fees	38,737	41,573	41,573	43,914	
Benefits in kind (1)	5,614	5,614	5,580	5,580	
Total	507,482	504,826	495,852	468,052	
Édouard Duval					
Manager ERAMET International					
Fixed remuneration	281,740	281,740	277,573	277,573	
Variable remuneration		23,262	23,262	19,822	
Directors' fees	36,500	37,500	37,500	34,500	
Benefits in kind (1)	-	-	-	-	
Total	318,240	342,502	338,335	331,895	
Cyrille Duval					
General Secretary Alloys Division					
Fixed remuneration (2)	161,409	161,409	157,596	157,396	
Variable remuneration	23,036	28,367	28,367	24,473	
Directors' fees	40,995	39,500	39,500	36,000	
Benefits in kind (1)	3,221	3,221	3,221	3,221	
Total	228,661	232,497	228,684	221,090	
SUB-TOTAL CORPORATE OFFICERS	3,502,692	3,631,403	3,575,650	3,344,887	

## Table 2 – Table summarising the remuneration of each executive corporate officer and or Comex member

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

	Amo	ount for 2013	Amo	Amount for 2012	
(€)	Due	Paid	Due	Paid	
Michel Carnec					
Human Resources Manager					
Fixed remuneration	278,615	278,615	270,500	270,500	
Variable remuneration	110,141	107,997	107,997	100,750	
Directors' fees	23,495	24,500	24,500	21,500	
Benefits in kind (1)	4,446	4,446	4,379	4,379	
Total	416,697	415,558	407,376	397,129	
Jean-Didier Dujardin					
Chief Financial Officer					
Fixed remuneration	322,400	322,400	313,000	313,000	
Variable remuneration	86,509	104,776	104,776	101,127	
Directors' fees	40,491	41,500	41,500	42,000	
Benefits in kind (1)	6,282	6,282	5,928	5,928	
Total	455,682	474,958	465,204	462,055	
Catherine Tissot-Colle					
Communications & Sustainable Development Manager					
Fixed remuneration	187,250	187,250	181,800	181,800	
Variable remuneration	74,601	55,631	55,631	57,372	
Directors' fees	-	-	-	-	
Benefits in kind (1)	3,745	3,745	3,610	3,610	
Total	265,596	246,626	241,041	242,782	
TOTAL CORPORATE OFFICERS AND COMEX MEMBERS	4,640,667	4,768,545	4,689,271	4,446,853	

(1) This relates to the provision of a company car.

(2) Part time as from 01/01/2012.

No multi-year variable remuneration or exceptional remuneration fell due or was paid out during the financial year.

The top ten earners at ERAMET in respect of 2013 received total remuneration of  $\notin$ 4,774,910.50, certified by the Statutory Auditors.

## Table 3 – Table setting out directors' fees and other remuneration received by non-executive corporate officers

The amount of directors' fees paid to ERAMET's corporate officers in January 2014 in respect of 2013 was €497,600 (€428,775 in 2012). The total sum allocated to the Board of Directors was set at €700,000 at the General Shareholders' Meeting of 15 May 2013 (resolution thirteen), to be distributed freely amongst the directors by the Board.

The directors' fees for 2013 were distributed on the following basis:

- annual fixed amount of €13,000;
- €1,500 for each actual attendance at Board meetings;

- annual fixed amount of €8,000 for Audit Committee members;
- €1,300 for each actual attendance at Audit Committee meetings;
- annual fixed amount of €8,000 for members of the Compensation Committee;
- €1,300 for each actual attendance at Compensation Committee meetings.

In addition, €1,525 in travel expenses is paid for each director living abroad in respect of each Board meeting (and Committee meetings in cases where a Committee meeting takes place more than 48 hours before or after a Board meeting).

The directors' fees paid to ERAMET directors by other companies in the Group amounted to an overall total of  $\notin$ 79,487 in 2013 ( $\notin$ 87,500 in 2012).

No other remuneration is paid to non-executive corporate officers.

The distribution of directors' fees at the beginning of 2014 in respect of 2013 was as follows (in Euros, before deductions):

		Other	<b>T</b>	<b>T</b> 1 1 001 0
(€)	ERAMET	companies	Total 2013	Total 2012
Michel Antsélévé (10)	20,225	-	20,225	-
Patrick Buffet (1)	25,000	37,992	62,992	66,500
Pierre Charreton (AREVA) (4)		-		5,528
Claire Cheremetinski (State Rep.) (3)	23,500	-	23,500	23,500
Thomas Devedjian (FSI Equation) <sup>(9)</sup>	25,000	-	25,000	13,583
Cyrille Duval (1)	25,000	15,995	40,995	39,500
Édouard Duval (1)	23,500	13,000	36,500	37,500
Georges Duval (1)	25,000	-	25,000	23,500
Patrick Duval	22,000	-	22,000	23,500
Caroline Grégoire-Sainte-Marie (8)	36,900	-	36,900	19,350
Gilbert Lehmann (7)	-	-	-	16,050
Thierry Le Hénaff <sup>(8)</sup>	25,000	-	25,000	10,583
Manoelle Lepoutre (2)	22,000	-	22,000	23,500
Jean-Hervé Lorenzi <sup>(5)</sup>	-	-	-	9,917
Louis Mapou	26,575	-	26,575	16,000
Sébastien de Montessus (AREVA) (7)	-	-	-	2,889
Michel Quintard	28,075	12,500	40,575	39,575
Michel Somnolet	58,200	-	58,200	59,275
Claude Tendil (8)	35,200	-	35,200	19,550
Frédéric Tona (6)	14,125	-	14,125	16,275
Antoine Treuille	62,300	-	62,300	50,200
TOTAL	497,600	79,487	577,087	516,275

(1) Other remuneration: see other tables related to corporate officers' remuneration.

(2) Appointment at General Shareholders' Meeting of 11 May 2011.

(3) Appointment at Board meeting of 14 December 2011 – amount paid to Ministry of Finance.

(4) Appointment from 20 March 2012 – Resignation at Board meeting of 25 May 2012.

(5) Resignation at Board meeting of 25 May 2012.

(6) Resignation at Board meeting of 25 May 2012 - Appointment at General Shareholders' Meeting of 15 May 2013.

(7) Resignation as from 20 March 2012.

(8) Appointment at Board meeting of 25 May 2012.

(9) Appointment at Board meeting of 25 May 2012 – amount paid to Bpifrance Participations – In February 2014, Jean-Yves Gilet replaced Mr. Devedjian as permanent representative of FSI Equation.

(10) Appointment at General Shareholders' Meeting of 15 May 2013.

#### 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 corporate officer during the year

Performance shares were granted to executive corporate officers and to 204 senior managers, executives and promising junior staff of the ERAMET group. In addition, each Group employee received two bonus shares as part of the EraShare 2013 bonus share plan for all Group personnel.

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

	Plan no. and date	Number of shares granted	Value of shares (1)	Acquisition date	Date available	Performance conditions
P. Buffet	Plan of 21/03/2013	22,405	1,223,761	21/03/2016	21/03/2018	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 three years
G. Duval	Plan of 21/03/2013	5,085	277,743	21/03/2016	21/03/2018	ditto
B. Madelin	Plan of 21/03/2013	3,970	216,841	21/03/2016	21/03/2018	ditto
P. Vecten	Plan of 21/03/2013	4,730	258,353	21/03/2016	21/03/2018	ditto
E. Duval	Plan of 21/03/2013	900	49,158	21/03/2016	21/03/2018	ditto
C. Duval	Plan of 21/03/2013	500	27,310	21/03/2016	21/03/2018	ditto
TOTAL		37,590	2,053,166			

(1) Calculated according to the fair value of shares on the day of granting by the Board of Directors, applying the method used in the consolidated financial statements.

The number of shares granted, as indicated above, refers to the maximum number of shares that may be granted subject to fulfilling the performance conditions. These very rigorous performance conditions are calculated over a three-year period and are set out in the section of this document concerning the remuneration policy for executive corporate officers.

Details concerning the number of shares that may actually be acquired and their corresponding value will only be disclosed upon maturity of the plan, in 2016.

Table 7 – Performance shares becoming available duringthe financial year for each executive corporate officerNo performance shares became available during the financial year.

## Table 8 – Not applicable

There is no share purchase or subscription option plan currently in operation.

#### Plan 2010 Plan 2011 Plan 2012 Plan 2013 20/05/2010 Date of Shareholders' Meeting 20/05/2010 20/05/2010 15/05/2012 20/05/2010 16/02/2011 15/02/2012 21/03/2013 Date of Board meeting Total No. shares granted, of which 65.008 71.665 89.885 145.040 number granted to (total) Corporate officers P. Buffet 8.670 8.605 10.755 22,405 G. Duval 1,600 2,030 1,000 5,085 B. Madelin 1,530 1,490 1,865 3,970 P. Vecten 4,970 1.865 1.820 2.275 E. Duval 600 750 865 900 C. Duval 630 600 370 500 Date of acquisition 15/02/2015 20/05/2013 16/02/2014 21//03/2016 of France Plan shares 21/03/2018 End date of retention period 20/05/2015 16/02/1016 15/02/2017 for France Plan End date of acquisition 20/05/2014 16/02/2015 15/02/2016 21/03/2017 and retention period for International Plan shares Performance of the Performance conditions Performance of the Performance of the Performance of the ERAMET share price ERAMET share price ERAMET share price ERAMET share price (total shareholder return (total shareholder return in relation to that of in relation to that of or TSR) in relation to or TSR) in relation to comparable companies comparable companies that of comparable that of comparable listed on the Stoxx listed on the Stoxx companies listed companies listed 600 Basic Resources 600 Basic Resources on the Stoxx 600 on the Stoxx 600 index (50%) and the index (1/3) and **Basic Resources Basic Resources** intrinsic performance intrinsic performance index (50%) and the index (50%) and the of financial indicators of financial indicators intrinsic performance intrinsic performance (50%) (operating margin (2/3) (operating margin of financial indicators of financial indicators (current operating (current operating (50%) (operating margin income / revenue) and income / revenue) and (50%) (operating margin (current operating operating cash flow); (current operating operating cash flow); income / revenue) and income / revenue) and progressive acquisition progressive acquisition operating cash flow); operating cash flow); over three years over three years progressive acquisition progressive acquisition over three years over three years Number of shares acquired 13.097 0 0 0 at 31/12/2013 Cumulative number of cancelled 37,122 7,539 650 1,650 or lapsed shares Performance shares remaining 14,789 64,126 89,235 143,390 at end of financial year

#### Table 9 - Historical details of performance share grants - Information on performance shares

The performance conditions are calculated over a three-year period and for the 2010, 2011 and 2012 performance share grant plans are the following: relative performance of ERAMET shares for 50% (half) of the share grant (this involves comparing the change in total shareholder return over a three-year period with that of a panel composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions being fully achieved if the ERAMET share is ranked in the top 15% of the panel) and the intrinsic performance achieved over a three-year period of certain financial indicators for 50% (half) of the share grant (25% operating margin (current operating income / revenue) and 25% operating cash-flow, with annual targets related to the Company's budgeted targets and the performance conditions only being fully achieved in the event of significant out-performance of these targets). The performance conditions for the 2013 Plan, calculated over a three-year period, are as follows: relative performance of ERAMET shares for 1/3 (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 composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions being fully achieved if the ERAMET share is ranked in the top 15% of the panel) and the intrinsic performance achieved over a three-year period of certain financial indicators for 2/3 (two-thirds) of the share grant (1/3 operating margin (current operating income / revenue) and 1/3 operating cash-flow, with annual targets related to the Company's budgeted targets and the performance conditions only being fully achieved in the event of significant out-performance of these targets).

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

#### Table 10 – Summary table of executive corporate officers

Corporate officers	Contract of employment	Supplementary Pension Plan	Compensation or benefits falling due, or which may fall due, as a result of departure or a change of position	Compensation related to a non-competition clause
Patrick Buffet	No	Yes	Yes	No
Chairman and CEO				
Start of term of office: 25 April 2007				
End of term of office: GSM to approve 2014 financial statements				
Georges Duval	Yes –	Yes	Yes (within limit of suspended	No
Deputy CEO	suspended		contract of employment)	
Start of term of office: 23 May 2002				
End of term of office: GSM to approve 2014 financial statements				
Bertrand Madelin	Yes –	Yes	Yes (within limit of suspended	No
Deputy CEO	suspended		contract of employment)	
Start of term of office: 1 January 2008				
End of term of office: permanent				
Philippe Vecten	Yes –	Yes	Yes (within limit of suspended	No
Deputy CEO	suspended		contract of employment)	
Start of term of office: 23 May 2007				
End of term of office: permanent				
Édouard Duval	Yes	No	Yes (within limit of contract	No
Manager ERAMET International			of employment)	
Director				
Start of term of office: 21 July 1999				
End of term of office: GSM to approve 2014 financial statements				
Cyrille Duval	Yes	No	No	Yes (within limit
General Secretary Alloys Division				of contract of
Permanent Representative of SORAME, Director				employment)
Start of term of office with SORAME: 11 May 2011				
End of term of office: GSM to approve 2014 financial statements				

## 4.3.2. Remuneration items falling due or granted to each Executive Corporate Officer for the financial year ended, subject to shareholder approval \_\_\_\_\_

Pursuant to recommendation 24.3 of the Afep/Medef code dated June 2013 which, in accordance with article L. 225-37 of the French Commercial Code is the code of reference applicable to the Company, remuneration items falling due or granted to each Executive Corporate Officer of the Company for the financial year ended are subject to shareholder approval:

- the fixed portion;
- the annual variable portion and, as the case may be, the multi-year variable portion, with the targets used to determine that variable portion;

- exceptional remuneration items;
- stock options, performance shares and any other long-term remuneration item;
- compensation related to taking up or leaving a post;
- the Supplementary Pension Plan; and
- benefits of any kind.

Shareholders are asked to approve the remuneration items falling due or granted to each Executive Corporate Officer, for the financial year ended 31 December 2013, by voting on the 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> resolutions.

Consequently, shareholders are asked to consider the following remuneration items for each Executive Corporate Officer.

## 4.3.2.1. Patrick Buffet, Chairman and CEO

## Remuneration items subject to shareholder approval

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
		No suspended contract of employment; Mr. Buffet has a straightforward corporate officer contract.
Fixed remuneration	€807,365 (amount paid)	Gross fixed remuneration for the financial year 2013 approved by the Board of Directors on 24 January 2013 at the recommendation of the Compensation Committee.
Annual variable remuneration	€712,566 (amount approved for 2013)	At its meeting of 20 February 2014, the Board of Directors, at the recommendation of the Compensation Committee and following validation of financial items by the Audit Committee, approved the variable remuneration of Mr. Buffet for the financial year 2013, amounting to €712,566 (63% of his maximum variable remuneration).
		The variable portion is based on certain criteria and on specific targets, whose selection and weighting are proposed by the Compensation Committee and approved by the Board of Directors. The targets for 2013 were:
		(i) the Company's trading results (Current Operating Income);
		(ii) the Company's financial position (net cash);
		<ul> <li>(iii) the accomplishment, vis-à-vis the budget and schedule, of major industrial projects or of development activities;</li> </ul>
		(iv) "managerial" results in terms of team motivation and leadership, strategic proposals, projects and goals in the fields of health, safety, the environment and industrial risk.
		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 2013, the portion related to quantitative targets represented 65% of maximum annual variable remuneration.
Deferred variable remuneration	N/A	Mr. Buffet does not have any deferred variable remuneration.
Multi-year variable remuneration	N/A	Mr. Buffet does not have any multi-year variable remuneration.
Exceptional remuneration	N/A	Mr. Buffet does not have any exceptional remuneration.

4.3. REMUNERATION OF CORPORATE OFFICERS

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description				
Performance shares or stock options or any other long-term remuneration item	22,405 performance shares	On 21 February 2013, the Board of Directors, at the recommendation of the				
	=€1,223,761	Compensation Committee and following the approval of the General Shareholders'				
	(applying the method used in the consolidated financial statements, fair value of the share on the day of granting by the Board of Directors)	Meeting of 15 May 2012 (10 <sup>th</sup> resolution), granted Mr. Buffet 22,405 performance shares (that is, 0.08% of share capital), for a value of €1,223,761 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 acquired, fully				
	Options = $N/A$	or partially, three years following granting provided that the performance conditions are fully met and the Company's annual targets, as set out in the budget, have been				
	Other items = N/A	significantly out-performed. In addition, these performance shares are subject to an additional retention period of two years 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, calculated over a three-year period, are as follows:				
		• relative performance of the ERAMET share price, 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 composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions only being fully achieved if the ERAMET share is ranked in the top 15% of the panel); and				
		<ul> <li>intrinsic performance achieved over a three-year period of certain financial indicators for 2/3 (two-thirds) of the share grant (one-third operating margin (current operating income / revenue) and one-third operating cash-flow, with annual targets related to the Company's budgeted targets; this performance condition is only fully achieved in the event of significant out-performance of these targets).</li> </ul>				
		For information purposes, the 2011 performance share plan, which reached its conclusion in 2013, allowed for the acquisition of just 15.58% of all shares granted at the outset. In addition, those shares are subject to an additional retention period of two years.				
		Mr. Buffet was not granted any stock options or any other long-term remuneration item during the financial year ended 31 December 2013.				
Directors' fees	€62,992 (gross amount before deductions)	In accordance with the rules for the allocation of directors' fees applicable to all ERAMET directors, Mr. Buffet received gross directors' fees based on an annual lump sum of €13,000 in addition to €1,500 in respect of each Board meeting attended in person. He also received gross sums of €24,992 and €13,000, for his participation as a director on the Boards of subsidiary companies COMILOG and Société Le Nickel SLN, respectively, in accordance with the rules applicable to all directors of those two companies.				
Benefits of any other kind	€6,579 (carrying value)	Mr. Buffet has 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	Description
Compensation related to taking up or leaving a post	No payment	As part of the overall balanced structure of his corporate officer contract, Mr. Buffet is entitled to severance pay of three times his last gross annual fixed remuneration plus three times the average of the gross annual variable remunerations received in the last three years prior to his departure.
		This severance pay entitlement is conditional upon the fulfilment of performance conditions: the sum of gross variable remuneration (itself subject to specific performance conditions) received over the last three complete years of his/her term of office must be 20% or more of the total gross annual fixed remuneration received during the same three-year period.
		In accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, this arrangement was authorised by the Board of Directors on 20 February 2008 and approved by the General Shareholders' Meeting of 16 April 2008 (4 <sup>th</sup> resolution), subsequently, upon Mr. Buffet's reappointment as Chairman and CEO in 2011, authorisation was renewed by the Board of Directors on 27 July 2011 and approved by the General Shareholders' Meeting of 15 May 2012 (4 <sup>th</sup> resolution).
Non-competition compensation	N/A	Mr. Buffet is not bound by a non-competition clause.
Supplementary Pension Plan	No payment	Mr. Buffet benefits 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 internal plan regulations, with said reference salary being capped at twenty-five times the annual social security ceiling (ASSC). The reference period taken into account 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 Mr. Buffet's case, supplementary pension income is capped at 35% of 25 times 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, assuming calculation based on the reference remuneration as set out above (fixed + average variable for the last three years), the annual income provided under this plan would be in the region of 20% of Mr. Buffet's reference remuneration.
		These supplementary pension calculations assume retirement at 65 years of age; a significant reduction would apply in the event of an early draw down of pension benefits, between 60 and 65 years of age.
Supplementary insurance scheme		Mr. Buffet benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group.
and healthcare plan		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	Mr. Buffet does not benefit from such entitlement.
Customary severance payments (collective bargaining agreement)	N/A	Mr. Buffet does not benefit from any customary severance indemnity under a collective bargaining agreement, whether upon retirement or upon departure for any other reason.

#### **CORPORATE GOVERNANCE**

4.3. REMUNERATION OF CORPORATE OFFICERS

#### 4.3.2.2. Georges Duval, Deputy CEO

#### Remuneration items subject to shareholder approval

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder	
	vote	Description
		Georges Duval has a contract of employment, suspended throughout his term of office on the Board.
Fixed remuneration	€326,600 (amount paid)	Gross fixed remuneration for the financial year 2013 approved by the Board of Directors on 24 January 2013 at the recommendation of the Compensation Committee.
Annual variable remuneration	€119,145 (amount approved for 2013)	At its meeting of 20 February 2014, the Board of Directors, at the recommendation of the Compensation Committee and following validation of financial items by the Audit Committee, approved the variable remuneration of Mr. Duval for the financial year 2013, amounting to €119,145 (52.1% of his maximum variable remuneration).
		The variable portion is based on certain criteria and on specific targets, whose selection and weighting are proposed by the Compensation Committee and approved by the Board of Directors. The targets for 2013 were:
		(i) the Company's trading results (Current Operating Income);
		(ii) the Company's financial position (net cash);
		<ul> <li>(iii) the accomplishment, vis-à-vis the budget and schedule, of major industrial projects or of development activities;</li> </ul>
		(iv) "managerial" results in terms of team motivation and leadership, strategic proposals, projects and goals in the fields of health, safety, the environment and industrial risk.
		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 70% of gross annual fixed remuneration for the Deputy CEOs.
		In 2013, the portion related to quantitative targets represented 35% of maximum annual variable remuneration.
Deferred variable remuneration	N/A	Mr. Duval does not have any deferred variable remuneration.
Multi-year variable remuneration	N/A	Mr. Duval does not have any multi-year variable remuneration.
Exceptional remuneration	N/A	Mr. Duval does not have any exceptional remuneration.

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
Performance shares or stock options or any other long-term remuneration item	5,085 performance shares = €277,743 (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	On 21 February 2013, the Board of Directors, at the recommendation of the Compensation Committee and following the approval of the General Shareholders' Meeting of 15 May 2012 (10 <sup>th</sup> resolution), granted Mr. Duval 5,085 performance shares (that is, 0.02% of share capital), for a value of €277,743 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 acquired, fully or partially, three years following granting provided that the performance conditions are fully met and the Company's annual targets, as set out in the budget, have been significantly out-performed. In addition, these performance shares are prohibited from sale until the end of the corporate officer's term of office.
		<ul> <li>These very rigorous performance conditions, calculated over a three-year period, are as follows:</li> <li>relative performance of the ERAMET share price, 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 composed of 30 comparable companies on the Stoxx</li> </ul>
		<ul> <li>600 Basic Resources Index, with the performance conditions only being fully achieved if the ERAMET share is ranked in the top 15% of the panel); and</li> <li>intrinsic performance achieved over a three-year period of certain financial</li> </ul>
		indicators for 2/3 (two-thirds) of the share grant (one-third operating margin (current operating income / revenue) and one-third operating cash-flow, with annual targets related to the Company's budgeted targets; this performance condition is only fully achieved in the event of significant out-performance of these targets).
		For information purposes, the 2011 performance share plan, which reached its conclusion in 2013, allowed for the acquisition of just 15.58% of all shares granted at the outset. In addition, those shares are subject to an additional retention period of two years.
		Mr. Duval was not granted any stock options or any other long-term remuneration item during the financial year ended 31 December 2013.
Directors' fees	€25,000 (gross amount before deductions)	In accordance with the rules for the allocation of directors' fees applicable to all ERAMET directors, Mr. Duval received gross directors' fees based on an annual lump sum of €13,000 in addition to €1,500 in respect of each Board meeting attended in person.
Benefits of any other kind	€4,194 (carrying value)	Mr. Duval has a company car.

#### **CORPORATE GOVERNANCE**

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

### 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	Description
Compensation related to taking up	No payment	Mr. Duval does not benefit from any commitment or undertaking related to severance indemnity under the terms of his corporate office.
or leaving a post		Mr. Duval's suspended employment contract makes provision for the payment, in the event of his dismissal, retirement or pensioning-off, of a contractual indemnity amounting to 18 months' salary, calculated on the basis of his reference remuneration (fixed plus variable) as an employee, which is not combined with the customary payments calculated by application of the national collective bargaining agreement for executives in the metallurgy industry.
Non-competition compensation	N/A	Mr. Duval is not bound by a non-competition clause.
Supplementary Pension Plan	No payment	Mr. Duval benefits 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 internal plan regulations, with said reference salary being capped at twenty-five times the annual social security ceiling (ASSC). The reference period taken into account 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.
		By way of illustration, assuming calculation based on the reference remuneration as set out above (fixed + average variable for the last three years), the annual income provided under this plan would be in the region of 31% of Mr. Duval's reference remuneration.
		These supplementary pension calculations assume retirement at 65 years of age; a significant reduction would apply in the event of an early draw down of pension benefits, between 60 and 65 years of age.
Supplementary insurance scheme		Mr. Duval benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group.
and healthcare plan		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 (3 <sup>rd</sup> resolution).

#### 4.3.2.3. Bertrand Madelin, Deputy CEO

#### Remuneration items subject to shareholder approval

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
		Bertrand Madelin has a contract of employment, suspended throughout his term of office on the Board.
Fixed remuneration	€261,250 (amount paid)	Gross fixed remuneration for the financial year 2013 approved by the Board of Directors on 24 January 2013 at the recommendation of the Compensation Committee.
Annual variable remuneration	€96,924 (amount approved for 2013)	At its meeting of 20 February 2014, the Board of Directors, at the recommendation of the Compensation Committee and following validation of financial items by the Audit Committee, approved the variable remuneration of Mr. Madelin for the financia year 2013, amounting to €96,924 (53% of his maximum variable remuneration).
		The variable portion is based on certain criteria and on specific targets, whose selection and weighting are proposed by the Compensation Committee and approved by the Board of Directors. The targets for 2013 were:
		(i) the Company's trading results (Current Operating Income);
		(ii) the Company's financial position (net cash);
		<ul><li>(iii) the accomplishment, vis-à-vis the budget and schedule, of major industrial projects or of development activities;</li></ul>
		(iv) "managerial" results in terms of team motivation and leadership, strategic proposals, projects and goals in the fields of health, safety, the environment and industrial risk.
		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 70% of gross annual fixed remuneration for the Deputy CEOs.
		In 2013, the portion related to quantitative targets represented 60% of maximum annual variable remuneration.
Deferred variable remuneration	N/A	Mr. Madelin does not have any deferred variable remuneration.
Multi-year variable remuneration	N/A	Mr. Madelin does not have any multi-year variable remuneration.
Exceptional remuneration	N/A	Mr. Madelin does not have any exceptional remuneration.

#### **CORPORATE GOVERNANCE**

4.3. REMUNERATION OF CORPORATE OFFICERS

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
Performance shares or stock options or any other long-term remuneration item	3,970 performance shares = €216,841 (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	On 21 February 2013, the Board of Directors, at the recommendation of the Compensation Committee and following the approval of the General Shareholders' Meeting of 15 May 2012 (10 <sup>th</sup> resolution), granted Mr. Madelin 3,970 performance shares (that is, 0.01% of share capital), for a value of €216,841 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 acquired, fully or partially, three years following granting provided that the performance conditions are fully met and the Company's annual targets, as set out in the budget, have been significantly out-performed. In addition, these performance shares are prohibited from sale until the end of the corporate officer's term of office.
		These very rigorous performance conditions, calculated over a three-year period, are as follows:
		• relative performance of the ERAMET share price, 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 composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions only being fully achieved if the ERAMET share is ranked in the top 15% of the panel); and
		• intrinsic performance achieved over a three-year period of certain financial indicators for 2/3 (two-thirds) of the share grant (one-third operating margin (current operating income / revenue) and one-third operating cash-flow, with annual targets related to the Company's budgeted targets; this performance condition is only fully achieved in the event of significant out-performance of these targets).
		For information purposes, the 2011 performance share plan, which reached its conclusion in 2013, allowed for the acquisition of just 15.58% of all shares granted at the outset. In addition, those shares are subject to an additional retention period of two years.
		Mr. Madelin was not granted any stock options or any other long-term remuneration item during the financial year ended 31 December 2013.
Directors' fees	€22,500 (gross amount before deductions)	Mr. Madelin did not receive any directors' fees from ERAMET, since he is not a director of ERAMET SA. He received a gross sum of €22,500 in respect of his participation as a director on the Board of the subsidiary company Le Nickel SLN, in accordance with the rules applicable to all directors of that company.
Benefits of any other kind	€3,194 (carrying value)	Mr. Madelin has 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	Description
Compensation related to taking up	No payment	Mr. Madelin does not benefit from any commitment or undertaking related to severance indemnity under the terms of his corporate office.
or leaving a post		Mr. Madelin's suspended employment contract makes provision for the payment, in the event of dismissal, retirement or pensioning-off, of a customary indemnity, calculated on the basis of the national collective bargaining agreement for executives in the metallurgy industry and on the basis of his reference remuneration (fixed plus variable) as an employee. The collective bargaining agreement provides for a maximum of 18 months' remuneration for maximum length of service of 28 or 30 years depending on the age of the parties upon their departure.
		In the event of a change in control of ERAMET and the termination of an employment contract deemed as being attributable to the employer, a specific guarantee, which may not be combined with other indemnities applicable under contracts or collective bargaining agreements, was decided upon in 2005 and would be enforceable. It constitutes an indemnity amounting to three years' remuneration (fixed + variable).
Non-competition compensation	N/A	Mr. Madelin is not bound by a non-competition clause.
Supplementary Pension Plan	No payment	Mr. Madelin benefits 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 internal plan regulations, with said reference salary being capped at twenty-five times the annual social security ceiling (ASSC). The reference period taken into account 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.
		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, assuming calculation based on the reference remuneration as set out above (fixed + average variable for the last three years), the annual income provided under this plan would be in the region of 35% of Mr. Madelin's reference remuneration.
		These supplementary pension calculations assume retirement at 65 years of age; a significant reduction would apply in the event of an early draw down of pension benefits, between 60 and 65 years of age.
Supplementary insurance scheme		Mr. Madelin benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group.
and healthcare plan		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).

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

#### 4.3.2.4. Philippe Vecten, Deputy CEO

#### Remuneration items subject to shareholder approval

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
		Philippe Vecten has a contract of employment, suspended throughout his term of office on the Board
Fixed remuneration	€306,940 (amount paid)	Gross fixed remuneration for the financial year 2013 approved by the Board of Directors on 24 January 2013 at the recommendation of the Compensation Committee.
Annual variable remuneration	€156,191 (amount approved for 2013)	At its meeting of 20 February 2014, the Board of Directors, at the recommendation of the Compensation Committee and following validation of financial items by the Audit Committee, approved the variable remuneration of Mr. Vecten for the financial year 2013, amounting to €156,191 (72.7% of his maximum variable remuneration).
		The variable portion is based on certain criteria and on specific targets, whose selection and weighting are proposed by the Compensation Committee and approved by the Board of Directors. The targets for 2013 were:
		(i) the Company's trading results (Current Operating Income);
		(ii) the Company's financial position (net cash);
		<ul><li>(iii) the accomplishment, vis-à-vis the budget and schedule, of major industrial projects or of development activities;</li></ul>
		(iv) "managerial" results in terms of team motivation and leadership, strategic proposals, projects and goals in the fields of health, safety, the environment and industrial risk.
		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 70% of gross annual fixed remuneration for the Deputy CEOs.
		In 2013, the portion related to quantitative targets represented 40% of maximum annual variable remuneration.
Deferred variable remuneration	N/A	Mr. Vecten does not have any deferred variable remuneration.
Multi-year variable remuneration	N/A	Mr. Vecten does not have any multi-year variable remuneration.
Exceptional remuneration	N/A	Mr. Vecten does not have any exceptional remuneration.

#### Remuneration items falling due or granted for the financial year ended

	Amount or carrying value subject to shareholder vote	Description
Performance shares or stock options or any other long-term remuneration item	4,730 performance shares = €258,353 (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	On 21 February 2013, the Board of Directors, at the recommendation of the Compensation Committee and following the approval of the General Shareholders' Meeting of 15 May 2012 (10 <sup>th</sup> resolution), granted Mr. Vecten 4,730 performance shares (that is, 0.02% of share capital), for a value of €258,353 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 acquired, fully or partially, three years following granting provided that the performance conditions are fully met and the Company's annual targets, as set out in the budget, have been significantly out-performed. In addition, these performance shares are prohibited from sale until the end of the corporate officer's term of office.
		These very rigorous performance conditions, calculated over a three-year period, are as follows:
		<ul> <li>relative performance of the ERAMET share price, 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 composed of 30 comparable companies on the Stoxx 600 Basic Resources Index, with the performance conditions only being fully achieved if the ERAMET share is ranked in the top 15% of the panel); and</li> </ul>
		• intrinsic performance achieved over a three-year period of certain financial indicators for 2/3 (two-thirds) of the share grant (one-third operating margin (current operating income / revenue) and one-third operating cash-flow, with annual targets related to the Company's budgeted targets; this performance condition is only fully achieved in the event of significant out-performance of these targets).
		For information purposes, the 2011 performance share plan, which reached its conclusion in 2013, allowed for the acquisition of just 15.58% of all shares granted at the outset. In addition, those shares are subject to an additional retention period of two years.
		Mr. Vecten was not granted any stock options during the financial year ended 31 December 2013.
Directors' fees	€38,737 (gross amount before deductions)	Mr. Vecten did not receive any directors' fees from ERAMET, since he is not a director of ERAMET SA. He received a gross sum of €38,737 in respect of his participation as a director on the Board of Comilog and its subsidiaries, in accordance with the rules applicable to all directors of that company.
Benefits of any other kind	€5,614	Mr. Vecten has a company car.

#### **CORPORATE GOVERNANCE**

#### 4.3. REMUNERATION OF CORPORATE OFFICERS

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	Description
Compensation related to taking up	No payment	Mr. Vecten does not benefit from any commitment or undertaking related to severance indemnity under the terms of his corporate office.
or leaving a post		Mr. Vecten's suspended employment contract makes provision for the payment, in the event of dismissal, retirement or pensioning-off, of a customary indemnity, calculated on the basis of the national collective bargaining agreement for executives in the metallurgy industry and on the basis of his reference remuneration (fixed plus variable) as an employee. The collective bargaining agreement provides for a maximum of 18 months' remuneration for maximum length of service of 28 or 30 years depending on the age of the parties upon their departure.
		In the event of a change in control of ERAMET and the termination of an employment contract deemed as being attributable to the employer, a specific guarantee, which may not be combined with other indemnities applicable under contracts or collective bargaining agreements, was decided upon in 2005 and would be enforceable. It constitutes an indemnity amounting to three years' remuneration (fixed + variable).
Non-competition compensation	N/A	Mr. Vecten is not bound by a non-competition clause.
Supplementary Pension Plan	No payment	Mr. Vecten benefits 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 internal plan regulations, with said reference salary being capped at twenty-five times the annual social security ceiling (ASSC). The reference period taken into account 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.
		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, assuming calculation based on the reference remuneration as set out above (fixed + average variable for the last three years), the annual income provided under this plan would be in the region of 34% of M. Vecten's reference remuneration.
		These supplementary pension calculations assume retirement at 65 years of age; a significant reduction would apply in the event of an early draw down of pension benefits, between 60 and 65 years of age.
Supplementary insurance scheme		Mr. Vecten benefits from the supplementary healthcare plan and the supplementary disability and life insurance scheme operating within the ERAMET group.
and healthcare plan		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).

### **4.4.** SECURITIES HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND BY GENERAL MANAGEMENT

Some directors have a material interest in the Company's share capital.

#### 4.4.1. Indirect interests \_\_\_\_\_

Patrick Duval is Chairman of CEIR. Édouard Duval is Chairman of the Management Board of SORAME. Georges, Édouard, Cyrille and Patrick Duval are shareholders of SORAME and of CEIR.

#### 4.4.2. Direct interests \_\_\_\_\_

Shares held at 31 December 2013	Equities	Voting rights
Michel Antsélévé	50	50
Patrick Buffet	12,386	22,396
Claire Cheremetinski (representing the State)	n/a	n/a
FSI Equation	6,810,317	6,810,317
Thomas Devedjian (replaced by Jean-Yves Gilet in February 2014)	n/a	n/a
SORAME	8,051,838	13,558,933
Cyrille Duval	715	1,228
Édouard Duval	630	1,095
Georges Duval	1,648	2,857
CEIR	1,783,996	1,783,996
Patrick Duval	102	204
Caroline Grégoire-Sainte-Marie	100	100
Thierry Le Hénaff	100	100
Manoelle Lepoutre	100	100
Louis Mapou	100	101
Michel Quintard	100	200
Michel Somnolet	100	200
Claude Tendil	100	100
Frédéric Tona	206	208
Antoine Treuille	160	320
Bertrand Madelin	3,596	3,596
Philippe Vecten	1,662	2,812

No director has a direct material interest in any Group subsidiary.

#### 4.4.3. Loans and guarantees granted or arranged \_\_\_\_\_

The Company has not granted or arranged any loans or guarantees for the benefit of members of the administrative, management or supervisory bodies.

### 4.5. SPECIAL REPORT ON BONUS SHARE GRANTS

#### FY 2013

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.

#### 4.5.1. Grants to corporate officers of the Company \_\_\_\_\_

Plan of 21 March 2013	Number of shares	Value
Patrick Buffet	22,405	1,223,761
Cyrille Duval	500	27,310
Édouard Duval	900	49,158
Georges Duval	5,085	277,743
Bertrand Madelin	3,970	216,841
Philippe Vecten	4,730	258,353

### 4.5.2. Grants to non-corporate officer employees of the Company and its subsidiaries \_\_\_\_\_\_

Plan of 21 March 2013	Number of shares	Value
Jean-Didier Dujardin	4,970	271,461
Michel Carnec	4,295	234,593
Catherine Tissot-Colle	2,885	157,579
Pierre Gugliermina	1,300	78,624
Philippe Gundermann	1,300	71,006
Jean de L'Hermite	1,000	54,620
Jean Fabre	1,000	54,620
Jean-Michel Fourcade	1,000	54,620
Alain Giraud	1,000	60,480
Antoine Greco	1,000	54,620

#### 4.5.3. 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 21 March 2013.

The Board of Directors

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### **5.1.** INTRODUCTION

ERAMET is a mining and metallurgical group that operates two world-class mining sites and about fifty industrial sites, while developing important projects. Due to the nature of its activities, the Group is concerned by all the aspects of sustainable development (economic and social development, environmental protection, good relations with stakeholders). Aware of the strong inter-dependence of ERAMET and the regions in which it operates, ERAMET has a long-term commitment to placing Sustainable Development at the heart of its activities and constantly improving this commitment. Through this approach, by pursuing its activities in a sustainable manner in the areas in which it operates, ERAMET's goal is to constantly increase the acceptability of its operations and accompany its development in new regions and new sectors.

Chapter 5 of this document aims to give readers a comprehensive view of the managerial systems set up and the action taken in this direction; parts 5.3 and 5.4 deal with environmental protection; part 5.5 describes the quality of relations with regions and stakeholders; part 5.7 presents the responsibility associated with products and finally parts 5.8 and 5.9 discuss the protection and development of employees.

Involvement from the highest levels of the Company reflects the Group's commitment. The Directors of Communications and Sustainable Development and Human Resources, who are both members of the Group's Executive Committee (Comex), have been organising, supporting and monitoring these various initiatives since 2007. The Communications and Sustainable Development Department (DC2D) has an Environment Department, a Public Affairs Department and an Industrial Risks coordination division, while the Human Resources Department (HR) includes a Health and Safety Department and a Security Department. Lastly, the Group's Medical Officer answers to these two departments depending on whether the matter concerns occupational health or the environment.

The Sustainable Development Policy adopted by the Group in 2009 takes up, puts into perspective, expands and completes the objectives and actions conducted in the framework of the policies on the three areas of Sustainable Development, i.e. the social, environmental and economic aspects. It was adopted by the Board of Directors in January 2010. The document is structured around the four essential cornerstones of its activities: the employees, sites, products and stakeholders. The details of this policy are presented in Chapter 5.2.

This Sustainable Development Policy, deployed at all sites in 2010 and translated into the Group's 12 languages, involves a multi-annual action plan validated by the Comex. The action plan ranks the objectives according to three levels of priority:

- Level 1: Essential objectives:
- related to compliance with existing statutory obligations,

- to help defend markets and activities,
- to actively prevent any potential risks and dangers that products and activities may present for the Group's employees;
- Level 2: Objectives enabling the actual deployment of the policy:
  - carrying out reviews prior to making improvements,
  - setting up and /or updating support tools;
- Level 3: Objectives corresponding to new or proactive approaches:
- carrying out studies: new tools, defining indicators, new themes (example: biodiversity),
- deploying action taken in certain areas (France, EU, etc.) throughout the Group,
- long-term preventive action.

The progress of these objectives is the subject of a continuous revision process every two years. Once they are attained, some of these objectives are deemed to have been implemented and they join all the other subjects that are dealt with in ongoing business activities and action plans of the Group, Divisions and sites. This is the case with the deployment of EraGreen, the environmental data collection tool, the anticipation of new regulations, ISO 14001 certification and the energy saving initiatives.

Here, for example, are a few examples of objectives that progressed in 2013:

- The policy of ISO 14001 certification of the industrial and mining sites continued successfully. At the end of 2013, two new sites were granted this certification. No fewer than 10 sites have renewed their certification for three more years, thus demonstrating the success of an environmental management system based on the guiding principles of continuous improvement.
- A great deal of work was carried out to consolidate the Group's expertise in biodiversity, which had already been reinforced in previous years. A working group of experts in this field developed a specific policy and instituted performance indicators. Moreover, cooperation with the BBOP (Business and Biodiversity Offset Program) continued.
- The mining aspect of environmental management has been one of the main objectives in the past two years. After a great deal of benchmarking both inside and outside the Company, a mining environment risk management framework was developed. On-site auditing practices were also reviewed and implemented to delimit all the specific aspects resulting from this field.
- Hazard studies on the 17 sites concerned by risk related to contact between water and liquid metal were re-examined internally and also with the support of an independent firm of experts. Dedicated action plans were systematically drawn up (see Chapter 3 § 3.3.3.2).

- Group sites and projects constantly strived to promote dialogue with stakeholders and the Group continued its involvement in all important present-day matters related to CSR, including nonfinancial reporting, transparency and corporate responsibility within the value chain.
- Professional associations continued their in-depth work on the dangers and toxicity of Mn, Co and Ni with support from the Group and produced guidelines to ensure the proper monitoring of employee exposure. A better understanding of other metals of interest to the Group was also developed. Exposure scenarios for hazardous substances marketed by the Group were also finalised and are appended to the Safety Data Sheets. The same work started for mixtures and should be completed by 2015.
- Lastly, integrating Sustainable Development into the projects led to the creation of standards on good practices as regards characterization studies, impact assessment and environmental risk control. The service providers used and approved by the Group for the various environmental studies were evaluated.

The Group's Sustainable Development objectives were reviewed in the second half of 2013 (excluding social aspects which are dealt with elsewhere) and were reorganised for 2014-2015. Over the next two years, there are 40 areas of improvement with 59 objectives, including 37 level-one priorities that follow on directly from the objectives of previous years. This new action plan was approved by the Group's Comex and shared with the Departments of the three Divisions.

These orientations and action plans are adapted to each operational entity and Division in the Group. In the past few years, ERAMET has set up several cross-functional working groups to reinforce environmental coordination between Head Office and the Divisions; between the Divisions and the sites and to deal with biodiversity (see 5.4.5) and the environmental management of mining activities (see 5.4.4). This reinforces the sharing of experience and the proper application of shared rules.

At the same time, the Group is very careful to integrate social, environmental, cultural and societal criteria when it conceives and develops its projects. By referring to the best international standards, the Group strives to build long-lasting relations with its stakeholders everywhere it sets up business and to respect any specific rules and cultures and current scientific knowledge. In this Chapter, we will describe how these general principles are applied in all the Group's major transformation projects.

Lastly, the Group introduced instruments to monitor and control activities to ensure that sustainable development objectives have been implemented in a concrete manner across the whole scope.

Environmental data is analysed using specific Group software, EraGreen, which was fully implemented at all the industrial and mining sites in 2011. It is based on the GRI methodology and ensures that the requirements of French regulations are observed. In addition to generic indicators which apply to the Group's various activities, some other indicators were developed or were adjusted in order to better meet the specificities of the Group's activities. This was the case with the sustainable development scope of mining activities which, after in-house discussions and external benchmarking, resulted in the development of new specific indicators.

The Group also makes use of a periodical internal auditing system to check the performance of its entities regarding the Environment, Health and Safety. It is based on a very demanding framework which adopts the requirements of standards ISO 14001 and OHSAS 18001 at least. Other inspections carried out as part of the insurance programme provide more information on the environmental impact of the sites and the structures and actions implemented to minimise the impact. This on-site presence is essential to ensure the proper integration of multi-faceted regulations and the challenges that apply to various activities. This detailed knowledge is also primordial for the proactive study of regulatory changes and to encourage progress through exchanges and synergy between sites and Divisions.

The data produced by these auditing and control systems allows the Group to constantly bolster its ongoing improvement process.

### **5.2.** SUSTAINABLE DEVELOPMENT POLICY

The ERAMET group acts under a value-creating, continuous improvement rationale. In that framework, it has set up a Sustainable Development policy to enable it to conduct its activities on a lasting basis in the areas where it is based and to support its development in new territories.

The Group strictly complies with the regulations that apply to its activities and its performance standards in accordance with best practices in the industry. The policy concerns its employees, its customers and its stakeholders, and includes the control of

industrial, health, social and environmental risks with respect to its activities.

Its implementation is based on specific Charters and Policies adopted by the Group such as the Code of Ethics, Health & Safety policies and the Environmental Charter, on the energy, biodiversity and responsible purchasing policies formalised in 2013 and on a recent revision of guidelines on industrial risks. These documents are available to stakeholders on the Group's website.

# 5.2.1. Protect and develop ERAMET's employees by involving them in its actions \_\_\_\_\_

#### 5.2.1.1. Protect our employees' health and safety

- The ERAMET group's employees are its prime asset. The Group shall continue the actions taken to reduce workplace accident frequency and seriousness rates, wipe out fatal accidents and move towards "zero accidents".
- Action plans are constantly implemented to harmonise safety standards in the Group's various bases and organise the sharing of best practices.
- Prevention and screening of occupational diseases is a priority under the health policy of the ERAMET group, which also seeks to help combat AIDS and possible pandemics, as well as addictions and stress.
- Moreover, the Group makes an active contribution to the development of scientific research and knowledge relating to the health and environmental impact of its business.

### **5.2.1.2.** Foster professional development and industrial dialogue

- We recognise individual worth and talent. We value diversity as it is a major advantage for as international and innovative a Group as ERAMET.
- We ensure that we practise no discrimination whatsoever based on gender, disability, family status, age, political opinions, religious convictions, trade union activity or origin.
- Rewarding and developing employees' skills are essential factors in retaining personnel and enhancing ERAMET's attractiveness. Rewarding managerial and technical skills, developing career opportunities within the Group and promoting managers from territories where the Group is based are all priorities.
- The ERAMET group strives to keep up constructive dialogue with personnel representatives, who are essential partners in the implementation and rollout of Sustainable Development policy.

### **5.2.1.3.** Make employees players in Sustainable Development

- Employee buy-in for the ERAMET group's commitments to Sustainable Development is a critical success factor for that process.
- The deployment of Sustainable Development policy is supported by employee awareness-raising and training actions. These emphasise the action levers that employees have in

their respective specialties for contributing to the achievement of the Group's Sustainable Development commitments and demonstrate the relevant issues.

#### 5.2.2. Manage our health and environmental risks and impacts in order to protect balances on a sustainable basis

# **5.2.2.1.** Control the health and environmental impacts of our facilities and industrial processes

- Aware of the potential environmental impacts of mining and metallurgical activities on the natural environment, the ERAMET group considers that its responsibility is to adopt exemplary behaviour by implementing all the resources needed to protect the environment.
- For both its mines and its plants, the Group shall reduce its environmental footprint by keeping up the efforts taken for several years. This goal is factored into its projects and development from design onwards.
- Protecting water resources, reducing air emissions, conserving biodiversity and restoring sites after closure are action priorities that mobilise all the Group's activities.

### **5.2.2.2.** Reducing energy consumption and fighting climate change

- The fight against climate change is given priority by the international community and all businesses that have undertaken a Sustainable Development process.
- The ERAMET group has opted to improve the energy efficiency of its facilities by setting targets for greenhouse gas emission reduction.

### **5.2.2.3.** Aim for better use of natural resources and develop recycling

- The sustainable beneficiation of mining deposits is a primary environmental and economic challenge for the ERAMET group.
- The Group is developing processes that enable low grade ores to be used and extend the lifespan of natural resources.
   Finally, it fosters the use of secondary raw materials obtained by recycling.

#### 5.2.3. Seize the opportunities offered by Sustainable Development for the benefit of our customers \_\_\_\_\_

## **5.2.3.1.** Factor Sustainable Development into the Group's innovation and business diversification policy

- The ERAMET group makes innovation and research efforts to reduce the environmental impacts of its facilities, manufacturing processes and products.
- Work is done to share knowledge, capitalize know-how and develop new partnerships with customers in order to utilise those potential new sources of growth.
- Diversifying activities into new products and new applications and bolstering our presence on selected innovative markets are also sources of development for the Group.

# **5.2.3.2.** Highlight the environmental benefits of using our products in our customer approach and reduce the risks from products for people and the environment

- The ERAMET group structures its marketing process by meeting customers' demand for more environmental benefits from the use of its products (stainless steels, very high strength steels, use of manganese in rechargeable batteries, etc).
- This process is based on scientific studies carried out to quantify the precise environmental impacts with respect to our products' entire lifecycles.
- The Group regularly implements all the necessary resources in terms of traceability and regulatory compliance to ensure that the use of its products does not impair health or safety and does not disrupt natural balances.

### **5.2.3.3.** Undertake a responsible purchasing process

- In many cases, allowance for costs related to the use and end-of-life of products means that products with lower environmental impact which do not entail excess costs for the buyer should be preferred.
- Given that fact, the ERAMET group develops a responsible purchasing policy by preferring suppliers that offer products or services that fulfil environmental and social criteria better while remaining competitive.
- In particular, the Group checks that its suppliers comply with the demands of REACH regulations.

# 5.2.4. Nurture a trusting relationship with our stakeholders to create value for all \_\_\_\_\_\_

### **5.2.4.1.** Meet our stakeholders' expectations better

- In its host regions, the ERAMET group has long shown itself capable of dialogue and of understanding local stakeholders' expectations. It fosters consultation and modernised governance in the various regions where it is active in order to identify any concerns of its stakeholders at as early a stage as possible and provide relevant responses to the demands made of it.
- Such an approach involves building forms of dialogue that are relevant to the political and cultural contexts of host countries.

# **5.2.4.2.** Contribute transparently to host regions' economic and social development by ensuring good governance of our operations

- ERAMET's ability to maintain a long-term presence wherever it is based and to develop its activities in new directions largely depends on its ability to demonstrate that its presence brings positive economic and social fallout for its local partners and its facilities' neighbouring populations.
- As a major player in the economies of many regions in the world, the Group intends to continue to develop actions in support of education, health prevention and stimulus of local businesses.
- Entering into partnerships with non-governmental organisations is encouraged. The Group strives to improve the governance of its operations constantly under a principle of shareholder dialogue and respect.

### **5.2.4.3.** Share our challenges and achievements as widely as possible

- Companies' non-financial performance is becoming a subject of major interest, examined by different types of stakeholders seeking information on how environmental and social issues are factored into the companies' policy.
- To meet that expectation, the ERAMET group provides increasingly clear and objective information in its internal and external communication on past and future achievements in terms of Sustainable Development.
- This information is based on verifiable facts and quantifiable indicators and forms the basis for a relationship of trust with our shareholders, the general public and any other stakeholder interested in our Sustainable Development process.

### **5.3.** ENVIRONMENTAL INFORMATION

#### 5.3.1. Environmental Charter \_\_\_\_\_

### Control and reduce the environmental impact of the Group's industrial activities

As a responsible industrial operator, the ERAMET group carries on its business activities in such a way as to keep its health and environmental impact as low as possible, while ensuring that the cost of such efforts remains economically viable.

### Control the risks and impact stemming from products sold by the Group

The ERAMET group's environmental policy includes a specific portion relating to the potential risks and impact stemming from the characteristics and use of its products. Controlled and reasonable management of these risks is one of its priorities.

#### **Encourage ongoing improvement**

The Group is continuously seeking to improve its environmental performance. This commitment is one of its responsibilities, on a par with ensuring the health and safety of its employees, complying with commercial agreements or identifying optimised technologies at the lowest possible cost.

### Factor the environment into every aspect of the Group's activities

This determination to make the environment a part of the Group's activities is demonstrated in every aspect of the Company's activities:

- when designing and starting up new activities, projects or capital expenditure programmes;
- throughout the day-to-day operation of facilities;
- when discontinuing activities.

#### Strictly comply with regulations

Strict compliance with regulations that are applicable to sites is the first guarantee of responsible management of their impact. Any non-compliance must be temporary, justified and notified to the relevant administrative body.

### Develop self-knowledge to improve and communicate

Accurate knowledge of our actual impact is a necessity. Knowing how to anticipate and assess both improvements and difficulties is key to the implementation of a policy. Communicating actual performance is becoming a regulatory requirement. By setting up an Environmental Information System (EIS), the ERAMET group is equipping itself with the resources necessary to achieve its goal.

### Anticipate regulatory changes from a sustainable development perspective

The ERAMET group is subject to a series of complex and ever more stringent environmental regulations. We owe it to ourselves to acquire full knowledge of these regulations, anticipate changes to them and act to raise awareness of our situation from a perspective of sustainable development that protects our competitiveness.

#### Contribute to scientific know-how

Scientific knowledge of the health or environmental impact of our activities is complex and constantly evolving. The ERAMET group helps to further research and knowledge on its activities.

### 5.3.2. ISO 14001 certification of the industrial sites \_

The significant progress made in recent years with regard to the goal of gradual introduction of measures along the lines of Environmental Management Systems, initially provided for in the 2002 Environment Charter and confirmed by the Sustainable Development Policy of January 2010, continued in 2013.

In line with the goal set in early 2007 and renewed every year, a target schedule for sites involved in the ISO 14001 certification processes continued. In 2013, two more sites located in France obtained ISO 14001 certification.

The sites concerned are the machining company SUPA (Société d'Usinage des Pyrénées Ariégeoises) and UKAD.

As from 2013, the Group wishes to focus its efforts on obtaining ISO 14001 certification for sites likely to have a real impact on the environment. Therefore, some sites like distribution centres or other sites whose activities do not represent any particular environmental risks, and entities that have ceased their activities have been removed from the scope of this objective, bringing the number of sites concerned to 46 in 2013 compared to 57 in 2012.

Moreover, as from this financial year, sites that have obtained their re-certification will also be monitored to confirm this continuous improvement performance commitment.

ISO 14001 certifications demonstrate the sites' commitment, the coherence of the management systems and the extent of this continuous improvement which are checked every year via external audits and via three-yearly audits to renew the certification.

On 31 January 2014, there were altogether thirty-three sites with ISO 14001 certification:

- Airforge, Pamiers;
- Aubert & Duval Firminy;
- Aubert & Duval Imphy;
- Aubert & Duval Issoire;
- Aubert & Duval Les Ancizes;
- Aubert & Duval Pamiers;
- Comilog Dunkirk;
- Comilog Gabon (Port Minéralier d'Owendo, Track Maintenance Department <sup>(1)</sup>, Moanda Industrial Complex & the Mine and Industrial Zone of Moanda);
- Erachem Comilog Baltimore;
- Erachem Comilog New Johnsonville;
- Erachem Comilog Tertre;
- Erachem Mexico;
- ERAMET Marietta;
- ERAMET Norway Kvinesdal;
- ERAMET Norway Porsgrunn;
- ERAMET Norway Sauda;
- ERAMET Sandouville;
- Erasteel Champagnole;
- Erasteel Commentry;
- Erasteel Kloster Langshyttan;
- Erasteel Kloster Söderfors;
- Erasteel Kloster Vikmanshyttan;
- Eurotungstène Grenoble;
- GECC Chongzuo;
- GCMC Freeport;
- Interforge, Issoire;
- SUPA, Pamiers;
- TiZir Titanium & Iron Tyssedal;
- UKAD, Saint-Georges-de-Mons;
- Valdi, Le Palais-sur-Vienne.

This process of obtaining ISO 14001 certification, undertaken on the industrial sites and on the mining sites, is being continued effectively. Certified sites now represent 72% (number of sites) of the target objective.

It should also be noted that in 2013, 100% of the sites which were the subject of certification renewal audits maintained their certification, i.e.:

- Airforge in Pamiers;
- Aubert & Duval in Imphy;
- Aubert & Duval in Pamiers;
- Comilog Dunkirk;

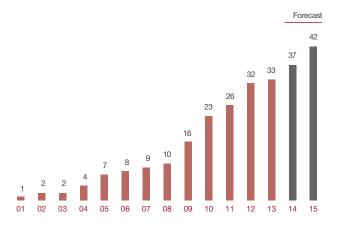
- Erachem Mexico;
- Erasteel in Champagnole;
- Erasteel in Commentry;
- Erasteel Kloster in Langshyttan;
- Erasteel Kloster in Söderfors;
- Erasteel Kloster in Vikmanshyttan,

To support and evaluate sites in their environmental approach, the Group carries out internal pre-certification audits, and site follow-up audits in the fields of health, safety (H&S) and the environment.

For this purpose, the Group works with a framework that is common to these various themes, developed in 2008, and which is perfectly adapted to ISO 14001 and OHSAS 18001 requirements. This stringent framework is used at all the Group's sites and is regularly revised (the latest update will be finalised in the first half of 2014) so as to take account of the mixed nature of practices, local regulations and evolving standards.

Mixed teams of auditors (central Departments and site representatives) supervise these audits which are organised in an increasingly integrated fashion to ensure that each site is audited regularly, as required by internal rules. Therefore, Health & Safety, Health, Safety & Environment or Health & Environment audits are carried out at about fifteen sites every year.

### Changes in sites with ISO 14001 certification and prospects for the next two years (including mines)



Prospects for new certifications in 2014 and 2015 result from the periodically reviewed commitments of sites, and which were reconsidered at the end of 2013.

Thus, at the start of 2014, the Group has some new industrial and mining sites undertaking this process, including the New Caledonian mines. ISO 14001 certification audits were successfully carried out at the SLN plant in Doniambo and the Forges de Monplaisir at the end of 2013 but they have not yet been included in this assessment.

- (1) This site used to be part of the "Port Minéralier d'Owendo" entity but as its activities are quite distinct (maintenance of the Transgabonais railway tracks and the track maintenance equipment), it is now monitored separately.
  - The certified sites of Aubert & Duval Heyrieux (Distribution Centre) and Valdi, Feurs (which ceased its activity in 2013) have left the Group's scope of consolidation so are no longer included in this list.

### 5.3.3. Resources devoted to preventing environmental contingencies \_\_\_\_\_

#### **5.3.3.1.** Technical and human resources

The Group develops its environmental policy through the four mainstays of its Sustainable Development policy (2010), and its Environmental Charter (2002).

Cross-functional, multi-year objectives are developed, updated and followed up annually. They are managed either by the Company, the Divisions or the sites.

Special attention is paid to the attainment of these objectives which are subject to annual approval and monitoring by the COMEX.

To develop this process, the Group ensures that its in-house network of experts is highly professional. There are over 80 people in this network (HSE duties) who report to general management at most sites.

This cross-functional, bottom-up and top-down process has enabled vigorous action to be taken in the field of environmental strategies, training, awareness-raising and synergies.

Here are just a few examples:

- The Group's three Divisions have a coordination structure to deal with environmental themes and monitor issues related to chemicals management. This initiative helps to reinforce the coherence of the Group's managerial policy in the central departments, the Divisions and sites.
- Cross-functional working groups to develop, share and structure experiences on themes as varied as regulations on waste and metal residue, the recycling of slag, the inter-site recycling of waste or co-products, the development of a biodiversity strategy, product stewardship and even the updating of safety data sheets following changes to European regulations (CLP), etc.
- The domain Committee on Health & Safety (H&S) and the Environment (E) analyses the skills available in the Group with regard to requirements and challenges once a year. This proactive process is carried out in perfect coordination between the Divisions' and Group's Human Resources Departments and the Health & Safety/Environment and Sustainable Development Departments.
- Both interactive and traditional communication media are powerful tools which circulate messages and offer opportunities to develop an awareness on environmental issues and stakeholders' expectations. Internet sites, brochures and regular in-house newsletters devote a lot of space to these themes.

On the sites, in the Divisions and even at Head Office, there are no end of training and awareness-raising initiatives covering the essential aspects of management and environmental responsibility. New recruits are integrated and given training in Health, Safety and the Environment and best practices on the sites. Training is provided via "IMaGE", a project set up by the Group's Management Training Institute. The "Alloys Management Institute" devotes a whole day to Health, Safety and the Environment to raise managers' awareness on the subject. Representatives from the Group's Sustainable Development Department, divisional coordinators and site HSE engineers take part in these various initiatives.

Finally, the Group continues to carry out its Environmental audits of sites, and whenever possible, combines them with Health & Safety aspects. In 2013, eleven sites were audited for all the environmental themes and about twenty others received an in-depth inspection by one of the members of the Group's Environment Department or by one of the three Divisions' coordinators. The audit framework common to the environment, health and safety is based on three main themes: the involvement of people, operational control and prevention. It completely integrates the requirements of ISO 14001 and OHSAS 18001.

Mixed teams of Group auditors (central Departments, Divisional coordinators and site representatives), who have been trained and certified according to an in-house framework, organise these audits in as integrated a manner as possible so that HSE aspects at each site are assessed every two to four years at the most, depending on the improvements suggested at the previous audit. This involvement develops a network of experts, encourages operational teams to share experience and enables them to benefit from the others' best practices. In 2013, some managers who are not directly involved in HSE took part in this auditing process. These people found the specific on-site experiences extremely positive and an excellent way of developing a better understanding of many environmental themes and generally speaking sustainable development. In parallel, the Group's Environment Department, in its support policy, carries out a ISO 14001 pre-certification audit of sites involved in the process and offers an efficient tool which analyses deviations and allows the sites concerned to manage their improvements with a view to obtaining their certification.

With regards technical resources to control the impacts on aqueous discharge or the air emissions of its 57 sites, the Group has a whole series of equipment to treat and monitor its emissions:

- For water:
  - 90 aqueous discharge points are canalized and monitored;
  - there are over 600 treatment facilities for these aqueous discharges (purification plants, septic tanks, pH adjustments, settling tanks, holding reservoirs, etc.) including almost 120 scrubbers/oil traps;

- 111 air-cooling towers, which in most cases, allow water loops to be used and which are suitably monitored;
- almost 300 piezometers to monitor ground water aquifers and also 70 extra piezometers installed outside the sites' boundaries.
- For air:
  - over 340 air emission points are canalized and monitored;
  - there are over 350 facilities to treat these discharges (dry or wet dust removers, cyclones, electrostatic filters, washing/ absorption of gas, an ammonia incineration facility, desulphurisation, activated carbon absorption, afterburning, etc.);
  - there are over one hundred atmospheric fallout measurement points – 60% on-site and the rest outside site boundaries.

Whenever necessary, the sites have developed a sampling and analysis plan which is perfectly in line with the operating permit requirements.

Please refer to Section 5.4 on environmental data for further details on the appropriateness of resources implemented and the results obtained.

#### **5.3.3.2.** Financial Resources

This overview focuses on the many improvements and capital expenditure implemented on sites during the year. Overall environmental capital expenditure is estimated to be almost €37 million in 2013, spread out over 44 sites. This figure is lower than figures for the previous two years because of the considerable amount of work carried out in 2011-2012, such as the improved air emission treatment at GCMC Freeport, SLN Doniambo, and ERAMET Marietta, and the work aimed at preventing water pollution at Comilog in Gabon (representing a total capital expenditure of over €90 million).

If we ignore the considerable capital expenditure made in 2011 and 2012, we observe that the amount dedicated to ongoing improvements to water and air emission prevention remained constant in relation to those of the two previous years.

The capital expenditure discussed here is strictly related to environmental protection and prevention. For example, it covers the installation of new facilities or work carried out to minimise impacts. This does not cover capital expenditure for new activities which inevitably comprise a considerable financial proportion, but which is not specifically identified, to comply with the best techniques chosen.

In 2013, more capital expenditure was devoted to the prevention of water pollution (almost 50%) while 40% was devoted to the prevention of air pollution and the rest was devoted to waste, biodiversity, and the prevention of other types of pollution.

A considerable amount was spent on the prevention of water pollution at mining sites, both at SLN in New Caledonia and

Comilog in Gabon. This capital expenditure was mainly aimed at controlling the quality of runoff water and heavily polluted water from the process carried out by settling tanks. Tanks and containments were also installed or replaced to prevent any hydrocarbon pollution.

The industrial sites also devoted a great deal of capital expenditure to the prevention of water pollution. For example, the Moanda Industrial Complex continued its site decontamination programme (building structures: gutters, slabs, settling tanks, etc.), ERAMET Norway Kvinesdal continued to improve its sludge management (dewatering unit, storage areas, retention basin, separator, etc.). The sites of Comilog Dunkirk (France), Erachem Comilog Tertre (Belgium), ERAMET Norway Porsgrunn (Norway), New Guilin (China) and Setrag (Gabon) also made a great effort in this field.

Many industrial sites distinguished themselves in the prevention of air pollution, including ERAMET Norway in Kvinesdal (Norway), Interforge (France), New Guilin (China), and Port Minéralier d'Owendo (Gabon). AD les Ancizes (France) devoted a great deal of capital expenditure to improving the extraction of dust generated by some of its processes. Erachem Comilog New Johnsonville (USA) finalised it capital expenditure aimed at collecting coal dust and took many initiatives to save energy and thus reduce its  $CO_2$  emissions. Lastly, the SLN plant in Doniambo continued its efforts to reduce its air emissions by increasing its filtration and treatment capacities on various installations and by adjusting its consumption of fuel according to air quality measurements and meteorological data.

A great deal of capital expenditure was assigned to waste management improvements at Comilog in Gabon, the American sites of Erachem Comilog New Johnsonville and GCMC Freeport, Setrag in Gabon and SLN Doniambo.

In 2013, numerous studies were also carried out at 26 Group sites costing a total of €2 million. These studies included environmental and social impact studies and statements in the case of developments and new projects, analysis reports on aqueous discharges, air emissions, noise pollution and other investigations aimed at better understanding the environmental situation of our sites (flora and fauna, hydrologic studies, etc.).

The most costly studies were carried out at Comilog and Setrag in Gabon, for the Weda Bay Nickel project in Indonesia, the Thio Mine in New Caledonia, at Valdi in Le Palais-sur-Vienne, Erachem New Johnsonville (USA), and AD TAF in Gennevilliers (France).

All this capital expenditure shows just how much importance the Group's sites attach to preventing pollution and complying with regulatory requirements and the other obligations that apply to them. As most of the Group's sites have ISO 14001 certification, it also illustrates the pertinence and dynamism of their environmental management systems.

### **5.4.** ENVIRONMENTAL DATA

Environmental indicators have been improving over the past several years and this trend continued overall in 2013, even if some of the results in 2013 are proportional to the rates of activity, as has already been observed in previous years.

The 2013 environmental report covers all the industrial and mining sites of the scope used for the Group (57 sites), spread out over five continents, i.e. the following Chinese, Norwegian, Italian, Swedish, Gabonese, Mexican, American, English, Belgian, German, French, Indonesian and Caledonian sites:

Country	Legal entity	Town of operations
Norway	ERAMET Norway	Kvinesdal, Porsgrunn, Sauda
	TiZir Titanium and Iron	Tyssedal
Sweden	Erasteel Kloster	Söderfors, Långshyttan, Vikmanshyttan
Belgium	Erachem Comilog	Tertre
Germany	A&D Special Steel GmbH	Mönchengladbach
France	Aubert & Duval	Firminy, Gennevilliers, Heyrieux, Imphy, Issoire, Les Ancizes, Pamiers
	AD TAF	Gennevilliers
	Airforge	Pamiers
	Brown Europe	Laval-de-Cère
	ERAMET	Sandouville
	ERAMET Research	Trappes
	Eurotungstène Poudres	Grenoble
	Interforge	Issoire
	CMM	Landévant
	Comilog	Dunkerque
	Erasteel	Champagnole, Commentry
	Forges de Monplaisir	Saint-Priest
	SUPA	Varilhes
	UKAD	Saint-Georges-de-Mons
	Valdi	Feurs, Le Palais-sur-Vienne
Italy	ADES	Ferrare
United Kingdom	Erasteel Stubs	Warrington
New Caledonia	SLN	Doniambo (Plant and Heating Plant); Thio, Tiébaghi, Poum, Kouaoua, Népoui Kopéto (Mining Facilities)
USA	Erachem Comilog	Baltimore, New Johnsonville
	ERAMET	Marietta
	Erasteel	Boonton, Romeoville
	GCMC	Butler, Freeport
Mexico	Erachem	Tampico
Gabon	Comilog	Moanda (Mine and Industrial Complex), Owendo (Port Minéralier d'Owendo and Track Maintenance Department)
	Setrag	Owendo (+ stations)
Indonesia	Weda Bay Nickel	Halmahera
China	A&D	Wuxi
	Comilog	Guilin
	GECC	Chongzuo

In terms of scope and compared to the situation at the end of December 2012, 2013 remained stable. However, we should note the following trends, in line with the previous year:

- the shutdown of Guangxi Comilog Ferro Alloys Ltd. in China;
- the continued start-up of the new Guilin Comilog Ferro Alloys Ltd. plant (China) where the level of activity has not involved all its furnaces simultaneously.

To monitor its key indicators, the Group uses its in-house reporting tool EraGreen. This computer tool is used to collect and

#### 5.4.1. Pollution and waste management \_

#### 5.4.1.1. Air emissions

Air emissions		2011	2012	2013
CO <sub>2</sub> emission related to energy	thousand tonnes	4,780	4,600	4,354
Sulphur oxides (SO <sub>x</sub> )	tonnes	11,286	11,370	9,466
Nitrogen oxide (NO <sub>x</sub> )	tonnes	2,875	2,959	5,234
Volatile organic compounds (VOC)	tonnes	182	454	438
Total canalised dust	tonnes	1,872	1,698	1,629
Nickel	tonnes	9.8	10	8.8
Manganese	tonnes	78	142	161

The Group's air emissions derive from energy requirements and the production of ferrous and non-ferrous metal alloys.

In parallel to energy requirements, it has been noted that it is above all the pyrometallurgical activities with their melting facilities and heat treatment furnaces that contribute to air emissions. The associated  $CO_2$  emissions are calculated according to the type and quantity of energy consumed by a site and according to specific emission factors.

Air emissions are usually proportional to the activity of the facility emitting them. Nevertheless, it should be noted that some of the materials processed contain high levels of chemical elements and this can result in emissions. It should also be noted that the measurements taken by approved bodies are sometimes called into question and new measurements taken by another third-party expert can sometimes differ greatly from those taken earlier. As a certain number of measurements are taken in an isolated manner and then extrapolated to emissions for the whole year, the impact of the accuracy of the measurement can prove to be very significant. This is supported by the fact that to calculate air emissions, one has to multiply extremely small concentrations of pollutants measured in mg/m<sup>3</sup> by very large quantities of emissions.

In pyrometallurgy, the emissions channelled are generated where material is handled, at furnaces and where there are operations involving casting and grinding, liquid metal and slag. In hydrometallurgy, dust emissions are usually channelled when there are operations involving the handling, drying and transport of materials.

The Group also concentrates on diffuse releases. The quantities of dust produced are checked so that we can develop a deeper understanding of this subject. The situations are very varied and the rules and hypotheses adopted to assess these releases at sites or specific places of operations can be very variable with reference to applicable regulations and are sometimes even questionable. These efforts will be pursued so that an overall estimation of the Group's diffuse releases can be established in the coming years.

Collection and filtration systems accompany most operations that produce emissions. At the end of 2013, the Group had more than 350 air emission treatment facilities – this is an increase compared to 2012 which followed the increase of 2011! Indeed, this progression is in line with the proportion of capital expenditure dedicated to these types of facilities including some large-scale installations like the sulphur gas trapping facility at GCMC Freeport (USA), the dust remover at ERAMET Marietta and the electrofilters at SLN Doniambo.

Concerning sulphur oxide and nitrogen oxide emissions in 2013:

 In comparison to previous years, SOx air emissions improved significantly. Capital expenditure at the GCMC Freeport plant (USA) produced its full effect with a reduction of more than 95% in SO<sub>2</sub> emissions.

consolidate environmental data from industrial and mining sites. The main themes covered are water, air, soils, energy, waste, biodiversity and regulatory aspects.

All the quantitative data given in the present report (environmental data) has been extracted from EraGreen and comes exclusively from the data encoded by each of the Group's sites.

In an effort to adopt a continuous improvement approach, from one year to another, some sites may update previous figures, thus causing a slight variation in data that was consolidated in the past.

#### SUSTAINABLE DEVELOPMENT

The clear improvement observed between 2011 and 2012 regarding NOx emissions did not continue and the level of these emissions returned to the level observed in the years preceding this period. The main influence came from the SLN site. Some of the possible causes, which will be clarified in 2014, are as follows: procedures modified at the thermal power plant (quality of fuels, combustion settings). It should also be noted that the high level of activity at the Moanda Industrial Complex (Gabon) contributed to a lesser extent to this increase.

The accounting of Volatile Organic Compounds (VOC) in air emissions was effected by the extension in the number of sites where this measurement was taken between 2011 and 2012. The situation of contributing sites remained stable over the past three years. The stability of 2012 was maintained in 2013.

The management of total dust emission canalization continued to improve once again in 2013. This is a general tendency. It is interesting to observe that trapping systems for other pollutants like SO<sub>2</sub> lead to clear reductions in total dust emissions. Levels of nickel and manganese air emissions remained more or less the same as those of last year and are influenced by the level of activity.

#### 5.4.1.2. Aqueous Discharges

Aqueous Discharges		2011	2012	2013
Suspended solids (SS)	tonnes	4,360	9,257	5,246
Chemical oxygen demand (COD)	tonnes	200	217	168
Nickel	tonnes	14.4	6.7	8.7
Manganese	tonnes	90.8	32.3	129.5

As with air emissions, ERAMET is determined to reduce its aqueous discharges. Industrial sites are striving to improve treatment processes to ensure that the water they release is of better quality.

The general tendency for Suspended Solids (SS) remains very variable from one year to the next and SLN Doniambo (New Caledonia) produces more than three quarters of the Group's discharge. As explained in previous years, this variation is due to the variable amounts of SS found in the sea water used for plant cooling and slag granulation. In 2013, there was a clear downward trend while in 2012, the same situation was the main cause of a clear upward trend. These quantities are contained in the final discharge, meaning that the total SS contained in the sea water collected beforehand is counted together with the SS linked to the operations. However, it should be noted that applicable regulations do not allow us to deduct the SS counts.

Other industrial sites generate lower levels of SS. This is the case with all the sites in the Alloys Division whose main contributors improved and maintained their discharge performances. A few sites in the Manganese Division contribute the Group's SS levels. This is the case with ERAMET Marietta, Erachem-Comilog Tertre and TiZir TTI Tyssedal. While complying with the levels imposed, we observe a satisfactory stabilisation of discharges at Tyssedal Norway, confirming the improvement of 2012, an increase at Tertre Belgium and a significant discharge at Marietta USA. Discharges at the last site depend upon the rainfall because all the discharges go into an enormous retention basin which is only discharged into the natural environment when the level is high due to heavy rainfall.

The Chemical Oxygen Demand (COD) improved in 2013. The analysis measurement of this indicator is difficult because various chemical elements may interfere with this, especially the presence of chlorides. This may lead to incoherent results. Two situations were identified at the sites of Sandouville and AD Pamiers and were corrected, thus explaining the reduction observed. The pertinence of the measurement of this indicator at the site of Eurotungstène Grenoble (France) is also limited but the operating permit obliges the site to carry forward its COD impact in accordance with criteria, and this matter must be re-examined with the authorities.

As regards aqueous discharge, nickel discharge increased once again but it was lower than in 2011. Concentrations were low but the volumes released were high. Periods of high rainfall can influence discharge situations when a great deal of leaching occurs at activity zones. ERAMET Marietta is the main contributor of manganese aqueous discharges, mainly due to discharge overflowing into the natural environment from an enormous water retention basin.

As indicated in paragraph 5.2.3, in 2013, a great deal of capital expenditure was put into improving the quality of the water released.

Finally, the Group's sites carefully monitor the quality of ground water and the impact of the activity on soils and sub-soils. At the end of 2013, there were 70 more piezometers.

More than 300 pieces of equipment, deployed at the Group's different sites, establish the initial state, accompany the first stages of all new projects and monitor any possible impact on ground water and surface water.

#### 5.4.1.3. Waste

Waste Production		2011	2012	2013
Quantity of non-hazardous waste	thousand tonnes	3,640	3,309	3,646
Quantity of hazardous waste	thousand tonnes	66	64	72

The field of waste management is constantly changing. For years, ERAMET has strived to recycle the waste it generates in its processes and also to become involved in the different processes of recycling waste containing metals resulting from the manufacture or use of products marketed by other industrial players.

The Group's Alloys Division is a long-standing and major player in this recycling of materials. Indeed, internal metal residue (machining chips, offcuts, etc.) and external residue (secondary raw materials) are put into the Group's steelworks furnaces. This sector has extremely high recycling levels.

For many years, ERAMET has been developing its recycling business. Part of the Manganese Division is specialised in activities based on the use of secondary raw materials. This is the case with GCMC Freeport (USA) which mainly recycles used catalysts from the petrochemicals industry and Erachem Comilog Tertre (Belgium) which produces copper salts and oxides from waste, and also, since 2010, the Valdi site (France) which is a major European player in the re-use of contained metals via the recycling of waste from the steel industry, catalysts from the petrochemicals industry and rechargeable and disposable batteries.

The setting up of environmental management systems is always accompanied by reinforced waste management. The increased number of certified sites goes hand in hand with the setting up of specific channels to recover waste, i.e. scrap metal, neon tubes, printer toners, used grease, and aerosols. The annual accounting process reveals situations that involve the removal of hazardous and non-hazardous waste that was sometimes stored on site for several years. Quite often, when environmental management systems are set up, sites are tidied up and this leads to an increase in the quantity of waste.

#### Non-hazardous waste

The notion of hazardous and non-hazardous waste is defined in accordance with the regulations of the countries in which the Group operates. Indeed, at the moment, the status of waste varies greatly from one country to another and uniform accounting is not easy to apply.

Mining activities and their related industrial operations are the source of more than 95% of non-hazardous waste. A large quantity of this is stored in industrial basins in Gabon. This is fine fractions of the ore produced when manganese ore is washed to separate the granular parts which correspond to market requirements. As regards nickel, the pyrometallurgical processing at the Doniambo plant also generates a large quantity of non-hazardous waste in the form of slag.

Much smaller quantities of by-products and non-hazardous waste are generated by industries involved in steel-making, melting-reduction and the production of ferroalloys. They come in the form of slag and inert slag which is mainly stored in internal landfills and some of which is recycled by an external operator.

Thus, for several years, increasing amounts of waste have been recycled and this is particularly the case at the steelworks of Aubert & Duval, and Erasteel and ERAMET Norway Porsgrunn in 2013.

It should be noted that the non-hazardous waste calculations do not include the tonnages of deliberately rich slag generated in the ferromanganese pyrometallurgical process, which serve as a secondary raw material to fuel the furnaces which produce silicomanganese.

The calculation of non-hazardous waste is also affected by the significant tonnages that result from decommissioning operations (rubble, scrap metal, etc.) and large-scale civil engineering works involving the construction of new units or plants as was the case with the silicomanganese and ferromanganese pyrometallurgical production plant in Guilin and the construction of the Moanda metallurgy complex in Gabon.

The overall quantity of the Group's non-hazardous waste, which decreased in 2011 and 2012, is proportionally the same as that of previous years.

#### Hazardous waste

Activities that generate hazardous waste are mainly the pyrometallurgical and chemical processes carried out by the Manganese Division.

Therefore, the Manganese Division's "chemicals" operations generate a large quantity of production and purification residues (called ore gangues). The fact that approved landfill sites handle this waste means that the applicable regulations are complied with on all points.

Pyrometallurgy produces dust, sludge and slag, some of which can be considered as hazardous waste, according to its intrinsic characteristics.

The progress observed in 2013 for hazardous waste clearly corresponds to these two situations. By subtracting a new tonnage generated further to an evident improvement in air emissions at GCMC Freeport, we can conclude that the Group's production of hazardous waste is on average stable for all the other sites concerned.

5.4. ENVIRONMENTAL DATA

#### **5.4.1.4.** Site rehabilitation/restoration

The Group carefully monitors the management of issues with a potential impact on the soil and subsoil arising from past, continuing or future mining and industrial operations.

For several years, the Group has developed a policy and expertise in investigating, identifying, monitoring and managing land under potential impact from different projects like the rehabilitation of industrial areas, internal landfills at the end of their working life, former mines, etc. and also soil mapping before new projects are set up.

Moreover, the Group takes all these issues carefully into account in its internal audits and when it acquires new activities.

The key events of 2013 are listed below. First of all in the industrial field:

 Erasteel Kloster Söderfors (Sweden): The programme of investigations on the soil at Söderfors industrial site which started in 2008 ended when the last tests were carried out.

At the same time, discussions with local authorities concerning measures for the rehabilitation of the two hazardous waste storage areas in Ingså were concluded in 2012. Thus, rehabilitation work on the two hazardous waste storage areas in Ingså started in 2013 when one of the storage areas was covered with the first layer of moraine. A second layer will be laid in 2014. Further studies are now being carried out on the second hazardous waste storage area; these studies aim to determine the size and type of covering to apply. The contract on the securement of this storage area will only be concluded once these details are determined, in agreement with the authorities.

- Aubert & Duval Les Ancizes (France): At the non-hazardous industrial waste landfill (slag, firebricks, debris from the pouring basin) which ceased operations on 31 December 2010 a series of studies and work was carried out in 2011 in collaboration with the town of Ancizes. Its rehabilitation was completed in 2012, after the eradication of an invasive plant (Japanese Knotweed) and the planting of 1,200 trees in the spring. In 2013, the site received the final permit for the post-operational phase of this landfill and started to set up financial guarantees. The first post-operational project steering committee also took place at the end of 2013, in the presence of the Mayor of Ancizes and the DREAL (France's Regional Environment, Development and Housing Departments). Its aim was to decide upon the organisational and operational measures that will be included in the Agreement between these two parties in 2014.
- Aubert & Duval Firminy (France): At Aubert & Duval, Firminy, the technical and financial feasibility studies on the possible recycling of slag present on the former sites of Layat and Dorian continued in accordance with the tripartite agreement between the Canadian multinational Harsco, the municipality and the plant, signed in 2012.
- Aubert & Duval Gennevilliers: In 2011, the B&C plants ceased operations, the site was secured and studies were carried

out the same year. The cessation of business statement and related management plan were then registered. The supervisory authority determined the objectives to aim for in terms of site dismantling and decontamination and an operating permit including these objectives was drawn up. All these measures were carried out in perfect coordination with the local authorities and the entities continuing their operations, i.e. plant A (which had itself ceased activities in July 2013) and the contract processing workshop (new subsidiary,"AD TAF"). Following the invitation for tenders, sent out at the beginning of 2013, a co-venturing of general contractors was chosen which started the work in May. At the end of the year, the asbestos was removed from these plants and most of superstructures were dismantled. The excavation of the polluted soil started in September and will be completed in 2014, as will the rest of the work. Plant A will start implementing similar measures in the first half of 2014. Only the subsidiary AD TAF will continue its activities in this area.

Erasteel Kloster (Sweden): This Swedish entity, comprising three plants at Söderfors Långshyttan and Vikmanshyttan, continued to pursue its project involving the internal recycling of metal hydroxide sludge from the Långshyttan landfill. This project was reoriented in 2013 and this sludge was finally sent to the Valdi Le Palais-sur-Vienne plant (France) for melting tests.

The tests were conclusive and the rest of the sludge stored at Söderfors and Långshyttan will be sent to Valdi in 2014.

Therefore, the project to close the Långshyttan landfill continued. In the summer of 2012, characterisation studies on an older layer of this type of sludge were started to determine the processing possibilities, but the reorientation of the project in 2013 delayed the local authorities' consultation. Pending their decision, the storage site has been secured as has the sludge that has already been evacuated and which is awaiting transfer to Söderfors.

- GCMC Freeport (USA): The site of GCMC Freeport (USA) recycles the metal found in used oil catalysts. Long-standing disputes involving the GCMC were negotiated and agreements were reached with the authorities in 2013. These agreements oblige the site to make certain commitments and comply with environmental standards. More specifically, after fulfilling its obligation to seal the soil at the various used catalyst storage areas in 2012, GCMC is now drawing up an action plan for the "Clean Closure" of the former remote storage area for residue from used catalyst processing.
- Valdi Feurs (France): In 2013, this site announced its discontinuation of operations and took the necessary steps to secure the area (evacuating waste for example). Early in 2014, studies aimed at completing its cessation of business statement and related management plan will be finalised and handed over to the supervisory authority and owner of the land. Once the authorities have established the objectives to aim for in terms of dismantling and decontamination, a procedure similar to the one followed at B&C in Gennevilliers will be undertaken.

Initiatives were also taken in the mining sector. They are described in Chapter 5.4.4 The Mining Environment and in Chapter 5.4.5 devoted to biodiversity. Lastly, an important point to note is the introduction of a policy of systematically mapping ground condition before the start to any new project, in accordance with the Group's Sustainable Development policy.

#### 5.4.2. Sustainable use of resources \_\_\_\_\_

Consumption		2011	2012	2013
Total energy consumption	GWh	17,346	16,953	16,114
Total water consumption	million m <sup>3</sup>	29.2	28.2	31.5
Industrial water consumption	million m <sup>3</sup>	16.7	16.5	13.0
Mains water consumption	million m <sup>3</sup>	1.9	2.6	2.5
Surface water consumption	million m <sup>3</sup>	7.8	6.9	13.9
Ground water consumption	million m <sup>3</sup>	2.8	2.2	2.1
"Social" water consumption	million m <sup>3</sup>	-	-	1.0

#### **5.4.2.1.** Water consumption

Before discussing the water consumption of sites in the ERAMET group, it should be emphasised that none of the Group's industrial sites are located in countries confronted with "water stress", i.e. when water resources per inhabitant, including all uses, usually drops below 1,700 m<sup>3</sup> per person. Despite the fact that water resources are usually substantial and plentiful on its sites, the Group attaches great importance to preserving resources. Many initiatives are taken to ensure that just the required quantity is used. Water recycling is encouraged everywhere whenever possible.

Mining, metallurgy, hydrometallurgy and chemicals are three activities that consume water for a range of purposes:

- cooling of furnaces and other metallurgical installations;
- washing of ore, raw materials and by-products;
- hydrometallurgy processes: solubilisation and reaction environments.

When it is technically possible, the sites:

- favour the internal recycling of the water consumed. The cooling of furnaces and other metallurgic facilities as well as all other high-consumption processes are mainly carried out in a closed circuit. The water consumed is mainly top-up water to compensate for evaporation;
- use industrial water and surface water for industrial processes even if some operating constraints impose the use of "clean" water.

In 2013, even if progress was made installing water meters on all the networks, some of the water consumption is still based on

estimations (rate of flow of pumps, inflow-outflow assessment). Therefore, some of the water consumption at Setrag, Gabon, is based on fixed quantity invoicing (over-estimated) pending the installation of the last water meters which will cover all its consumption.

We should point out that part of the Group's overall water consumption is used by the general public or the staff living in the accommodation provided to them. This year for the first time, it was possible to measure the "social" proportion of water: it was just over one million m<sup>3</sup>. However, the Group's efforts to provide some isolated areas with drinking water is offset by users squandering and over-consuming water (especially the general public) because it is free.

Lastly, because it is restored, the sea water used to cool the SLN thermal power plant (New Caledonia) and for slag granulation is not counted in the present assessment.

The decrease in consumption observed from 2010 to 2012 did not continue in 2013. The increase is mainly due to major technical constraints in the supply of "clean water" to the Comilog Moanda washing plant. Indeed, in 2013 it was not possible to continue the recycling loop set up in 2012 because of the return of suspended sludge managed in the industrial basins and other technical constraints imposed by this recirculation. Increased production at this entity also resulted in higher consumption. Other sites also had to increase their water consumption temporarily in order to ensure more reliable processes or to carry out exceptional maintenance work (examples: adjusting temperature, emptying fire cisterns, maintenance of purification plants, etc.). Some sites also experienced significant leakages in some of their networks. 5.4. ENVIRONMENTAL DATA

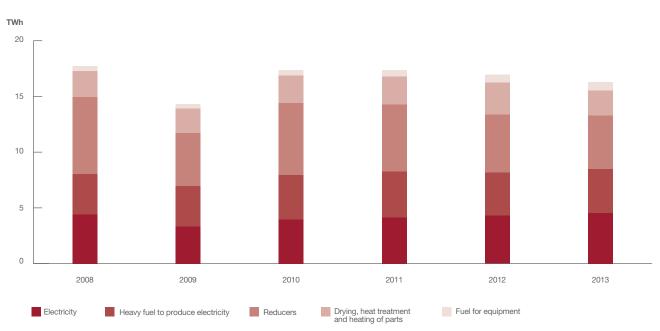
Although increased water consumption at some sites had a strong impact on the Group's overall consumption, efforts to reduce consumption elsewhere produced concrete results. Thus, the Eurotungstène site in Grenoble continued its programme, initiated in 2011, to reduce industrial water consumption by installing a closed cooling circuit. In this way, over a three-year period, the site reduced its industrial water consumption by 35%. ERAMET Norway Kvinesdal also strived to put a stop to the consumption of water that is not essential for its operations and it achieved good results. Indeed, over a period of three years, the site reduced its industrial water consumption by over 45%.

Even if 2013 can be considered an exceptional year in terms of water consumption, one must keep in mind the fact that this resource is essential for the management of some of the Group's processes. For example, the cooling of the electric furnaces must be perfectly managed and optimised. In some cases, a water supply shortage could present a high-risk situation during which security must be ensured before any other consideration.

#### 5.4.2.2. Energy

The main energy requirements come from sites with pyrometallurgy operations. The furnaces and melting facilities, ERAMET group's core metallurgy business in its three Divisions, are the main contributors.

In 2013, energy consumption dropped to 16.11 TWh (16.93 TWh in 2012) for the third year running.



#### Energy consumption trends

This decrease is due to a relative drop in activity but also the energy optimisation process pursued since 2006.

To provide a macroscopic analysis, the energy consumed has been classified according to five types of uses:

- "Electricity" which is used either in the furnaces for electrolysis or as a driving force (engines);
- "Heavy fuel to produce electricity"; this is the heavy fuel used in the Doniambo thermal power plant. The power efficiency for this is approximately 28 to 30 percent (electrical power / energy contained in the fuel);
- "Reducers" which are directly used in the reduction of ore;
- "Drying, heat treatment and heating of parts", produced by fossil energy;
- "Fuel for equipment".

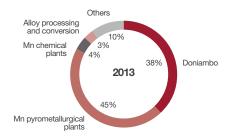
The Group's core business (the processing of ores and alloys) makes the use of electricity and reducers compulsory. The unavoidable energy requirements for this processing <sup>(1)</sup> amounted to approximately 10 TWh in 2013 (i.e. 62% of the total energy). In other words, just over 1/3 of the energy consumed by the Group can be the subject of energy efficiency improvements.

<sup>(1)</sup> These requirements are defined as the energy needed to carry out and control all the chemical and structural transformations of the material (ore reduction, alloy forming). It does not include the intermediary operations like transport, storage, drying and finishing.

The proportion of electricity increased slightly in 2013. This is due to changes in the energy mix at the SLN plant which encouraged the purchase of hydroelectric power from Yaté to optimise the fuel-powered plant but also to an increased proportion of electric furnaces in the Group (commissioning of New Guilin).

The reducers and drying/heat treatment are directly proportional to the activity.

The proportion of fuels also increased (although it remains negligible) due to more complicated mining plans requiring more haulage.



90% of energy requirements are consumed by 14 plants. This energy is used by the eight pyrometallurgical plants in the Manganese Division (Sauda, Porsgruun, Kvinesdal, Tyssedal, Marietta, CIM, New Guilin and Dunkerque), the Doniambo plant, three chemical plants in the Manganese Division (New Jonhsonville, Chongzuo, GCMC) and the two main alloy processing and conversion plants (Les Ancizes, Pamiers).

The Group's other 42 sites account for the remaining 10% of energy consumption.

#### 5.4.2.3. Energy efficiency

Between 2005 and 2012, the ERAMET group pursued a bottom-up energy saving approach. 26 sites, including the 15 sites mentioned above, thus developed a plan of action to save energy.

In 2012, with the arrival of the "energy management systems" ISO 50001 standard and related standards (ISO 16247 "Energy Audits" for example) the Group added a top-down approach aimed at giving all the sites a common methodology.

Within this framework, an Energy Policy was approved by Comex in September 2013. It adopts the basic continuous improvement

principles applied to energy management. In it the Group undertakes to:

- provide its products and services while constantly optimising its performance and energy competitiveness and promoting the continuous improvement of energy management;
- encourage and support value-creating initiatives by ERAMET group entities to continuously improve energy management;
- adjust its energy improvement goals in line with technological progress, Research & Development and Innovation, while complying with changes in legal and regulatory requirements.

The implementation of this Energy Policy will be supported by:

- use of the best available techniques, insofar as they are compatible with the Group's capital expenditure and standard ROI;
- factoring energy optimisation into the decision-making processes for all phases in a project (from design to implementation);
- recovering energy in internally and/or externally usable form whenever that recovery is economical;
- relevant, competitive energy purchasing that gives priority, insofar as it is reasonable and whenever it makes technical and economic sense, to renewable energies, and which fosters virtuous behaviour;
- the allocation of relevant resources by every entity to implement the Group's Energy Policy through action plans and to take energy management into account;
- individual recognition for the achievement of energy efficiencyfocused goals;
- development of new Best Available Techniques to enable the Group to move towards less energy-intensive processes.

The Group's Industrial Affairs Department continues to help sites with their own energy efficiency process, via audits and on-site advice (during the first stage of the process for example) and also provides new methodological support which may include assistance in obtaining certification of their "energy management system". In this respect, the Group's energy management coordinator is trained as an ISO 50001 auditor.

Two Norwegian sites were granted ISO 50001 certification in 2012, and several European sites are now preparing for a possible certification.

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#### **5.4.2.4.** Use of Mineral Resources

This aspect is developed in The Mining Environment chapter (see § 5.4.4.2).

#### 5.4.3. Climate change \_\_\_\_\_

### **5.4.3.1.** Contribution to greenhouse gas management and reduction policy

Since 2003, the Communications and Sustainable Development Department has had a unit responsible for climate change related issues for the Group as a whole, the primary responsibilities of which are:

- active participation in the climate change committees of French and European professional bodies (AFEP, MEDEF, FEDEM, FFA, Eurofer, Eurométaux and Euroalliages) that represent the industry vis-à-vis the French and European authorities in the drafting of related regulations;
- informing the relevant sites about such regulations and assisting them with their application;
- helping to define and roll out the Group's policy with respect to climate change, in close cooperation with the "energy management" unit in the Industrial Affairs Department, the Purchasing, Development and Innovation Department, the Public Affairs Department and the three Divisions;
- providing information on CO<sub>2</sub> emissions and emission forecasts to the Group Purchasing Department, which is responsible for managing the accounts of the relevant French sites vis-à-vis the national greenhouse gas allowance registry. The Norwegian sites manage their accounts in close cooperation with the country's authorities.

#### ETS 3: Directive 2009/29/EC of 23 April 2009 amending Directive 2003/87/EC "so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community"

The Group played an active role in the discussions between the industry (via professional bodies) and the national and European authorities (Commission, Parliament and Council).

#### **ERAMET** sites concerned

Alloys Division: Aubert & Duval: Les Ancizes, Firminy, Pamiers and Airforge.

Erasteel: Commentry.

Manganese Division: Comilog Dunkerque, ERAMET Norway (Porsgrunn, Sauda, Kvinesdal) and TiZir TTI in Tyssedal.

The Group's total emissions subject to the ETS will rise from approximately 100,000 tonnes of  $CO_2$  per annum at present to around one million tonnes of  $CO_2$  per annum during the third period.

#### Free allowances

Calculation of the number of free allowances is based on the general formula:

#### Free allowances

specific emissions (according to benchmark)

x historical production volume (2005-2008 median activity)

#### x trans-sectoral reduction factor

The Commission decision of 27 April 2011 set out the various terms which will differ according to the installations and sub-installations.

The forging sites (AD Pamiers, Airforge and Interforge) are not included in the list of sectors with a "risk of carbon leakage" and therefore, they will not be entitled to free quotas. For a transitional period, they will receive a decreasing number of free quotas (from the historic 80% of emissions in 2013 to 30% in 2020 and 0% in 2027).

At the end of 2013, the Commission approved the allocation of the free quotas proposed by the French and Norwegian authorities. Therefore, all the sites in the Group concerned officially received free quotas throughout period 3.

It should be noted that the Commission published the "transsectoral reduction factor" for the period, which takes account of the difference between the total number of free quotas requested by all the European sites and the "cap" that Europe set out to achieve internationally. This factor is lower than expected so this reduces the number of free quotas for the sites.

The sites' 2013 emissions are in the process of being checked by the Commission's approved bodies. They will then issue the "reasonable assurance reports" that are essential to surrender the quotas in the official registers at the end of February 2014.

#### CO<sub>2</sub> Coordination Committee (C3O2)

In order to coordinate information and actions related to the Group's carbon footprint, the "C3O2" was set up in April 2010. It includes representatives from the Communications and Sustainable Development Department, the Group Purchasing, Research and Innovation Department, the Group Industrial Affairs Department and the Industrial Departments of the three Divisions.

#### 5.4.3.2. Grenelle 2

#### Application of Article 75 of the French environment act Grenelle 2 and order 2011-829

Aubert & Duval (AD) is the only corporate entity of the Group in France to employ over 500 people and therefore it is subject to this law (approximately 3,800 ETP in 2011).

With the assistance of a BURGEAP consultant, an assessment was carried out for 2011, based on the "guidelines on greenhouse gas emission inventories" drawn up by the national coordination centre (Version 2 of April 2012).

The first part of the 27 November 2012 report details the consolidation of greenhouse gas emissions for all the Aubert & Duval sites. The second part summarises the main initiatives that Aubert & Duval intends to take to reduce these emissions.

The review reports the following emissions:

Direct emissions =  $85,491 \text{ tCO}_2\text{e}$ Indirect emissions =  $16,504 \text{ tCO}_2\text{e}$ 

Total emissions = 101,995 tCO<sub>2</sub>e

#### 5.4.3.3. Impact of climate change

Two questions on this subject were added to the EraGreen 2013 reporting tool:

- 1. What are the likely consequences for your site and how were they identified?
- 2. What measures have you taken during the year or do you intend to take to adapt to the consequences of climate change?

70% of the sites mentioned the two following themes in their replies to the first question:

- possible consequences of rising sea levels;
- possible consequences of extreme climate events.

The sites have not yet decided on the measures they will take to adapt to these situations. With regard to a possible rise in lea levels, sites located near the coast consider the altitude of their facilities should ensure minimal to negligible impact.

#### 5.4.3.4. Group Carbon Footprint

ERAMET's initial Carbon Footprint, was carried out in 2007-2008 in joint consultation with Carbone 4, a company in receipt of ADEME approval.

After checking and consolidating the data for 2007 and integrating the SLN carbon footprint carried out in 2008, the Group's carbon footprint for 2007 was approximately:

#### 6.35 million tonnes CO2 equivalent

Breakdown by item:

- 87% for "energy" which includes energy consumption (electricity, gas, fuel oil, coal) and the consumption of reducing agents needed in processes (coke, coal, anthracite, etc.);
- 8% for freight;
- **3% for "inputs":** CO<sub>2</sub> emitting particularly during the production of scrap used in arc furnaces in steelworks.

According to the "Greenhouse Gas Protocol" classification, the carbon footprint showed the Group's  $CO_2$  emissions, broken down into three "scopes":

- Direct emissions from processes (scope 1) = 74% of the total;
- Indirect emissions from the consumption of electricity (scope 2)
   = 13% of the total;
- Other emissions (freight transportation, carbon content of inputs, etc.) (scope 3) = 13% of the total.

#### Changes in the Group's Carbon Footprint

To follow changes in the carbon footprint over time, only the emissions of scopes 1 and 2 were taken into account (representing 87% of the total) because this data is directly related to the activity of the sites and is easy to provide.

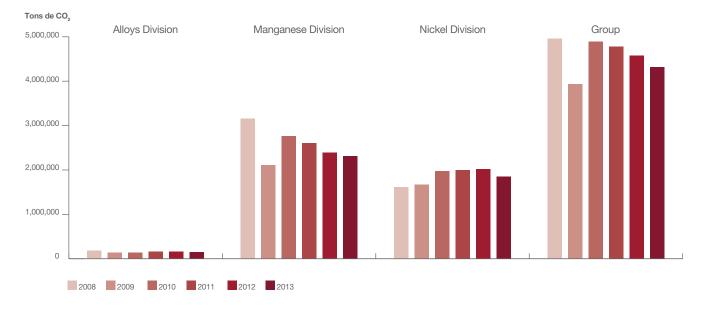
The data used to calculate scopes is entered into the Group's system for consolidating environmental data (EraGreen).

The following table shows changes in the Group's emissions between 2008 and 2013.

The marked reduction in emissions (-13% between 2008 and 2013) can be partly attributed to a reduction in the Divisions' activities and partly to energy savings.

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#### Change in CO<sub>2</sub> emissions – Scopes 1 and 2

#### **5.4.4.** The Mining Environment \_

This chapter is devoted to the environmental protection initiatives implemented at the Group's productive mining sites (excluding measures related to biodiversity which will be presented in chapter 5.4.5). Measures related to mining projects under development are described in chapter 5.6 "Major Projects".

All the Group's productive mining operations are opencast mines, which are all located in areas of high rainfall and from which stable silicate and oxide ores are extracted.

The mine operated by Comilog on the Bangombé plateau in Gabon is one of the world's richest manganese ore deposits and

is covered by a 4-5 meter-thick layer of overburden. Due to the characteristics of the deposit and the ore, this mine produces relatively little waste rock.

SLN operates 13 mines in New Caledonia; five of them are operated directly by SLN and eight others are contracted out to local operators. The mines are located on rugged terrain at altitudes of between 250 and 1,000 meters. With this type of deposit, approximately 7 to 9 tonnes of overburden has to be removed in order to produce 1 tonne of useable ore. Therefore, it is essential that this waste rock is stored in such a way as to ensure the security and protection of the environment.

#### Summary table of environmental vulnerability at ERAMET mining sites

	SLN mines in New Caledonia	Moanda mine Comilog	Comments
Strain on water resources (quantity)	Low	Low	High rainfall at all sites.
Erosion	Very vulnerable	Low vulnerability	Soil and rocks in New Caledonia are more vulnerable to erosion; receiving bodies are also more vulnerable. The Moanda deposit is located on a plateau which reduces its vulnerability.
Acid mine drainage	No acid mine drainage	No acid mine drainage	Stable silicate and oxide ores unlikely to cause acid drainage.
Production of waste rock	Very vulnerable	Low vulnerability	Most of the waste rock from the Moanda mine is put back into the pits immediately. A lot more waste rock is produced in New Caledonia, but the operating methods at SLN are changing and waste rock is used to fill up the pits more and more.
Production of residues	Low vulnerability	Low vulnerability	Low vulnerability because the residue produced by ore concentration facilities (washing plants) is chemically stable and does not constitute environmentally hazardous waste.
Biodiversity	Very vulnerable	Average vulnerability	The biodiversity at New Caledonia's sites is considered remarkable mainly because of its highly endemic nature.

### 5.4.4.1. Mining environment management structures

Teams dedicated to ensuring that the environment is factored into mining operations are present on the sites and in the subsidiaries concerned both in Gabon and New Caledonia.

Since 2010, within the framework of its Sustainable Development Policy, ERAMET has strived to reinforce the construction, formalisation and international coordination of environmental management tools for mining activities. In concrete terms, the following initiatives were taken to achieve this:

- all the mining subsidiaries concerned drew up a Mining Environment action plan combined with an associated risk assessment; every two months, the progress of these action plans is reviewed with the Group's Environment Department;
- a community of internal practices made up of mining environment experts was set up and meets regularly. Its role is to draw up guidelines on the best practices to apply throughout the Group and to encourage sites to exchange expertise;
- further indicators specific to mining activities were included in the Group's environmental reporting tool (EraGreen) in 2011;
- Environment Management Systems compatible with the requirements of standard ISO 14001 were implemented by the mining subsidiaries. The four main SLN mining centres are aiming to obtain certification by the end of 2015. Meanwhile, in 2012, Comilog obtained its certification which covers the Moanda mining operations, storage activities, transportation of the ore and sinter to Owendo and equipment maintenance;

- in recent years, all SLN mining sites have updated their environmental impact studies within the framework of the reform to the New Caledonian Mining Code. This considerable task enables each site to have comprehensive studies on the environment and ecosystems in which they operate together with efficient environment management plans suited to their own specific characteristics;
- at the same time, in 2012-2013, a lot of work was spent developing environmental studies for the Comilog mine in Gabon to gain a better understanding of the site's environmental characteristics with a view to developing a pertinent strategy for the rehabilitation of the site. These studies concern the hydrology, hydrogeology and biodiversity of the site;
- lastly, in consultation with the authorities, Comilog has decided to go beyond the mandatory regulations imposed upon it and to carry out a comprehensive environmental impact study to enable it to better prepare its project to extend Moanda's mining operations to the edge of the present deposit (the downward sloping part of the deposit within the Comilog concession).

In the coming years, these efforts will be pursued and the engineers and senior managers involved in mining activities will be made more aware of the techniques and methods used to ensure environmental protection. Therefore, in 2014, all the senior managers at the Comilog mine in Moanda will receive training in these subjects. 5.4. ENVIRONMENTAL DATA

#### 5.4.4.2. Extracting the resource responsibly

Mining operations are one of the Group's core businesses. Mineral resources are extracted in a responsible way, i.e. by minimising impact during the exploration and extraction stages, and by optimising the use of deposits. In New Caledonia, geologists reduce the number of tracks opened, prefer indirect geophysical exploration that does not impact the environment and transport equipment by helicopter during exploration operations. They also use modelling tools to improve their understanding of deposits and better evaluate resources. This data is passed on to miners who optimise the extraction stages by reducing the volume of tailings handled, by mapping areas precisely, by keeping the surface areas of cleared land to a minimum, and by maximising the recycling of the mineral profile. On the sites, these recovery improvements can be seen in the implementation of GPS on diggers and the display of loading plans in the cabins.

Moreover, ERAMET researchers are seeking ways of recycling tailings and ore with an even lower content. This determination was demonstrated recently in Moanda, Gabon, where Comilog incurred a capital expenditure of €12 million. The sand processing workshop can recover the finest fractions of ore by using magnetic separation technology developed within the Group.

Since 2010, SLN has been recycling tailings from the washing unit and also the products stored on the terraced heaps of mining waste. In three years, more than 483,000 tonnes of products have been recycled, making the recycling of secondary raw materials a concrete reality. Finally, SLN has developed techniques to recycle ores that were initially considered as marginal, to lower the cut-off grade and thus greatly extend the life of deposits while reducing the final environmental impact.

#### 5.4.4.3. Water Management

Given the nature of the ores (silicate and oxide ores), the tailings and mining waste are chemically stable. Therefore, ERAMET's mining sites are not subject to the acid mine drainage (AMD) phenomenon which constitutes the main risk in terms of pollution for many mining sites worldwide.

As the sites are located in areas with high rainfall, the water consumption of the Group's mining sites is not a sensitive issue.

The main objective of water management on ERAMET's sites is to prevent erosion caused by the stripping of the land, and to prevent the receiving bodies from becoming polluted by suspended solids (SS) carried by runoff waters.

To avoid this, some time ago, SLN equipped its sites with sedimentation basins which trap the suspended solids and prevent them from being deposited in the natural environment. Before the water reaches these structures, many precautions are taken to limit erosion: keeping sites out of water, reducing uncovered areas as much as possible, preserving natural dikes around the edges of stripping sites, organising runoff water to reduce its speed, implementing hydraulic locks, etc. Each of SLN's mining sites has a Water Management Plan which describes these measures which fully comply with the New Caledonia's regulations. Implementing these Water Management Plans as and when operations develop represents an ongoing commitment and considerable capital expenditure. Thus, over the past three years, the capital expenditure devoted to water management at these sites has exceeded €10 million.

The specific know-how developed by SLN on erosion prevention has been compiled into a technical guide (called the "Blue Guide"). It is considered a reference by the profession in New Caledonia and by the Group worldwide.

In Gabon, the subject of erosion is less sensitive because the deposit is located on a plateau and the upper geological stratum offers better drainage. This observation was confirmed in a study carried out in 2012-2013 to characterise the bodies of water and the hydrology of the site. However, the mine operators are aware of the measures they need to take to limit erosion. This subject will become more sensitive when the deposit is extended to the slope in the future: the structures and management measures will therefore be reinforced. A very operational benchmark has been established to adapt the good water management practices of the SLN to the Comilog.

In addition, over the past few years, important progress has been made in the management of aqueous discharge from the ore concentration facility at the Moanda site. In 2010, sedimentation basins were built to prevent discharges from entering the river Moulili. Basins were built and installed to recover overflow water and redirect it to the concentration facility.

#### 5.4.4.4. Managing tailings and mining waste

Given the considerable amount of tailings that SLN handles in its operations, in terms of environmental protection, it is extremely important to store tailings in suitable structures and replant the sites to reduce erosion and minimise the impact on ecosystems and landscapes.

Thanks to its long experience, SLN has developed efficient techniques, one of which involves creating heaps of tailings. The structures are built according to good practices and their long-term stability is ensured, even during times of cyclonic rainfall. These tailings heaps are constantly monitored (internal investigations) and regularly assessed by an outside third party. As it did for water management techniques, the SLN has published a technical guide describing the construction methods for these heaps and the sizing rules. This guide was updated in 2012 and the project was awarded a trophy at the Group's HSE challenge. This guide applies to all SLN's direct and subcontracted mining operations. Moreover, to keep clearing to a minimum and aid in the rehabilitation of sites, for several years the SLN has been creating spoil tips within the former mines. Firstly, this improves stability and secondly it aids and facilitates the rehabilitation of sites.

In Gabon, the issue is not as sensitive because much smaller volumes of tailings are handled and the mining technique involves opening and closing pits one after the other, therefore most of the tailings are put back into the pits straight after the extraction process.

The mining residue produced by ore concentration facilities at the mines is chemically stable and, according to the regulations, does not constitute hazardous waste. In Gabon, this residue is stored in seven basins with a capacity of one million cubic meters. These structures are subject to continuous environmental surveillance and monitoring. A study is currently underway on the rehabilitation of one these basins.

#### **5.4.4.5.** Rehabilitation of mining sites

#### In New Caledonia

Out of SLN's five main mining centres, three have a formalised master plan on rehabilitation. The two other plans will be finalised by the end of 2015. These documents aim to plan rehabilitation operations but of course the sites are now gradually restored as work progresses at all the mining centres.

Therefore, major rehabilitation initiatives continued in 2013. A considerable amount of restoration work to complete the rehabilitation was conducted:

- in Poum, the restoration of the former Fabrice tip (a tip that had slid down before SLN recovered the Poum Massif) allowed more than 130,000 m<sup>3</sup> of fallen material to be evacuated and 50,000 m<sup>3</sup> of hillside to be remodelled. The seeding of slopes that is now being carried out will bring this vast project to its end;
- on the Thio Plateau the SLN teams continued to remodel a very old tailings tip. Most of the very large earthmoving works (about 200,000 m<sup>3</sup> of earth moved) and landscape remodelling was completed. It involves impressive water canalisation and management systems and the remodelling of the tip;
- in Népoui, closure works on the Rachel tailings tip ended in 2013. Many other works were continued in Poro and Kouaoua.

Furthermore, a total surface area of 80 ha was replanted in the last two years.

At the same time, SLN makes significant contributions to the following:

- committees on the rehabilitation of mining sites operated before 1975 (*Comités de réhabilitation des sites miniers* – CRSM) financed pursuant to *délibération* (motion) 104. Since its formation in 1990, SLN has contributed up to €24 million;
- the financing of the Fond Nickel fund provided under the development scheme. It was set up in March 2010 and is intended for the rehabilitation of mines operating mainly before 1975 which have no more re-usable mining resources. It has an annual budget of approximately €4 million. Half its funding is provided by the annual land royalties on mining concessions.

#### In Gabon

It is much easier to replant the landscape in Gabon than in the New Caledonia because plants recolonize the area naturally. When restoring sites, the landscaping aspects are of key importance; mounds of tailings, a few meters in height and created during operations, have to be remodelled.

- Since 2010, the mining procedure has been reviewed so as to integrate land reshaping as and when operations progress. Remodelling work on areas that were disturbed prior to this date was also undertaken and are the subject of an annual objective in the mine's environmental management system: to date, more than 150 ha have been remodelled. In addition to these concrete actions, prior studies to define a full rehabilitation strategy for the Bangombé mining plateau continued in 2013 (hydrology, water bodies and biodiversity studies).
- Moreover, since 2010, operations to restore the river Moulili by extracting sediment deposited in the riverbed downstream from the mine washery continued. In 2013, 1.3 million tonnes were extracted and since the start of operations, more than 4.6 million tonnes of manganese sediment have been excavated. These operations are carried out in strict compliance with the Environmental and Social Management Plan drawn up following the impact study.

#### 5.4.5. Preserving Biodiversity \_\_\_\_\_

Within the framework of its Sustainable Development policy (2010) and in accordance with its Environment Charter (2002), ERAMET gives structure to the initiatives it takes in favour of biodiversity and takes part in studies on the mitigation sequence, i.e. avoiding, minimising and compensating the impacts on biodiversity.

#### 5.4.5.1. Biodiversity issues

Since the Rio Convention on biological diversity was drafted in 1992, the erosion of biodiversity has been considered a major international problem. The industry has been under greater pressure from authorities, financial institutions and the general public over the past 20 years. The mining and metallurgical activities of ERAMET put a strain on species, habitats and ecosystem services. Its major development projects follow the global tendency of mining industries to push prospection activities into more and more remote areas that had, up until then, been preserved. In this case, the threat to biodiversity is a reality that needs to be well assessed and well managed.

Over the past few years, the Group has taken advantage of its experience in mining and major projects, together with regulatory changes in the industrial sector, to encourage all its sites to progress in their approach to the preservation of biodiversity and to take part in local, national and international *ad hoc* discussions.

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ERAMET strives to develop high-quality studies with recognised specialists. The characterization study is considered a crucial stage which influences the relevance of the impact assessment and the definition of avoidance, mitigation and even compensation measures which will be implemented. The goal is to constantly reduce the impact of the Group's activities on biodiversity, in a manner that is proportionate to the risks, throughout the life of the sites.

In 2011, an internal task force dedicated to biodiversity was created. It meets three times a year and brings together ERAMET's main players in this field. It aims to encourage teams to exchange ideas, whether they are on site, in the Divisions or at Group level, to create networks with partners, to share experiences and to work together to develop shared management tools. In 2013, the task force worked on a Group Biodiversity Policy, guidelines on

the sizing of biodiversity aspects in characterization studies and the implementation of biodiversity offsets.

ERAMET attaches great importance to the characterization of biodiversity, to its preservation and to the implementation of this graded approach of avoidance, mitigation and even compensation. Biodiversity is integrated into the development of new industrial and mining projects, ahead of operations, right from the feasibility stage, and is factored into the operations at mining sites in operation or in the process of being rehabilitated.

This approach to biodiversity is adopted at all sites and the actions are proportionate to the risks. ERAMET's activities can effect ordinary biodiversities just as it can effect remarkable biodiversities depending on the place of operations.

On our sites	New Caledonia	Gabon	Indonesia	Elsewhere
Number of species (flora and flora) classified as CR <sup>(1)</sup> in the IUCN red list <sup>(2)</sup>	10	2 (*)	O (")	0
Number of species (flora and flora) classified as EN $^{\scriptscriptstyle (3)}$ in the IUCN red list	21	4 (*)	14 (*)	0

(\*) These values depend on the results of the characterization studies being carried at Mabournine, on sites that were little studied before the development of said projects and therefore on which little has been written. They are likely to change.

The Group has no mining or metallurgical sites in protected areas. However, the railway tracks of the Gabonese train company Setrag cross over 300 ha of the Lopé National Park which is a UNESCO World Heritage site <sup>(4)</sup>. The Park was created in 2007, almost 20 years after the *Transgabonais* railway line started operating.

Number of sites located within 10 km of a protected area	21
Average distance of these sites from protected areas	2 km
Types of protected areas	Nature Reserve, National Parks, ZNIEFF <sup>(5)</sup> , ZICO <sup>(6)</sup> , Natura 2000 <sup>(7)</sup> , RAMSAR <sup>(8)</sup> , UNESCO World Heritage

#### On the world stage and in relation to the French authorities

At an international level, and via the Weda Bay Nickel (WBN) project, in October 2011 ERAMET joined the Business and Biodiversity Offsets Programme (BBOP) which aims to share experiences and expertise in the field of biodiversity offsets. The BBOP

is a group with many partnerships made up of over 80 companies, financial institutions, governments and non-governmental organisations (NGO). It was established by Forest Trends and the Wildlife Conservation Society (WCS). The BBOP aims to test and develop best practices for the creation and implementation of biodiversity offset programmes, via pilot projects carried out worldwide. For this purpose, in 2010, the BBOP adopted ten principles which lay down rules for avoiding, minimising and offsetting impacts on biodiversity. In 2011, these principles served as a basis for criteria and indicators and they now represent a recognised international standard on biodiversity offsets. In 2012, ERAMET took part in the translation into French of this standard. The first BBOP offset programme is under study for the Weda Bay Nickel project in Indonesia, the goal of which is achieve no net loss in biodiversity. Results of the initial feasibility studies were presented at the annual BBOP meeting held on 21 May 2013 in Brussels.

At French level, ERAMET took part in the work initiated by the Ministry of the Environment on "Avoidance-Minimisation-Offsets", in line with the BBOP principles. The work resulted in the publication of a dedicated doctrine in September 2012 and 27 methodology sheets setting out the guiding principles in October 2013.

(1) CR: IUCN classification referring to critically endangered species.

(2) IUCN: International Union for Conservation of Nature.

(3) EN: IUCN classification referring to endangered species.

(4) UNESCO: United Nations Educational, Scientific and Cultural Organization.

(5) ZNIEFF: "Zone d'intérêt écologique, faunistique et floristique" - natural area of ecological, faunistic and floristic interest.

(6) ZICO: "Zone importante pour la conservation des oiseaux" - Important Bird Area (IBA).

(7) Natura 2000 is a European network of Special Protection Areas and Special Areas of Conservation designated by Member States.

(8) The RAMSAR list designates wetlands of international importance.

### 5.4.5.2. In New Caledonia

The Société Le Nickel (SLN) mines nickel deposits at different sites in New Caledonia, in the heart of a region known for its great biodiversity and the very endemic nature of its plants and animal species Since 1975, about 3,200 ha of land has been effected by mining activities.

The SLN has been developing reliable and environmentally-friendly prospection, exploration, mining and rehabilitation methods for more than 30 years. They are the subject of internal guidelines that were taken up in the guide to best New Caledonian mining practices. These best practices are shared with other mining companies and were published at the beginning of 2013.

Replanting work started at the SLN in 1993, and hydraulic seeding and planting has been carried out on approximately 220 ha of land.

The toxicity of the soil, which is rich in metals and poor organic elements, together with extreme weather conditions, give results that are not always very apparent in the short term.

In 2010, the SLN put a great effort into re-organising this "replanting" activity in order to considerably increase the surface areas treated while at the same time continuing to improve the quality of the features created. To achieve this, the SLN reinforced its partnership with the local company SIRAS Pacifique, which has been SLN's service provider since 1993. Together they developed a planting technique involving hydraulic seeding. In 2013, 34 ha of land was rehabilitated, including 20 ha which was replanted. The following table indicates the surface areas affected and rehabilitated in the last three years of operations. These surface areas include the five mines operated by the SLN directly, i.e. the mines of Kouaoua, Népoui Kopéto, Poum, Thio and Tiébaghi.

Surface area in ha	2011	2012	2013
Surface area affected during the year	36	41	60
Surface area rehabilitated during the year	0	50	13
Surface area replanted during the year	18	29	21

New Caledonia's new Mining Code, dating from 2009, requires mining permits to be regularised. This involves putting together a file containing eight documents, including an environmental impact study. This regularisation work was an opportunity to carry out a vast inventory of existing data on biodiversity and to complete it with new natural environment characterisation studies. Nineteen research departments worked on the study and more than one hundred reports were commissioned. Numerous specialists and experts from the scientific community worked on fields as varied as botany, herpetology (the study of reptiles), ornithology (the study of birds), myrmecology (the study of ants), the quality of fresh water (biotic indices) and even the marine environment (corals and fishes). The compiled and summarised data handed over to the supervisory authority between 2011 and 2012 led to concrete recommendations for the operator, thus enabling it to avoid or minimise identified impacts. The development and deployment of the measures stipulated in the operating permits should eventually lead to the drafting and implementation of biodiversity management plans for all 12 operating sites.

In an effort to improve scientific knowledge, enhance our understanding and protection of biodiversity, the SLN set up six scientific partnerships. The agreements cover several areas of environmental engineering: optimising the use of topsoil (UNC <sup>(1)</sup>-IAC <sup>(2)</sup> agreement), studying the genetic diversity and dynamics of the *Araucaria rulei* population, a conifer in danger of extinction (IAC/ Southern Province/Northern Province agreement), assessing the impact of light pollution and wild cats on a species of petrel, a seabird that nests on mining massifs (IRD agreement <sup>(3)</sup>), a project to plant hyperaccumulator species capable of absorbing metal on tailing heaps and to monitor them (CNRS <sup>(4)</sup>-IAC agreement), an agreement to study the interactions between micro-organisms in the soil and plants (IAC) to improve the growth and follow-up of plantations and lastly an agreement to set up a programme to manage rare and threatened species of flora in the mining massifs SLN (IAC).

For several years, the SLN has been conducting a policy that resolutely promotes the protection of biodiversity at its mining sites. Since 1 January 2013, SLN's Management has been striving to set up a Biodiversity Strategy based on international standards on biodiversity conservation and also offsets. Through this, the SLN hopes to establish an overall biodiversity management plan that encompasses the environmental issues facing all its mining centres in New Caledonia's Grande Terre.

This Biodiversity Strategy will summarise the environmental issues. It will be based on consultations with stakeholders, the creation of partnerships, the application of the mitigation sequence and the development of compensation programmes at pilot sites close to SLN mines. It will be an integral part of the Company's overall strategy.

(1) UNC: University of New Caledonia.

(2) IAC: New Caledonian Institute of Agronomy.

(4) CNRS: National Centre for Scientific Research.

<sup>(3)</sup> IRD: Development Research Institute.

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The SLN started to develop this strategy in 2012 with the support of the Missouri Botanical Garden – MBG, The Biodiversity Consultancy – TBC and the Business and Biodiversity Offset Program – BBOP, and by setting up and organising coordination workshops with institutions, NGOs and scientists. An initial analysis of possible offsets in New Caledonia was carried out by TBC experts. On 2 January 2013, the SLN's commitment to Biodiversity was formalised by the adoption of a policy. In 2013, the SLN embarked upon the second stage of the process which should last two to three years and which should assess whether it is possible to achieve no net loss in biodiversity by following anoffset approach in a biodiversity hotspot. For this purpose, two pilot sites have been chosen and are being assessed: Tiébaghi and *Camp des Sapins* in Thio.

#### 5.4.5.3. In Gabon

The Compagnie Minière de l'Ogooué (Comilog) has been mining manganese ore on the Bangombé plateau (altitude ~600 m), in

Moanda, Gabon, for fifty years. The surface area concerned is 1,500 ha.

Although there are still considerable reserves of manganese ore that will allow mining to continue for more than ten or even twenty years, part of the plateau has already been rehabilitated. This has involved a great deal of reshaping. Opencast mining techniques are employed comprising three stages: stripping the topsoil, removing the layer of overburden and then the actual extraction. The mined areas have formed bumps and hollows of a few metres high. Since 2010, more than 150 ha of land have been rehabilitated and the mining procedure has been reviewed so as to integrate the reshaping stage and the recycling of topsoil as and when work progresses.

Nature immediately reasserted its rights and numerous plants, herbs, flowers and shrubs have appeared. A study of the flora and fauna is continuing on the free zones of the plateau which aims to compare this natural recolonisation with a reference state specific to this type of terrain.

Surface area in ha	2011	2012	2013
Surface area affected during the year	67	46	64
Surface area rehabilitated and replanted during the year	40	28	31

Another large-scale programme has been undertaken by Comilog. This is the rehabilitation of the river Moulili whose flow has been disrupted by the accumulation of manganese sediments. This was caused by the washing plant operations and the sediments discharged into the river bed. The rehabilitation work started in 2010 and should be spread over a period of about fifteen years. This work involves the gradual landscaping of the banks and slopes. At the end of the work, 170 hectares of land will have been rehabilitated and reintegrated into valley's landscape with the reconstruction of a stable ecosystem. Comilog teams are working on the first replanting projects with the University of Science and Technology of Masuku (Franceville, Gabon): soil study, plant propagation and re-introduction.

Alongside its mining activities, Comilog finances the *Parc de la Lékédi.* This is situated 5 km from Bakoumba, in the south-east of the Republic of Gabon.

This park covers 14,000 hectares of savannah, gallery forests and lakes; it is made up of three reserves and is home to representative examples of local wildlife like buffalos, mandrills, chimpanzees, gorillas, red river hogs, panthers, and numerous antelopes.

The park has been constantly maintained and regularly developed with a view to preserving protected species, animal observation and rearing. With the aim of protecting the great apes in Gabon, the *Parc de la Lékédi* works with international organisations such as the Aspinall Foundation for gorillas.

In 2013, the Park provided its expertise when a group of 10 gorillas from England were reintroduced into the Batéké Plateau National Park.

A programme to reintroduce species that are threatened or extirpated in Gabon was also launched in collaboration with the

National Parks Agency and the International Union for Conservation of Nature. The first reintroductions should take place sometime in 2014.

The Park also joined forces with the NGO called Conservation Justice and the Regional Department for Water and Forests of Upper Ogooué to conduct joint anti-poaching actions.

As part of the Mandrillus Project, conducted in partnership with the CNRS since 2011, a team of researchers, field assistants and students follow a population of about 120 primates that move around the Park freely. The aim of the project is to answer fundamental questions on evolutionary ecology, anthropology, feeding ecology, animal communication, etc. and also more specific questions on conservation and epidemiology. A testing laboratory set up in Bakoumba routinely carries out parasitic, endocrinologic and genetic analyses. When animals are captured, unique samples can be taken: blood, odours, colours, swabs, morphology, urine, etc. and animals can be fitted with RFID collars, proximity detectors. Every five minutes, the advanced technology of these collars provides images of the spatial associations of various individuals in the Group, thus mapping the social networks. The data is then downloaded onto a tablet directly. Therefore, as the social networks change over time and space, it is possible to assess the propagation of pathogens between individuals very precisely, to determine the strength of the bonds between them (bonds that may have important consequences on the survival of individuals) and to map movements.

At the end of the year, cercopithecus from poaching were reintroduced into the park in collaboration with the Franceville International Centre for Medical Research (CIRMF). A group of sun-tailed monkeys, a species that is native to Gabon, will join them sometime in 2014. At the same time, the park conducts activities to highlight local resources and the remarkable natural heritage of the region. It develops ecotourism (camps, school trips to the country, etc.) and fish farming (the leading producer of tilapias in Gabon), and fosters local craft industries like basketwork and pottery.

In Gabon, at about 250 km from Libreville, to the south of Lambaréné, a study is being carried out on the feasibility of a Greenfield industrial and mining project. The site is located in quite a remote area where forestry activities were carried out in previous decades.

Nevertheless, right from this initial stage of the project particular attention is being paid to the site's great biodiversity which is related to:

- the location of the country: Gabon is part of the Congo Basin, the world's second largest area of tropical rainforest after the Amazon Basin, and it is home to numerous endemic and emblematic species including the forest elephant and gorilla;
- the fact that it is close to wetlands of international importance the Bas-Ogooué RAMSAR site.

The project, still at the exploration stage, aims to optimise an ore rich in niobium, rare earths, tantalum and uranium. At the same time as the geological and ore beneficiation studies, the first initial characterization studies were carried out.

The first detailed inventories concerning the characterization and evaluation of fauna and flora were carried out between 2012 and 2013 with the assistance of recognised Gabonese and international experts. The inventories were based on field missions carried out during the dry and wet seasons and the selective placing of camera traps. They were completed with an analysis of the biodiversity of ecosystems and landscapes and an initial evaluation of ecosystem services. An initial evaluation of biodiversity issues was carried out based on the criteria set out in IFC's performance standard 6 and the related guidance note.

Gabonese specialists and experts from the National Centre for Scientific and Technological Research (CENAREST), the National Herbarium of Libreville and TEREA (a firm of environmental consultants) have worked in tandem with international scientists:

- from the Missouri Botanical Garden (MBG), an organisation recognised internationally for its skills in botanical research and conservation. Established in 1859, the Missouri Botanical Garden is located in St. Louis, Missouri and has outposts in different places of the world;
- from the Wildlife Conservation Society (WCS), an international NGO dedicated to the conservation of biodiversity which has been present in Gabon since the 1980s. In particular, the WCS helped the Gabonese Government create its 13 national parks in 2002;
- and the firm of environmental consultants Golder & Associates.

During floristic inventories, three samples of each fertile species (which have fruits or flowers) are collected. To increase the chances of identifying the family, genus and taxon, the MBG calls upon the knowledge and skills of three herbariums:

- the National Herbarium of Libreville;
- the Herbarium of the Université libre de Bruxelles;

• the Wageningen Herbarium in Holland which contains the largest collection of Gabonese plants.

One specimen of each sample collected is given to the Herbariums. The Maboumine project is thus contributing to the supply of plants to Gabon's reference herbariums.

The above-mentioned studies were reviewed by a firm specialised in the environment and ecology called Biotope. They are completed gradually to meet requirements; for example they were reinforced as part of the feasibility studies underway concerning the development of an experimental mine and a pilot plant.

#### 5.4.5.4. In Indonesia

ERAMET is studying a project to extract and beneficiate nickel on the island of Halmahera, in the equatorial region in Indonesia. There are two well-known ecological features of this island which is located:

- near the three ecological boundaries of Wallace, Weber and Lydekker which means that the island has a mixture of Asian and Australasian species of fauna and flora;
- in the middle of the Coral Triangle which is world-renowned for its coastal and marine biodiversity and which stretches between the coasts of the Philippines, the Celebes and Papua.

Within this context, ERAMET and its subsidiary Weda Bay Nickel have placed biodiversity at the heart of this Greenfield project by conducting studies to establish and assess the initial state of the environment with recognised Indonesian and international experts and specialists. The aim of these studies is to fully establish the diversity of the ecosystem consisting of the local and regional fauna and flora so as to be able to avoid or limit the potential impact of future mining and industrial activities in the project impact area. In 2012, the studies focussed on assessing the sensitivity of habitats (sensitive, critical, etc.), anticipating the impacts of the future project on biodiversity, choosing measures for avoidance, reduction and rehabilitation, and developing plans to manage biodiversity and initiatives to enhance knowledge, raise stakeholders' awareness, define the monitoring process and principles of bio-safety. In 2013, to complete the initial characterization studies, work was conducted on terrestrial fauna in the areas that were to be cleared first. More than 20 biologists worked on this study, all taxons taken together (flying mammals, micro-mammals, birds, reptiles, amphibians and invertebrates, including molluscs). Other tools and materials were also developed and implemented as part of the pre-construction work. For example, there is an alternative action management grid based on the Avoidance-Minimisation-Offsets method, which ensures that the preservation of biodiversity is integrated into the decision-making process. There is also the whole process of raising the awareness of sub-contractors and other players, and supporting and supervising them in order to manage their impacts on biodiversity, whether terrestrial, aquatic or marine.

WBN reinforced its partnerships and thus:

 signed a Memorandum of Understanding (MoU) with the Indonesian Institute of Science LIPI (*Lembaga Ilmu Pengetahuan Indonesia*) in 2011 for the aquatic aspects of the studies and assessments; 5.4. ENVIRONMENTAL DATA

- entrusted the task of reviewing the concession's botanical inventories and assessing its endemicity to the Missouri Botanical Garden (MBG), in association with the Saint Louis Botanical Gardens in the United States, the Bogor National Herbarium, and the Leiden Herbarium in Holland. Thus, all the data collected is fed into these public databanks;
- set up a programme to patrol and watch the forests in order to prevent any illegal land clearing in the areas of the concession concerned.

At the same time, rehabilitation programmes continued with:

- two nurseries on the plain and foothills, to ensure the proper reproduction and growth of local species capable of adapting to disturbed soil;
- the installation of a shade house where epiphytes are grown (plants which use other plants for support and to grow upon). This method is mainly used to identify samples at their flowering stage, and is particularly effective when carrying out in-depth inventories;
- experimental testing of potted plants which involves comparing plant growth based on soil quality (combinations of topsoil, limonites and saprolites) and the addition or non-addition of compost;
- monitoring the 15-hectare area of foothills rehabilitated and replanted in 2008, following the completion of mining tests (pilot mine, drainage system and debris basins). This involved the planting of 7,000 plants of 19 local species. In 2013, Indonesia's environmental authorities carried out an on-site assessment and confirmed the effectiveness of the programme over the past five years.

Moreover, since 2009, WBN has set up four observatories close to the future mines and industrial facilities. These are plots of land where the growth of plants is monitored during the whole project, in order to visualise the impact of the mining operations on the surrounding environment. The other advantages of these plots is that firstly they offer sources of seedlings and a seed bank of local species for future rehabilitation activities, and secondly their role as wildlife sanctuaries can be assessed.

In line with the performance standards set out by the International Finance Corporation (IFC), especially number six dedicated to biodiversity, the project undertook to have a positive impact on biodiversity. To attain this objective, the project devises biodiversity offset programmes to compensate for any significant residual impact. Therefore, WBN developed a preliminary feasibility study as part of its biodiversity impact assessment based on the BBOP standard and it presented this methodology at BBOP's last annual meeting in Brussels in May 2013.

### 5.4.5.5. In France

ERAMET is just as committed to the protection of biodiversity in mainland France. The mitigation sequence is also applied to the Group's industrial projects. The notion of avoidance is of critical importance in the selection of a site for future activities. In 2012, ERAMET decided to exclude a geographical site because of its

rich biodiversity. The site was relatively anthropised. However, the inventories carried out as part of an environmental impact study showed the presence of two seagull colonies, the two species of which are protected in France. It would have been difficult to minimise or offset the impact due to the limited number of nesting sites in the region and the low tolerance of the two species. Therefore, ERAMET gave precedence to another, less sensitive, site nearby.

In Saint-Georges-de-Mons, in Auvergne, a project to recycle titanium used in aerospace is being studied. This project is perfectly in line with a sustainable development policy.

The project stretches over an enclosed surface area of approximately 6 hectares, on agricultural and wooded land, near the existing metallurgical sites of the subsidiary Aubert & Duval. It is located outside all protected or inventoried areas. However, there are several protected sites in the vicinity:

- Natura 2000 areas:
- special areas of conservation (Habitats Directives) FR8301034, *Gorges de la Sioule,*
- special protection area (Birds Directives) FR8312003, *Gorges de la Sioule,*
- site of community importance (Habitats Directives) FR8302021, *Gîtes de la Sioule;*
- an Important Bird Area (IBA).

In 2013, an ecological assessment (fauna/flora) of the project siting and an evaluation of its impact on biodiversity was carried out by URS and Biotope, two consultancy firms specialised in the environment. Despite the fact that the project does not cross the boundaries of the Natura 2000 sites, an evaluation of its impact was also carried out, because of any indirect effects it may have on the habitats and the species of community importance that justified the designation of the sites. The results of the different prospection activities and the areas identified as sensitive were factored into the project right from its design stage and particularly into the optimisation of the layout.

The layout was chosen in such a way as to avoid destroying the important woodland habitats that attract flocks of birds, most of which are protected. In an effort to follow the avoidance strategy, the site of the buildings was moved to conserve the "wood undergoing change" which is listed as highly sensitive.

Overall, the ecological risks at the location of the site appeared to be low.

As regards indirect impact, measures to reduce the impact on the water, soil and air and to lower noise levels have been defined and should also contribute to the preservation of the site's natural environment, whether directly or indirectly.

Moreover, as part of its landscaping projects, sturdy and local tree species will be planted. They will help the site become integrated into its natural environment.

The project's residual impact on the fauna, flora, natural environments and ecological balance has been assessed as low.

# 5.5. INFORMATION ON SOCIETAL COMMITMENTS IN FAVOUR OF SUSTAINABLE DEVELOPMENT

### 5.5.1. Territorial, economic and social impact of the Company's activity \_\_\_\_

# 5.5.1.1. Employment and regional development

The ERAMET group is present in over twenty countries worldwide and actively participates in the economic and social development of the regions in which it operates. This is seen in the emergence of companies linked to the sites' activities, the construction of local infrastructures that are important for regional development, and the sites' involvement in major national or regional sustainable development initiatives.

#### The emergence of companies

Group sites encourage the emergence of local companies because the nature and development of the sites' activities often lead to a great deal of subcontracting which gives rise to specific requirements. This has been seen at many of the Group's sites. In Italy for example (ADES Acciai) where a local transporter has set up business (MB Trasporti whose work with ADES accounts for 9% of its sales) and also in France (AD Interforge) where a small subcontractor involved in boiler making has been set up. Another example is Erasteel Kloster's Söderfors site (Sweden) near which an SME was set up by a former company employee, with the site's support. Even when they do not contribute directly to the development of companies, some sites (Bear Metallurgical Company, Pennsylvania, USA) have set up working groups with other companies and bodies to discuss ways of developing SMEs and protecting local jobs.

On a larger scale, the Société Le Nickel (SLN) in New Caledonia, subcontracts out the work that its core business does not cover such as transporting ores, sprinkling tracks, re-planting land and managing water in the mines. This contributes to local development and gets local communities involved in mining massifs through economic activities. Moreover, thanks to the Association for the Right to Economic Initiative (ADIE), which receives an allocation from the SLN, small companies are set up to provide meals, transport and tourist services for example.

#### **Construction of local infrastructures**

The Group's major subsidiaries directly contribute to the construction of local infrastructures. In Gabon, the Group's four Gabonese subsidiaries each took part in the development of major infrastructures. In the town of Moanda, Comilog carried out work on schools (building lavatories, erecting fences to protect the children) and roads, Sodepal repaired the road between the town of Bakoumba and the *Parc de la Lékédi*, Somivab carried out maintenance work on a school and an infirmary at the Biliba site and Setrag set up the primary school at Booué and several other dispensaries located in remote areas and which are open to employees and residents.

In New Caledonia, within the framework of a tripartite agreement between the SLN, the Northern Province and the town of Poya, the SLN contributed to the construction of a bridge in the town of Poya to replace the dilapidated foundations which prevented the population from moving about safely particularly during the rainy season. The new Gohapin bridge is just one part of the tripartite agreement project aimed at improving the living conditions of local populations via the creation of new infrastructures. Indeed, the €293,000 that the SLN contributed to this project is just part of the €1.68 million that the SLN has undertaken to spend on the town of Poya within the framework of this agreement between 2011 and 2014.

#### Other initiatives related to sustainable development

Aware of the impact they can have on their environment and communities, there are more and more sites undertaking regional and national initiatives related to sustainable development. In China (GECC Chongzuo), France (ERAMET Sandouville), Belgium (Erachem Comilog Tertre) and Norway (ERAMET Norway Kvinesdal), site representatives contribute to local and national studies on themes like energy savings, clean production, climate plans and water conservation, via their participation in working groups on these themes. Some sites are also involved in national and European research programmes to work on various themes like energy efficiency in the industry for example. The electric rolling mill project at Erasteel Champagnole (Jura, France) is often cited as an example in publications on this subject by the French Environment and Energy Management Agency (ADEME). Another concrete example can be found in Belgium where in 2003, within the framework of the Kyoto Protocol for greenhouse gas reductions, Erachem Comilog Tertre signed a Belgian chemistry sector agreement with the regional authorities, with the goal of achieving a 17% improvement in its energy efficiency by 2009, as compared with the benchmark data for 1999. This agreement was reviewed in 2008 and a new goal was set to achieve a 20% improvement in the sector's energy efficiency by 2012. On a like-for-like basis, this new energy efficiency goal was comfortably achieved by Erachem Comilog Tertre. Indeed, the site improved its energy efficiency index by over 40% in 2013 as it did in 2012.

# 5.5.1.2. Neighbouring and local populations

Aware of its responsibility towards society and more specifically towards neighbouring and local populations, the Group is committed to keeping its stakeholders informed of its activities by taking part in local information committees and by raising the general public's awareness of sustainable development. Another line of development concerns industrial ecology for the benefit of local populations.

#### **Industrial Ecology**

Industrial ecology is an environmental and social management procedure that, among other things, enables a stakeholder to benefit from a material flow that is not used by the Company. Aware of the need to control their impact, sites introduce this type of initiative and reduce their consumption or else enable third parties to benefit from resources.

ERAMET Norway in Sauda uses its excess steam production to heat the ground under the town's streets and stadium to prevent the ground from freezing in winter. Based on the same model, another Norwegian site, ERAMET Norway in Kvinesdal, uses its excess hot water to heat its premises, the neighbouring fish farm which raises turbot and five boutiques.

Several of the Group's sites have undertaken proactive and responsible initiatives to significantly reduce their consumption of industrial water over the past years. AD Pamiers (Ariège, France) and Eurotungstène (Isère, France) have reduced their consumption of industrial water by 80% and 50% respectively and hope to reduce it even further.

This type of initiative is becoming more and more common and even in R&D these practices are developing: the Group's research centre, ERAMET Research (Trappes, France), is working on ways to neutralise the residue from its processes and minimise its emissions and consumption (energy, water, consumables, etc.).

#### **Local Information Bodies**

Many of the Group's sites are involved in local information and consultation bodies (local information commissions, Chambers of Commerce and Industry, working groups, etc.). ERAMET is involved in national, European and international federations representing the sector's interests. As a result of urbanisation, sites are often located near towns or in towns [the Doniambo plant in Nouméa (New Caledonia), Eurotungstène in Grenoble (Isère, France), Aubert & Duval in Pamiers (Ariège, France) and Erasteel in Commentry (Allier, France)], they are more than ever integrated into local life. They take part in Local Information and Consultation Commissions to inform populations about their activities, to give them news on the site, particularly regarding industrial risks, and to ensure transparency. For example, Eurotungstène (Isère, France) helped write an information and prevention guide for the general public produced by the Prefecture of Isère on the site's activities, the regulations governing it, the risks and their effects and the preventive measures implemented.

When projects are being set up, stakeholders are mapped and consultations are regularly organised to keep populations informed and take account of their opinions. For example, in 2013, the Weda Bay Nickel (WBN) project in Indonesia updated its map of local stakeholders covering 21 villages, four sub-districts, two districts and one province and at national level with the support of an outside consultant. A complaints management system has also been set up and is available to the communities of 21 villages located around the project. It allows any member of these communities to submit a complaint on any subject.

The Lithium project (Argentina) has appointed one of its team members as a community representative in charge of dealing with stakeholder relations in order to ensure ongoing ties with local populations, maintain good relations and remain attentive. Another example is to be found at Somivab (Gabon) where one of the site's employees has been appointed a Social Mediator in charge of mediating between the site's management and the local populations.

Within the Grande Côte (GCO) project in Senegal, representatives take part in a local consultation framework that brings together local populations, district authorities and rural Councils. The project also takes part, as a simple observer, in a Local Employment Pre-selection Committee which brings together the Authorities, village leader representatives, young people, women, corporate groups and rural councils. This Committee selects people who could take up jobs at the GCO.

#### Raising populations' awareness of sustainable development

As regards sustainable development, the Group's sites go further than just informing the public; they help train the public and raise its awareness. In Nouméa, New Caledonia, a three-day exhibition called *"SLN Durable pour tous"* (SLN – Sustainability for all) was presented to the public in September 2013 as part of the Southern Province Heritage Month. The exhibition attracted 1,500 people who also visited the Doniambo plant. Designed as an itinerant exhibition, it was then taken to the mining sites at Tiébaghi, Népoui, Koné and Thio where more than 800 people were able to visit it. Moreover, the Heads of Mining Centres or their assistants have raised primary and secondary school pupils' awareness of sustainable development in mining. Every year, the Chinese site, GECC Chongzuo, contributes to the environmental protection awareness campaign launched annually by the local office for environmental protection. In Mexico, Erachem Comilog Mexico takes part in the local and national recycling campaigns every year to promote the recycling of wood (pallets and material), electrical and electronic waste, incandescent lamps and empty ink cartridges. A member of staff from ERAMET Marietta (Ohio, USA) takes part in the Young Engineers and Scientists Day, enabling over 750 students to discover the many facets of science. Every year, the site of AD in Les Ancizes (Puy-de-Dôme, France) publishes a bimonthly magazine which always includes an article on sustainable development. This magazine has a circulation of 800 and is distributed to institutional bodies and people who live near the site.

Other large-scale initiative: at GCO (Senegal), the Social & Community Department permanently organises consultation sessions for the general public and awareness-raising initiatives aimed at many types of populations, including schools, on different themes related to health, the environment, school education and safety. These sessions are held at different levels: hamlets, districts, villages, rural councils, town halls and schools. An adapted and participative approach is always taken and the GCO gets representatives from local authorities and rural councils to speak.

# **5.5.1.3.** Dialogue with educational institutions and support for education and training

The Group is committed to a policy of active support for the education and training of local communities and young people in particular. This support takes many forms on the sites and within the Group's major projects.

#### Dialogue with educational institutions

Numerous sites in the Group have strong ties with educational institutions. This is reflected in various sponsorships: For example, Erasteel Champagnole (Jura, France) sponsors a group of students on advanced vocational diploma courses at the local high school and this year Comilog (Gabon) sponsored the 39<sup>th</sup> class at ENSET which trains senior Gabonese Technicians. It is also reflected in partnerships with educational institutions. This is the case at AD Firminy (Puy-de-Dôme, France) and at ERAMET Norway Porsgrunn which has a partnership with the International School Telemark.

Some sites set up cooperation programmes with local establishments: in France, AD Les Ancizes (Puy-de-Dôme) is involved in an organisation called "Science Schools". Made up of pupils, teachers, instructors, representatives of Aubert & Duval and local partners, it organises events related to education and in 2013 it organised two major events:

The site set up several workshops with 245 primary school pupils following the work they had done on "air and air pollutants". The site organised a one-day workshop for ten local school teachers on the quality of water.

In New Caledonia, the SLN entered into a special partnership with the Ouaté tribe in Népoui to set up a centre for nature classes for the island's youngsters. Initially coordinated by another mining group, the SLN now subscribes to this project which is a win-win operation for the Province, the town and the island's population.

In Indonesia, the WBN project makes access to training easier. Indeed, since 2008, WBN has financed the higher education of 48 students who go away to study at Indonesia's main universities in Ternate, Manado, Bandung, Makassar and Semarang. Nine of them finished their studies in 2013: four students have now graduated from Manado Polytechnic and five others have graduated from Manado University.

To give yet another example, Erachem Mexico finances grants of up to  $\epsilon$ 7,400 per year.

#### **Hosting students**

Whether located in China (GLC Guilin), France (AD TAF, Ile de France and CMM Landévant, Morbihan), the United Kingdom (Erasteel Stubs Warrington) or the United States (Erachem Comilog New Johnsonville, Tennessee), every year, most Group sites host interns, apprentices and PhD students for a few weeks or a few months. The students come from various horizons: secondary schools, high schools, specialised schools, universities, top graduate schools. They can thus discover how an industrial site functions, as was the case this year when a class of tenth year pupils learnt all about the Lithium Project in Argentina. They are also given the opportunity to put the knowledge they acquired on vocational courses into practice (bac pro, BTS and DUT). For example, Les Forges de Monplaisir (Rhône, France) hosted an intern studying Quality, Health and the Environment and Sodepal (Gabon) hosted an intern studying ethology to work on wildlife at the Parc de la Lékédi. The sites also host a lot of apprentices who are sometimes hired after their apprenticeship; ERAMET Ingénierie (Île-de-France, France) recruited one student as a planning draughtsman in the Design Office after he had obtained his vocational degree.

Therefore, the Group's sites play an important role locally as regards knowledge transfer. GECC Chongzuo in China illustrates this well: it has committed itself to offering an apprenticeship to a student from each of the three local universities every year, i.e. the Guangxi Nationality Normal College, the APEC International Occupational College and the Guangxi Science and Technology College.

Lastly and more generally, the Group's major subsidiaries host a large number of students every year. There were 350 students at the SLN in New Caledonia, more than 430 at Comilog (Gabon), including 350 involved in the construction of an Industrial Complex in Moanda (Gabon), and at least one hundred apprentices and interns at Setrag (Gabon).

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#### **Specific initiatives**

As well as providing students with work placements and apprenticeships, the Group's sites often initiate training courses to meet their personnel requirements in plants and mines.

The American site GCMC Freeport (Texas, USA) is involved in the subject of education upstream: it has set up a two-monthly meeting with representatives of the local university and other industries to jointly determine the contents of the apprenticeship courses to ensure this corresponds to industry requirements.

The WBN project (Indonesia) plays an active role in education and training via its Saloi Foundation which lists education as one of its four pillars. In 2013, this foundation focused on three main areas:

- preparing a roadmap to ensure that the local community benefits from future employment opportunities at the project, by improving the education system;
- supporting primary and secondary education by financing material, fitting out classrooms, contributing to the organisation the Education Day, financing the training of 39 teachers from many different schools and organising the cooperation between several universities;
- supporting universities (those of Ternate in Khairun and Tobelo in Uneira in liaison with the University of Le Havre in France), organising several international workshops that brought together academics, representatives of Indonesia's public authorities (a member of the Government and local representatives) and representatives of Halmahera island's mining projects, and financing material for several Indonesian universities.

# 5.5.2. Relations with stakeholders \_\_\_\_\_

### **5.5.2.1.** Dialogue with stakeholders

All ERAMET sites, whether involved in mining, metallurgy, chemicals, or distribution, interact with a wide variety of stakeholders on a daily basis, i.e. neighbours, schools, customers, public authorities, associations, etc. These interactions can take many forms – presenting sites, celebrating events.

#### Dialogue with neighbouring populations

There are many types of dialogue with local stakeholders, and neighbouring populations. These can be local consultations, specific initiatives to establish dialogue, information meetings, or Open Days and each site interacts with its stakeholders according to its own sensibilities and resources, in line with the Group's sustainable development policy. Public meeting are the best way to pass on information to stakeholders, even when the subject is sometimes strategic. So this was the method used in 2013 by the SLN (New Caledonia) to present its project for the future electric power plant. It held 26 public meetings that attracted more than 400 people (from 2 to 75 people at each meeting). This was also the method used by the SLN in Nouméa when it presented its strategy for the next 40 years to associations and to social, economic and traditional circles.

When the status of the site was changed from "Seveso lowthreshold" to "Seveso high-threshold" in 2012, the French site Eurotungstène (Isère, France) also held a meeting to give its neighbours all the information on this matter and thus establish trusting relations with its stakeholders. In 2013, public meetings were an opportunity to pursue a policy of transparency and distribute a brochure created by the region that presents classified industrial sites like Eurotungstène.

Lastly, in 2013, the site of Valdi Le Palais-sur-Vienne in France invited 200 people to a meeting at its site – neighbouring populations, representatives of the municipality and members of "Barrage", a local association for environmental protection. Those present were able to discuss certain subjects, i.e. the site's main capital expenditure for HSE (health, safety and the environment), the project to capture and treat air emissions during the casting process, changes to road traffic and even to touch upon the site's "environment and safety" policy.

#### Dialogue with the authorities

Even outside the context of everyday regulatory obligations, sites in the Group have very close ties with their supervisory authorities and regularly invite them to visit their installations. This was the case at ERAMET Marietta USA (Ohio), SLN New Caledonia, Erasteel Kloster Sweden, Porsgrunn and Sauda Norway, Commentry (Allier), Issoire (Puy-de-Dôme), Champagnole (Jura) Pamiers (Ariège) in France, and Metallied (Spain) which presented its site to the Basque Government this year. These visits are welcome opportunities to present what has been achieved with capital expenditure, what projects are in the pipeline and the main challenges.

Another example of this can be found at Comilog Gabon which regularly organises site visits for elected representatives. This year, the site received several high-ranking elected representatives: members of the Gabonese Government and diplomats, the Minister of Mines and 18 assistants, a delegation of 25 Senators, the South Korean Ambassador to Gabon and five assistants, and the Economic Advisor of the American Embassy in Gabon.

In November 2013, representatives of the European Commission DG Entreprise visited the Group's research centre (ERAMET Research, Ile de France, France) where they were able to actually see the setting up and development of a process at the R&D stage and some of the participants had never seen this before. 5.5. INFORMATION ON SOCIETAL COMMITMENTS IN FAVOUR OF SUSTAINABLE DEVELOPMENT

In September, GECC Chongzuo (China) received a French delegation of 8 people from Ministries in charge of ecology and industry, from ANSES (French Agency for Food, Environmental and Occupational Health & Safety) and INERIS (French National Institute for Environmental Technology and Hazards) in order to study the management of chemicals in the European Union and China. This visit was an opportunity to present the Group's environment policy and to tell the authorities about the challenges facing industrial sites.

Other sites maintain very regular relations with their authorities. For example, GLC Guilin (China) meets the local government every month to discuss the situation of the site and to talk about any other subjects that either party wishes to tackle. AD Firminy (Loire, France) very often meets its supervisory authorities to discuss the site's social and environmental projects and to exchange opinions on economic prospects. These informal relations reflect the sites' great transparency regarding their operations.

Within the framework of major projects like the Mabournine project in Gabon, project managers have regular talks with the Governor of the Province to discuss everyday business and pass on information about site activities. The Grande Côte project in Senegal adopts the same practices – many useful exchanges are to be had during meetings with the Sub-Prefect of Méouane, the Prefect of the Tivaouane Department and the Regional Governor of Thiès. These discussions concern the life of the GCO project, the progress of work on site, the economic and social impact on all the local populations (men, women, young people, traditional and religious authorities), the needs of the populations and their grievances and also on the life of the State (public services), future projects, etc. This is an important source of information on the populations and allows sites to better understand their needs and anticipate any problems that may arise.

#### Opening the sites to the public

To ensure transparency and provide information, the Group's sites regularly open their doors to all types of stakeholders – employees' families, neighbouring populations, local authorities, schools, customers, etc. These events are organised by the New Caledonian, Argentinean, Norwegian, French, Mexican, American, Senegalese and Swedish sites to enable their stakeholders to discover their activities in the form of guided tours, classroom presentations and actions.

Site visits can be organised in the framework of national events: ERAMET Sandouville (Seine-Maritime, France) organised an Open Day for about thirty people during the French "Industry Week". They can also be organised as local events: Erasteel Kloster Långshyttan (Sweden) regularly organises an open day in June every year.

ERAMET Marietta (Ohio, USA) adopted a new formula this year. Instead of holding an Open Day for stakeholders, the site decided to organise three site visits for thirty or so people on very specific subjects: "Good River financing update, newly proposed electric legislation and state taxes". Moreover, ERAMET Marietta gave French students a one-day visit of the site, in partnership with the French site ERAMET Research (Île-de-France).

In New Caledonia, there are a great number of visits to SLN's Doniambo plant every year. In fact, the public can sign up at the Communications Department for a visit of the plant, organised on the last Thursday of every month. In 2013, thirty more plant visits for groups of 10 or 20 people were organised for the general public and high school pupils.

### Celebrating an event

Industrial and mining sites regularly celebrate events that are important to themselves and their stakeholders and on these occasions they receive visitors. Every year, Comilog (Gabon) celebrates the very popular feast day of *Sainte-Barbe*, the patron saint of minors, and on this occasion organises several days of festivities during which several thousand people, workers, families and the population of Moanda take part in fairs, meals and sporting activities or else attend shows and trade fairs with the foreign communities.

This year, ERAMET Norway Porsgrunn celebrated its 100<sup>th</sup> anniversary by organising two events:

- a day devoted to employees' families, which attracted almost 200 people, featuring children's games, a show, a big meal and a guided tour of the site;
- a more formal meal for employees and their spouses which was attended by the Mayor of Porsgrunn.

In 2013, Erachem Comilog Baltimore (Maryland, USA) celebrated five consecutive years without any Lost Time Injuries. On this occasion, employees and members of their families celebrated this exploit by getting together in a party suite at Baltimore's Orioles Park at Camden Yards Baseball Stadium.

In another field, GCO (Senegal) celebrated the signing of a protocol on the training of local populations between GCO and the State of Senegal represented by the national vocational training office (*Office national pour la formation professionnelle* – ONFP). The signing ceremony, presided over by the Minister of Vocational Training and Apprenticeships, was held in Diogo. 200 people attended this event and had the opportunity to visit different areas of the plant before attending the signing ceremony in the presence of the Minister, ONFP representatives, members of the Local Employment Pre-selection Committee and local populations.

# 5.5.2.2. Partnerships and sponsorships

The ERAMET group is involved, to varying degrees, in different partnerships and sponsorships, based on various themes like the environment, support for the population, sport and culture. While the industrial and mining sites are usually involved in local partnerships with local stakeholders, the Group's foundations and the major mining projects can contribute to the development of their community on a different scale.

#### Local partnerships and sponsorships

The vast majority of sites have entered into one or more partnerships with local associations, involving a few hundred or a few thousand Euros in each case. Sporting activities were sponsored by French sites like AD Imphy (Nièvre), AD Pamiers (Ariège) and AD Issoire (Puy-de-Dôme), the Chinese site GECC Chongzuo and the American site Erachem Comilog New Johnsonville (Tennessee). On a larger scale Comilog Gabon, sponsored the largest cycling race in Gabon this year and also the country's first marathon which took place in December 2013.

Sites like AD Firminy and Eurotungstène in France, GECC Chongzuo in China and GCMC Freeport in the USA (Texas) encourage the development of cultural initiatives and all contribute financially to the development of various activities: supporting a museum dedicated to local industry, an orchestra and even an artist-sculptor. Another example of this is ERAMET Norway in Porsgrunn which this year contributed approximately €23,600 to sponsor several school music groups, the drama group *"Grenland friteater"* and also the town's theatre festival.

In the field of community support, many charities receive sponsorships. For example, in 2013, Bear Metallurgical (Pennsylvania, USA) provided financial support to 16 different charities. In Gabon, Somivab provided an in-kind and financial contribution amounting to approximately €3,000 to support the village of Essassa. In China, GECC Chongzuo provided financial support to the Red Cross and encouraged staff to donate their blood regularly.

Lastly, some sites fund environmental protection initiatives or enter into partnerships with NGOs. This year, Sodepal supported anti-poaching activities conducted by the NGO Conservation Justice while Setrag signed a memorandum of understanding with the WWF to combat the transportation of bushmeat which resulted in several seizures during the year. ERAMET's four Norwegian sites TTI Tyssedal, Kvinesdal, Porsgrunn and Sauda are partners of the NGO Bellona which provides them with advice and expertise on subjects related to the environment.

#### Sponsorships in the major projects

The WBN project (Indonesia) provides funding either directly or via its Saloi Foundation, a community development programme. In 2013, it contributed approximately €538,000. This programme organises initiatives in the following fields: education, health, economic development, culture and the creation of infrastructures. For example, WBN continued to set up the following health programme:

- funding itinerant doctors and nurses in 62 villages;
- supporting Mother and Child Healthcare Centres in 16 villages by funding children's food (about 28 children per month);
- setting up a dental care programme in two Districts via awareness-raising campaigns in 17 schools and in partnership with the Ministry of Health;

- funding the services of a paediatrician at the Weda hospital;
- funding Malaria Jamboree, the staff training centre aimed at combating malaria in the villages.

WBN also provides occasional technical and financial support as was the case when flooding hit the district of Halteng in September 2013 which effected 85 families.

Since 1992, the SLN in New Caledonia has organised the *"Nickels de l'Initiative"* sponsorship programme. Thanks to this programme, dozens of local initiatives, covering a wide variety of subjects, are helped. Out of the 68 applications filed in 2013, 14 received awards. The highest prize was awarded to the "New Caledonian Train Association" in support of its project to rehabilitate Caledonian trains. This year, the SLN devoted almost €84,000 to this initiative.

In 2013, the ERAMET group and SLN also organised an exceptional sponsorship operation and became the two major sponsors of an exhibition on Kanak culture, the most important exhibition on this culture for twenty years. *"Kanak, l'art est une parole",* as the exhibition was called, was held at the *Musée du quai Branly* in Paris (France) from December 2013 to the end of January 2014. It attracted more than 110,000 visitors and received considerable media coverage. Some of the objects on exhibit will be sent to New Caledonia in the spring of 2014 and exhibited at the Tjibaou Cultural Centre in Nouméa. ERAMET and SLN contributed €200,000 to this event, altogether.

#### Foundations

The ERAMET group now supports two foundations created in 2010. The first was set up as part of the WBN project and the second was created by ERAMET's subsidiary Aubert & Duval and is dedicated to this subsidiary's French sites.

The Saloi Foundation, set up and sponsored by the WBN project in Indonesia, aims to implement community development programmes on Halmahera Island. In concrete terms, it has four main thrusts (education, local economic activities, health, environmental and cultural initiatives) and has set itself the following objectives:

- education: to upgrade facilities and teacher training so as to improve educational standards and enable local children to access higher education and prepare their future;
- local economic activities: build capacity and provide opportunities for local people to develop their own sustainable businesses so they can benefit, either directly or indirectly, from the economic opportunities generated by the Project;
- health: improve the quality of healthcare in the region through close collaboration with Government;
- environmental and cultural initiatives: conserve and promote both the original environment and the local culture.

The Aubert & Duval Foundation, set up in 2010 by ERAMET's subsidiary Aubert & Duval, aims to develop initiatives that contribute to the vitality of the French regions in which AD sites operate and to support local micro-economic projects and associations. The Foundation focuses on two areas: promoting regional action (local economic initiatives, micro-entrepreneurship, the development of tourism, etc.) and human development (sporting, cultural, and leisure activities, training and education, etc.). With a budget of €270,000 for 2013, it collects applications from the French Aubert & Duval sites seeking funding for sponsorships, studies the projects and then arbitrates. The Foundation's Executive Committee then allocates a budget to the sites for their sports, cultural or charity sponsorships.

In 2013, the Aubert & Duval Foundation and ERAMET Alliages joined forces with other partners to propose a building project within the framework of "Investments for the Future". This project comprises six sub-projects, one of which directly concerns AD Les Ancizes (Puy-de-Dôme) because it involves rehabilitating a residence that it owns and turning it into an "Alternate House". This house is designed to promote the reception, integration and training of new recruits (apprentices, people on work-based learning programmes, service providers, etc.) by offering them accommodation near the plant and conditions suited to their needs. It will have about 80 small flats and will work in a network with other similar houses in the region, thus allowing great mobility to the people who use them. Alongside this partnership, ERAMET Alliages has its own project involving the transfer of housing (formerly workers' housing developments located near the site of Les Ancizes) to the Office public de l'habitat et de l'immobilier social (French public agency for social property and housing) so this housing can be rehabilitated to accommodate 200 families, thus revitalizing the area.

# **5.5.2.3.** Extractive Industries Transparency Initiative (EITI)

ERAMET has been a supporter of EITI (Extractive Industries Transparency Initiative) since 2011. Based on a set of principles and rules, as well as a coalition made up of governments, companies, civil society groups, investors and international organisations, EITI promotes transparency on local revenues. In signing up to these principles, ERAMET shows its intention to beneficiate natural resources responsibly and be transparent on money transfers between businesses and host countries, but also to report regularly to its stakeholders.

ERAMET takes part in the EITI implementation in Indonesia where the Group is developing a mining project. A member of the committee for the creation of an EITI secretariat in Indonesia is indeed on the Weda Bay Nickel project Supervisory Board. ERAMET is also represented within the Senegal EITI interest group. This country's application was accepted in October 2013, via an employee from TiZir, a joint-venture between ERAMET and Mineral Deposit Limited that formed a partnership to extract mineral sands in an area to the north of Dakar. Moreover, the EITI correspondent at ERAMET takes part in the working group led by the Minister for Foreign Affairs. This participation is aimed at keeping the French representative on the international board of the EITI informed. Lastly, ERAMET keeps a close watch on the changes and implementation of France's membership of the EITI announced by the President of the French Republic at the G8 Summit held in June 2013 in Moscow.

# 5.5.3. Subcontracting and suppliers \_\_\_\_

The ERAMET group gives priority to suppliers that offer products and services that are environmentally friendly and socially responsible while remaining very competitive. In particular, it ensures that its suppliers comply with the demands of REACH regulations and it prefers to work with local suppliers. In addition, the Group wishes to promote good business practices and therefore takes part in various French initiatives (SME pact, Innovative SME) aimed at improving the visibility of commitments among suppliers.

As 72% of the Group's industrial and mining sites have ISO 14001 certification, the factoring in of environmental protection by subcontractors and suppliers is indeed considered. For example, Erachem Mexico, which has both ISO 14001 and FAMI QS certification, ensures that all the purchased materials used directly in its production process comply with ecological standards and have certifications and documents to prove this. More specifically, the oils and lubricants used in equipment must be ecological, even if they are much more expensive than non-certified products.

In the Province of Upper-Ogooué Gabon, Comilog plays a major role in the creation and development of subcontracting companies because it works with more than 700 companies, including almost 400 Gabonese companies, and 130 of them operate locally. This represents sales of €27.4 million just for the town of Moanda. The purchasing policy of this ERAMET subsidiary gives great priority to the support and development of SMEs and SMIs. Comilog expects its suppliers to comply with contractual obligations. All suppliers must be approved, in other words they must meet regulatory demands and the Company's needs. In addition, they are obliged to comply with Gabonese laws, codes of conduct and the rules governing competition.

In 2013, the Group Purchasing Department, in consultation with the operational entities and the Communications and Sustainable Development Department (DC2D), drafted the ERAMET group's Responsible Purchasing Charter. This Charter formalises ERAMET group's desire to ensure that purchasing integrates sustainable development issues better and it strives to promote a process of continuous improvement. ERAMET's expectations with regard to its suppliers, subcontractors and service providers concern three main areas: working conditions and labour standards, the environment, good business practices. 5.6. MAJOR PROJECTS

# **Code of Ethics and Values**

In line with the values the Group has established for itself and to respond more effectively to the global issues concerning it, in 2010, the Group adopted a Code of Ethics based on responsibility, citizenship, integrity and respect for individuals. This Code lays down a set of core shared principles so that everyone in the Group, from the Board of Directors to the Group's employees, can refer back to it and act in line with it at all times. This Code is designed to meet two main goals: protect the Group's integrity and strive for profitable, sustainable and harmonious growth through nine major principles.

Many Group sites organise awareness-raising sessions for their employees on these subjects. This is the case at the French ERAMET Sandouville (Seine-Maritime), AD Issoire (Puy-de-Dôme) and ERAMET Ingénierie (Île-de-France), the American GCMC Freeport (Texas) and Bear Metallurgical Company (Pennsylvania), SLN in New Caledonia, GLC Guilin in China and ERAMET Norway Sauda.

In Gabon, Comilog organises two meetings a year with its suppliers, during which matters related to ethics are discussed in a very transparent manner.

The Group's Ethics Officer can be contacted directly by employees who want to report practices that do not comply with the Group's code of ethics or want advice on a procedure to follow. In addition, ERAMET has committed itself to setting up a professional warning system to report any breaches of the Code of Ethics.

# **5.6.** MAJOR PROJECTS

ERAMET is driving major projects which are currently at different stages of maturity:

- the Weda Bay Nickel project in Indonesia,
- the Moanda metallurgy complex (C2M) and the Maboumine project in Gabon,
- the Grande Côte project in Senegal,
- the Lithium project in Argentina,
- the sea bed exploration project off the coast of Wallis & Futuna,
- the electricity plant project and a cooperation project involving the beneficiation of deposits at Prony and Creek Pernod in New Caledonia.
- the extension of titanium activities in France.

All these projects are developed in accordance with the Group's Sustainable Development policy, with its Code of Ethics and environmental, health and safety charters and international reference standards. The aim is to establish a long-term trusting relationship with the communities present in the regions where the Group operates, and to prevent any violation of the basic rights of these communities, particularly the native communities, as appropriate. This is achieved by implementing mechanisms for dialogue with representatives of the stakeholders concerned.

Environmental, social, corporate and health aspects are taken into account right from the beginning. Experts and specialists in sustainable development are incorporated into the industrial, technical, legal and financial teams and participate in the various steering and management committees right from the project brief, feasibility and pre-construction stages. Likewise, they take part in the due diligence audits in the case of planned M&As. Lastly, the environmental and social aspects for which the Group can be held liable are integrated into the risk assessment and management process for these capital expenditures.

# 5.6.1. A Greenfield project in Indonesia \_\_\_\_\_

The Weda Bay Nickel project (WBN) includes mining operations, the recovery of ores via hydrometallurgy, and finally at the end of the process, the production of Nickel metal via pyrometallurgy. The hydrometallurgical process is specially adapted to ERAMET's nickel ores and has been patented. It allows the optimal use of the geological profile (laterites and saprolites), a limited consumption of energy (low greenhouse gas emission) and compliance with international regulations on the environment. This process is proposed as the Best Available Technique in the European reference documents (BREF Non Ferrous Metal) which is in the final stage of validation.

In 2013, with the bankable feasibility study underway, the project finalised the ultimate studies and started the initial pre-construction work (laying out roads and logistics platforms). It employed approximately 400 people, most of whom worked on the site, on Halmahera island in Indonesia, and also in offices in Jakarta and Manado and in Kuala Lumpur Malaysia.

#### **5.6.1.1.** The commitments

The project is developed in accordance with the 10 Equator Principles, the International Financial Corporation's Performance Standards, the best international mining and industrial practices and Group policy on the environment and health and safety at work. The whole project is conducted in compliance with Indonesian regulations.

Therefore, WBN and ERAMET strive to:

 assess the level of impacts on the environment, society and public health in order to ensure effective management;

- develop and maintain a continuous dialogue with their stakeholders;
- promote safe and healthy working conditions;
- prevent and reduce the risk of pollution;
- ensure the protection of the community and the respect for the dignity and culture of indigenous peoples;
- avoid forced displacements and limit the impacts related to land use on those people concerned;
- ensure the safety and security of people and the project;
- protect and conserve biodiversity and ecosystem services by favouring the sustainable management of natural resources.

The project has been insured by the World Bank's Multilateral Investment Guarantee Agency (MIGA) since 2010. This guarantee was granted following impact studies and in-depth audits which confirmed that the project complied with World Bank standards. Every quarter, WBN sends a report to the MIGA on the Environment, Health, Safety, Public Affairs/Dialogue with stakeholders and Human Resources and MIGA representatives come to the site once a year to carry out an audit.

### 5.6.1.2. Implementation and initiatives

WBN completed the characterisation studies, assessed the potential impact and risks associated with the project, decided on the avoidance, reduction and compensation measures to take in accordance with the mitigation sequence, and integrated them into its design.

The characterisation studies improved its knowledge of the island's biodiversity and ecology in terms of habitats, flora and fauna. Moreover, they confirmed its richness and, in addition to mitigation and control measures, WBN has undertaken to develop a biodiversity offset programme to compensate for the impact on sensitive habitats. This "tailor-made" compensation programme will offset the significant residual impacts so as to maintain an equivalence and avoid a net loss of biodiversity, and will even achieve a net gain of conserved biodiversity on the island. It was within this framework that ERAMET joined the Business and Biodiversity Offsets Programme (BBOP), a recognised thinktank which developed a robust, scientific method which has already been tried and tested on several pilot projects around the world. More than eighty companies, financial institutions, governments and non-governmental organisations adhere to the BBOP, including the World Bank and the French Ministry for Sustainable Development.

In line with its commitments, WBN actively keeps up relations with local communities and its other stakeholders and continues to:

- receive inhabitants from local communities, students, politicians, journalists, etc. in the project's information centre;
- implement the local development programmes (initiated in 2008). Priorities regarding education, health, economic development (agriculture, fishing, trade, etc.), conservation of the environment, the promotion of local culture and improvements to light infrastructures are established with local populations and stakeholders;

- organise public meetings in each village, ensure presence and continuous dialogue throughout the year, via a dedicated team;
- coordinate a complaints management system, formalising the receipt, recording and resolution of the complaints;
- reinforce its ties and partnerships with universities, institutions and non-governmental organisations (NGOs) and work together in social, societal and environmental fields;
- learn more about indigenous peoples and get to know them well in order to develop consultation and freely available information programmes and preserve their way of life.

WBN has also developed more than thirty social-environmental management plans which it has transposed into operational procedures that are already implemented in the field and by its subcontractors. All of this strengthens the overall environmental and social management system of the project.

To ensure continuous improvement, the teams in charge of environmental, social and societal aspects continue to carry out studies on physical, ecological and human environments. They also help the technical teams with the detail engineering and in the transposition of sustainable development requirements in reference documents which will allow the invitation for tenders to be launched for construction firms and suppliers, with aspects of the environmental and social management system broken down into a simplified procedure.

The main impact study was finalised in 2013; no risks or critical impacts were found that would call into question the development of the project. This study of more than 6,000 pages is a robust component of the bankable feasibility study.

Addenda on this study are being drawn up to integrate the latest recommendations given in the International Financial Corporation's Performance Standards of 2012, and also the latest engineering details regarding the pyrometallurgical unit that completes the nickel beneficiation process and the quarries that will supply the construction material for the roads and earthworks.

# 5.6.2. Metallurgical complex in Gabon under construction \_\_\_\_\_

Comilog is expanding its activity in Gabon. A metallurgical complex is being built near the existing mining facilities in Moanda. This complex will use pyrometallurgical and hydrometallurgical methods to process resources other than the ore resources currently sold or intended for the sintering plant, to produce silicomanganese and metallic manganese respectively. This complex is in line with the country's policy of economic expansion and value creation.

The study on environmental impact, the study on transport and the study on hazards were carried out in accordance with applicable Gabonese legislation. They also took into account European regulations and Best Available Technologies (BAT) in *ad hoc* reference documents, for all project phases, from the construction to the discontinuation of activities and integrating the post-operations

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rehabilitation process. The Gabonese authorities approved the project at the end of 2011.

At the end of 2013, this project was in the last stages of construction. The industrial units will be started up one after the other in the first half of 2014.

As a reminder, technical decisions were made in coordination with environmental and financial teams, taking into account the best techniques developed in the Group and the Best Available Techniques described in the European reference documents. It can be noted, for example:

- sulphur dioxide discharges comply with the best available technologies;
- the process water is recycled;
- residue from the hydrometallurgical process is filtered and stored in tips or pits;
- rainwater collection pools are adapted to the equatorial rains of Gabon;
- it has an efficient waste-water treatment plant;
- an outfall for this waste-water is installed downstream from the populations living near this new industrial complex.

In December 2013, the Manganese Division requested an environment audit to be carried out prior to start-up. It showed that the various recommendations given in the impact studies had been fully implemented during the construction phase. Now, the Management team at this new plant are very careful to ensure that the discharge values set out in the environmental management plan are observed via suitable control methods and proactive measures. A dedicated health, safety and environment team is now in place and all on-site managers have been informed of any possible impacts and trained to manage them in the same way as they are managed at similar Group plants in Belgium, China, France and the United States.

# 5.6.3. Recovering niobium, rare earths and tantalum in Gabon \_\_\_\_\_

The company Maboumine, a subsidiary of Comilog, holds a mining exploration licence for the Mabounié polymetallic deposit, near the town of Lambaréné in Gabon. This deposit is rich in niobium (used in steels and super alloys), rare earths (group of 17 metals used in hybrid cars, wind turbines, oil catalysts, etc.) and contains reasonable amounts of tantalum (used in electronic components) and uranium.

ERAMET's research centre is trying to develop an innovative hydrometallurgical process to recover these resources, in cooperation with about twelve other international research laboratories. The whole process is continuously simulated on laboratory installations built for this purpose. In 2008 and then in 2013, geological investigations were carried out. To complete these investigations, an experimental mine is to be set up in 2015. The purpose of this mine is to confirm the results of these investigations and also to collect data to determine the mining methods to use. The ores extracted will be stored and used locally in a pilot plant (the decision to construct this will be taken in 2015) to finalise the process developments and create a transposable scale to size a commercial plant.

A regulatory study was conducted in 2011 to identify the context of environmental, social, societal and sanitary limits, and in 2013 a firm of experts completed it. The first initial environmental and social characterization studies were carried out between 2012 and 2013. They allowed an inventory to be drawn up, monitoring equipment to be installed, the presence of critical habitats to be established and the first communication and consultation campaigns targeting local populations to be implemented. These studies will be completed gradually according to requirements and will support impact assessments being carried out on the experimental mine, aggregate quarry and pilot plant.

The project has also developed its preliminary management plan as regards the environment, health, safety and social matters. Even at this very early stage of research and exploration, it is gradually being implemented on site.

The project is developed in accordance with Gabonese regulations, the 10 Equator Principles, the International Financial Corporation's Performance Standards, the best international practices and Group policy, with support from a network of recognised national and international experts. The Maboumine Sustainable Development strategy was presented to Gabonese authorities which gave it their wholehearted support.

# 5.6.4. TiZir, a joint-venture to beneficiate mineral sands \_\_\_\_\_

Grande Côte is one of the two entities of TiZir Limited, a jointventure in which ERAMET and the Australian company Mineral Deposits Limited (MDL) each hold a fifty percent share. This joint venture holds a 90% share in the Grande Côte entity and the Republic of Senegal holds a 10% share. This is one of the largest projects being developed in the industry of mineral sands.

Grande Côte marks the arrival of ERAMET in Senegal and also its sectoral diversification, as mineral sand (titanium, zircon, etc.) applications open new markets for the Group. Production is expected to start in 2014. The Grande Côte operating period is estimated to be twenty years, based on an annual production of about 85 kt of zircon and 575 kt of ilmenite.

In view of the TiZir Limited joint-venture, ERAMET assessed the environmental, social, societal and sanitary aspects of the Grande Côte project to ensure a responsible and sustainable start of production at the site, in accordance with the Group's environmental and social standards.

An environmental and social management plan (ESMP), attested as compliant by the State of Senegal, has been developed for the project. This plan specifies the preventive and corrective measures required to limit and reduce any environmental and social impacts that might result from these activities and the creation of committees including stakeholders to implement and monitor the ESMP.

In terms of environmental protection, this programme includes measures to manage water, the quality of air, noise and biodiversity. The quality of water and the level of ground water are measured regularly. The water management system was designed in such a way as to avoid any additional pressure on the groundwater table which is used by the neighbouring population to water their crops and has been authorised by the relevant department of the State of Senegal. The specific operating method used at this mine, whereby the plant is moved along the deposit gradually means that the vegetation in the area, composed of sparsely distributed grasses and trees, will be pulled up. In order to reconstruct a similar dune after the operations, the project follows a rehabilitation programme which involves characterizing the initial state of biodiversity, moving any rare plants, recovering the arable soil so it can be used when the ground cover is put down again, thus limiting the long-term impact on the landscape. Rehabilitation tests based on samples of earth and seeds from the dunes have been carried out so as to determine the best re-vegetation methods to adopt once operations begin. As well as taking biodiversity into consideration before dredging operations begin, social aspects are also considered. This involves inspecting the site prior to operations in order to find any indications of archaeological relics, to identify rural paths which have to be diverted during mining operations and to identify people who use the land who are entitled to compensation.

The strategy for land clearing and rehabilitation, including the preliminary reconnaissance stages, and for the determination of ecosystem services is being finalised with the authorities, after consulting neighbouring populations and other stakeholders. Land rehabilitation can be integrated into a process of resource management and local development.

Grande Côte project teams have also done their utmost to establish the best possible relations with neighbouring communities and to ensure that the project contributes as much as possible to the local and regional economy. A considerable effort has been put into informing and consulting local stakeholders and this is an ongoing process. Mechanisms to compensate local people whose land was, or will be, affected by the project have been set out in consultation with the authorities: the scales adopted are in line with the World Bank's guidelines and much higher than regulatory requirements. An action plan to promote local development has been drawn up in a participative manner. It focuses on four priorities: school education; health and the environment; youth and sports and lastly socio-economic development, micro-finance and craft industries. An annual budget of \$400,000 is devoted to these development initiatives. Lastly, a partnership with "Office national de la formation professionnelle" (national vocational training office) has been established to help local people enhance their capacities and provide support to people employed during the construction phase who are gradually laid off. Therefore, more than 400 young people from the immediate vicinity of operations will initially receive training in 12 specialised subjects, thus enabling them to become reintegrated into the local economy faster.

# 5.6.5. Mining exploration in Argentina

Lithium is one of the special metals with a high growth potential. ERAMET has put together a team of geologists, engineers and researchers to study the potential of deposits in Argentina and the processes required to produce lithium salts.

In 2012, its Argentinean subsidiary, ERAMINE SUDAMERICA SA, identified a deposit of lithium in the Province of Salta, in the north of the country: the *"Salar de Centenario"*. In 2013, it conducted an exploration programme which revealed potential resources exceeding 3 million tonnes of LCE <sup>(1)</sup>.

At the same time, teams from ERAMET Research and ERAMET Ingénierie developed a process for the extraction and production of lithium salts. In 2013, they discovered an alternative way of producing lithium salts from brine. This process ensures higher profitability and lower environmental impact compared to the traditional brine evaporation process. This new process was developed in partnership with IFPEN (IFP Énergies nouvelles). Several patents have been filed for this process.

The exploration activities, such as the drilling, pumping tests, hydrodynamic modelling, and the installation of pilot units to concentrate lithium are conducted in accordance with the Group's sustainable development policy for projects, in other words, in compliance with Argentina's regulations and international standards. The Group's Environment Department accompanies all the activities.

# 5.6.6. Sea bed exploration operations \_

ERAMET invests in research projects for which the scientific benefits surpass its own activities. Since 2010, the Group has taken part in seabed and volcano exploration operations off the coast of the Wallis & Futuna islands, in the Pacific Ocean. These operations are conducted as part of a consortium, the active members of which are Ifremer, Technip and ERAMET. 5.6. MAJOR PROJECTS

The results of the initial scientific explorations, partially financed by ERAMET, will greatly contribute to knowledge on the seabed in this area (topography, geology, volcanology, biology, biodiversity) because a great deal of analysis was carried out on the samples taken (fluids, rocks, living organisms). Moreover, the discoveries are promising: several hydrothermal sites that may represent a potential mineral resource have been identified.

In 2013, ERAMET's subsidiary "Sialeo" was created to deal with the mining aspects of the project and a joint mission with Ifremer and Technip was carried out on-site in Wallis & Futuna, to present the project to local populations and prepare the future exploration operations scheduled for 2015 or 2016. Partners are also being sought with a view to expanding the consortium.

# 5.6.7. Plans for a new electric power plant in New Caledonia \_\_\_\_\_

In New Caledonia, at the Doniambo industrial site, the SLN recovers its nickel ores via a pyrometallurgical process. The drying, calcination and reduction furnaces are mostly fuelled by a fuel plant dating back to 1972 which is scheduled to be replaced in 2018.

A file on a new coal-powered plant that uses the best technologies applicable to Large Combustion Plants (LCP) and supported by a robust analysis of regulations that apply in New Caledonia, Europe and France, has been put together, anchoring the project to the best international standards.

The project team is giving great priority to the management of social – health and environmental aspects of the project. Therefore, SLN has established long-term relations with its stakeholders to ensure communication and consultation.

This project is to be environmentally and socially exemplary. Studies to assess the potential impact of the new power plant are conducted in accordance with the Equator Principles and the regulations of both New Caledonia and France. The impact and risk studies are being finalised with a view to submitting a completed application file for an operating permit in 2014. Particular attention is paid to health and environmental risk management, to the recycling of ashes via the development of an ecological cement, for which a patent will be filed, and to the carbon compensation proposal.

### 5.6.8. Cooperation with the Southern Province and Vale in New Caledonia for the Prony and Creek Pernod concessions \_\_\_\_

On 5 November 2012, Le Nickel-SLN, the Southern Province and Vale New Caledonia signed a declaration of intent whereby Le Nickel-SLN agrees to take part in discussions for the signature of a joint collaboration programme with the initial aim of exploring the deposits and subsequently, of possibly developing those deposits. These discussions are currently underway.

# 5.6.9. An extension of titanium activities in France \_\_\_\_\_

In 2011, Aubert & Duval (ERAMET group) and its Kazakhstan partner UKTMP inaugurated their titanium ingot processing plant UKAD in the town of Saint Georges de Mons (Puy-de-Dôme), in France, in the presence of the Deputy Prime Minister of Kazakhstan and the Prefect of the Auvergne Region. UKAD produces and sells titanium products (billets, bars, wire, sheets) mainly to the aerospace industry. This new plant allows the partners to offer an integrated titanium sector which encompasses the extraction of the ore to the supply of pre-machined closed-die forged parts.

Another objective was to reinforce the critical supply chains of this raw material which is strategic for the aerospace industry in Europe. Therefore, Aubert & Duval and UKTMP have worked on a project to recycle the offcuts generated throughout the UKAD production process, the aeronautical titanium offcuts and chips from outside partners and eventually end-of-life components. Circular economy criteria and the need to make some strategic resources more accessible in Europe and France were taken into account. The EcoTitanium project, based on these objectives, was thus created. The recycling plant, for which the bankable feasibility study is currently underway, will also operate in Saint Georges de Mons (Puy-de-Dôme).

The risk management and impact assessment studies are being drawn up and will be submitted to the authorities in 2014 with a view to obtaining an operating permit.

# **5.7.** RESPONSIBILITY FOR CHEMICALS

Because of its diversified activities, ERAMET acts on two fronts: on the one hand, it uses chemical substances and mixtures, and on the other hand, it produces them.

The Group is a "user" insofar as chemicals are used in its Nickel and Manganese Divisions' hydro-metallurgical activities involved in the recycling and surface treatment of alloys. A wide range of products is used: commodity chemicals like acids, bases, some salts used in chemical precipitations and syntheses, etc.

In the three Divisions, the development of a vast range of alloys, ferromanganese and ferronickel requires the use of ores, minerals, recycled secondary materials and a series of metal additives to adjust the compositions of the shades required. Some building materials and some materials which are necessary for equipment to function correctly also have characteristics that are specific to the chemicals, some of which may prove to be sensitive.

There is also a whole range of products used in the laboratories, in the maintenance of facilities and for other specific purposes like purifying water, trapping gases, and airborne particles, etc.

The Group is a "producer" of chemicals insofar as the main products marketed by the Nickel and Manganese Divisions' pyrometallurgical activities are ferrous nickel, silicomanganese and ferromanganese. The Alloys Division provides a wide range of shades of steel and alloys because many high-tech markets require this. As regards the metal in these alloys, account is taken of the dangerous nature and risks which are sometimes associated with them and which is often influenced by the physical form in which they are marketed, i.e. as solids or powders. As for hydrometallurgical activities, a wide range of nickel and manganese salts and oxides and some other metals are also marketed.

Because the Group markets all these products, it has to become involved in all processes that enable it to acquire a good understanding of their intrinsic properties, their impact and proper management of associated risks. Therefore, some of its legal entities play a major role the consortia managed by dedicated professional organisations and declare them as lead registrants in order to meet the requirements of the European REACH regulations (Registration, Evaluation and Authorisation of Chemicals).

Lastly, the Group's mining activities are also included in these themes. Even if very little consideration is given to minerals in the classification processes and they do not come within the scope of REACH registrations, the Group does pay very close attention to them. Within the framework of constantly changing regulations, the new requirements of European and international regulations are integrated. The international classification system GHS (Globally Harmonized System) developed at the United Nations and its European equivalent CLP (Classification, Labelling and Packaging of substances and mixtures) are gradually being introduced in accordance with the deadlines set. In some countries, the adoption of the GHS has been accompanied by specific rules that may have repercussions on the classification of some substances produced by the Group.

Therefore, ERAMET is very involved in all areas of chemicals management and has integrated this theme at Corporate level and in its three Divisions. Each of them has a dedicated service to properly manage all the many aspects of chemicals. Within this context, 2013 saw an extension of tasks to ensure the integration of all the related regulations. The ten consortia and the relevant professional organisations continued the monitoring work and the Group and the three Divisions played a proactive role.

With regards product stewardship and related risks, ERAMET clearly adopts a voluntary, sustainable and responsible approach.

# 5.7.1. At Group level \_\_\_\_

During the year, many of the Group's teams were involved in different tasks related to various aspects of chemicals management. This multidisciplinary network helped ensure that the impact of the application of various regulations was taken into account properly: buyers, sales people, plant representatives, R&D, logisticians, lawyers, IT experts, etc. In each Division, a specific steering committee continued its work and took the necessary decisions to ensure its completion while a product stewardship steering group remained operational at Group level.

After the registrations required by REACH regulations were made in 2010, the way in which the Group and the Divisions integrate the various chemical management themes was extended. Indeed, many cases could greatly impact the Group's activities. Some could result in a considerable increase in operating costs while others could call into question the long-term survival of some activities. Therefore, it is necessary to carry out and support action that ensures a consistent approach to products, to produce robust well-proportioned scientific studies, to measure the consequences

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#### 5.7. RESPONSIBILITY FOR CHEMICALS

of the danger status of some substances and to address the resulting industrial constraints.

Nevertheless, in 2013 the preventive and protective measures taken in previous years were pursued in order to consolidate the medium and long-term management of chemicals. All the registrations required by REACH regulations before 1 June 2013 were carried out, many of which had been done in advance in 2012.

In addition to those carried out for the 2010 deadline, the following number of registrations were made for the second important REACH deadline: five in the Alloys Division, nine in the Nickel Division and five in the Manganese Division.

REACH regulations and any other regulations related to them are carefully monitored. The monitoring and analysis of the REACH reassessment process showed that there should be no in-depth changes but rather a series of adjustments, the revision of some guiding principles and more specific focus on nanomaterials. On initial examination, the Group's activities should not be greatly affected by these changes. However, the publication of adaptations to technical progress (ATP), annexes on the harmonisation of European classifications in the CLP regulation, mean that some work will have to done to upgrade some files on the substances produced by the Group.

Special attention is still paid to the selection of substances of very high concern and to the process that may result from their inclusion in the candidate list. Indeed, at European level, REACH organises an authorisation procedure aimed at gradually replacing substances of very high concern with less hazardous substances. Selection of these substances involves the Member States, the European Commission and the European Chemicals Agency (ECHA), as well as producing companies, importers and users of these substances and other interested parties. This selection process continued in 2013. The Group took part in some of this work (refractory ceramic fibres, trichloroethene and coal-tar pitch) and actively contributed to discussions between producers and within the professional organisations concerned.

A lot of progress was also made in harmonising the management of Safety Data Sheets. By implementing a procedure covering the application, drafting and validation stages and using a software programme to draw up the data sheets used by the three Divisions, the management of these sheets has been improved. The safety data sheets required for dangerous products are constantly updated and other risk information sheets are developed for non-dangerous products. The model developed for exposure scenarios, which is common to the Group, is clearer and more comprehensible for final recipients. It has been implemented and extended safety data sheets have been created.

Lastly, particular attention was paid to international regulations concerning metals that are specific to the Group and to their salts and oxides. Indeed, it is important to properly monitor the changes that may appear in a region or a country and to consider other action that would ensure homogeneity with regards the status of products and any related industrial constraints. In this respect, forward-looking work involving a quick review of scientific literature and current regulations in force in various parts of the world has been carried out for a series of metals and their compounds in direct relation to the Group's projects. Various other initiatives have been taken to provide support to the Divisions and sometimes to certain sites. For example: implementing RoHs (Restriction of Hazardous substances) regulation, monitoring changes to rules regarding transport, taking part in a visit made by a delegation of French ministers in China, etc.

In 2013, the other key events for each of the three Divisions were as follows:

#### 5.7.1.1. The Manganese Division

To close the Manganese Division's registrations, in 2013, Erachem Comilog SprI submitted the last file for ammonium sulphate  $((NH_4)_2SO_4)$ , a substance produced during the hydrometallurgical processes to make some manganese salts.

During the second half of 2013, the ECHA carried out compliance checks on four of the thirteen manganese substances registered (i.e. SiMn slag, trimanganese tetraoxide, manganese dioxide and manganese carbonate). Indeed, the European Chemicals Agency always examines registration files in this way. In some cases, these processes mean that lead registrants have to justify some aspect of their file via open discussions with ECHA experts before replying officially via a dedicated web platform.

These short process periods (the lead registrant only has 30 calendar days to reply to the request) were managed in close collaboration with the manganese consortium. Although the latter confirmed the positions stated when the registration was made (recourse to exemption from tests), as a lead registrant for two of the substances concerned, Erachem Comilog Sprl updated the corresponding registration files, giving more details and replying to some of the questions asked by ECHA. Sometime in 2014, a committee of representatives from European Union member States must unanimously agree on a final decision. Failing this, the European Commission shall decide.

ERAMET is also a stakeholder and actively contributes to the development of scientific knowledge. The Group continued to contribute to studies regarding the International Manganese Institute's (IMnI) five-year plan to better integrate the notion of sustainability into the manganese industry. For this purpose, in 2013, the Group took part in the studies involving a socio-economic analysis applied to manganese and studies on the life cycle of ferromanganese and silicomanganese. Specific studies of the possible impact of different types of manganese ores on health and the environment were also initiated.

# 5.7.1.2. The Nickel Division

The Division's activity was particularly marked by its participation in the cobalt consortium's efforts to revise the classification of the metal. Two major classifications, acute toxicity and carcinogenicity, were reassessed. The cobalt consortium, with the proactive support of ERAMET, validated the continuation of further scientific research to improve understanding and identify the potential mechanisms that produce these effects.

Concerning nickel compounds, the Division took part in studies on the life cycle of nickel metal which take account of impacts right from the mining stage to the marketing of nickel metal. ERAMET remains very active in the scientific field involving studies assessing the toxicity of nickel compounds and continues its involvement in the work on the "sediment" compartment in the last part of the European Risk Assessment dossier on Ni compounds. Constant and sustained efforts were also made to identify the most pertinent Risk Management Option (RMO).

Specific in-depth characterisation of oxidised nickel ores was developed to better understand the absence of impacts on health.

In 2013, the Nickel Division actively contributed to the revision of uses and exposure scenarios included in the REACH files of nickel lead registrants. When necessary, the efforts made to ensure sites are compliant with the exposure scenarios included in the extended safety data sheets will be continued in 2014.

In an effort to constantly inform people, chemical risks training material has been developed for the Division's sites. It is designed for various target audiences and includes information for operators aimed at facilitating risk identification and prevention, the correlation between the CLP regulation and the various regulatory impacts that result, specifically in France via the Classified Facility for the Protection of the Environment (ICPE) section.

# 5.7.1.3. The Alloys Division

In 2013, the Authorisation procedure, specified in REACH for the use of substances included in its Annex XIV, caused a great deal of concern in the Alloys Division due to two events: in April, trichloroethylene was permanently added to annex XIV, in June ECHA proposed that priority be given to refractory ceramic fibres, and in December, this proposal was validated by the REACH committee of member States.

Trichloroethylene is used by one of the Division's sites as an all-purpose degreasing agent in a sealed machine. The Group carried out research to find a technically sound alternative solution while working with the other economic players concerned by the authorisation of this substance. As for refractory ceramic fibres, the Alloys Division has gradually been reducing their use over the past ten years. The Division also worked with the other economic players concerned by this substance in order to respond to the public consultation launched by the ECHA.

In 2013, the Alloys Division actively contributed to the revision of uses and exposure scenarios included in the REACH files of lead registrants of nickel, iron and tungsten.

The work started in 2013 to ensure sites are compliant with the exposure scenarios included in the extended safety data sheets will be continued in 2014.

## 5.7.2. Strong involvement in professional bodies \_\_\_\_\_

ERAMET is very involved in professional bodies at Group level, Division level and sometimes at subsidiary level. It holds several key positions in professional bodies operating in its sphere, including:

- the acting General Manager of the Alloys Division, member of the Board of the Fédération Française de l'Acier (FFA);
- the General Manager of the Nickel Division, member of the Board of the Nickel Institute;
- the Director of the Communications and Sustainable Development Department, Chairwoman of the Fédération des minerais, minéraux industriels et métaux non ferreux (FEDEM), Vice-Chairwoman of the Alliance des Minerais, Minéraux et Métaux (A3M), member of Board of Directors of the UIMM (Metallurgical Industry Association) and Member of the Economic, Social and Environmental Council (CESE) for the MEDEF and member of the Environment Section. In 2013, she was also appointed Vice-Chairwoman of the Extractive Industries and Primary Processing Strategy Committee by the French Minister of Productive Recovery;
- the Director of Research, Innovation, Engineering and Group Purchasing, Chairman of the European Powder Metallurgy Association (EPMA) and member of the Eurométaux executive committee;
- Sales & Marketing Director of the Nickel Division, member of the Steering Committee and the general assembly of REACH Nickel Consortia;
- Senior Vice-President Commercial, Ores and Alloys ERAMET-Comilog Manganese, Chairman of the IMnI (International Manganese Institute) and Vice-Chairman of Euroalliages;
- Director of Public Affairs, chairman of working group GT3 in the Extractive Industries and Primary Processing Strategy Committee;

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Environment Director, Chairwoman of FEDEM's Health, Safety and Environment committee (HSE), member of the Eurométaux HSE policy committee, member of the BBOP Executive Committee and member of the Nickel Institute and Cobalt Development Institute's scientific platforms. She also chairs the Nickel consortia engineering group. The Environment Engineering Director chairs Euroalliages' EHS committee (Environment Health and Safety) and the Manganese consortium's engineering committee.

ERAMET's Environment Department and the REACH managers take part in these bodies' various scientific working groups – for example on the changing Exposure Limit Values, on the updating of the Best Available Techniques for non-ferrous metals in Europe, on the development of environmental quality standards in Europe, and on the assessment of ore classifications.

# 5.7.3. ERAMET and the international scientific community as regards HSE \_\_\_\_\_

Through its dynamic participation in the activities of Eurométaux, ERAMET continued to contribute to the preparation of new methodologies to assess the impact of metals on the environment and on health (Herag & Merag). The Group continued to be involved in the European project to identify and finalise methodologies to assess the impact of alloys on health with a view to harmonised European classification scheduled for 2015. Human environmental toxicology, which assesses toxic hazards for humans when exposed to a mixture of chemical substances in their environment, is quite a new but fast-growing scientific discipline.

# **5.8.** HEALTH AND SAFETY

# 5.8.1. Safety \_\_\_\_\_

#### **5.8.1.1.** Policy, objectives and structures

The Group's commitment to Occupational Health and Safety is primarily reflected in the involvement of the Company's senior management. ERAMET's Director of Human Resources, who is a member of the Group's Executive Committee, is in charge of Health and Safety initiatives.

The Group Health and Safety Manager (H&S) reports directly to him as does the Group Medical Officer. Together, they draw up the health and safety policy and related initiatives for the Group and they present them to the Executive Committee. Once these are approved, they are scheduled, implemented, checked via audits and then corrected or adapted.

The Safety Charter, focusing on three main themes:

- individual involvement;
- daily commitment;
- prevention as a priority,

is applied at all sites and translated into the Group's 12 languages. It is implemented through an annual plan of action approved by the Comex. The objectives are reviewed quarterly. In 2013, the main initiatives concerned: The accident rate, with the objective of the lost-time accident frequency rate set at 4, on a like-for-like basis, broken down as follows:

- Alloys Division: 4.5;
- Nickel Division: 7;
- Manganese Division: 2.15;
- Administrative staff, ER & EI: 0.

**Integrate the "small sites" into a scope extended to include all Group sites,** provide them with support in their H&S initiatives, follow the accident rate and frequency rate (TF1).

Following the safety campaigns conducted in 2011 and 2012, organise a campaign on the theme of Lock out/Tag out.

Continue and complete, in an exhaustive manner, the inventory of chemicals, Hazardous Chemical Agents and CMR substances, and control their introduction (giving priority to all European sites)

Roll out a training course on "Chemical Hazards", giving priority to all supervisory staff in the Alloys Division.

Lastly, in order to establish a real **culture of prevention** at our Group's sites, continue rolling out the **safety training modules** targeting:

- sites in difficulty (management, supervisory staff, operators);
- sites outside of mainland France (training instructors for internal roll-outs – for example: SLN, USA in 2011 and 2012).

The coordinators for the Alloys Division and the Manganese Division, reporting to the Division's Directors, lead, coordinate and follow up the safety initiatives, in liaison with the Group's H&S Director. At all the sites, a network of leaders supports this policy and presents it to management.

The H&S results are reviewed monthly at executive committee meetings, in the presence of the Group's Chief Executive Officer.

### 5.8.1.2. Accident rate and frequency rate trends

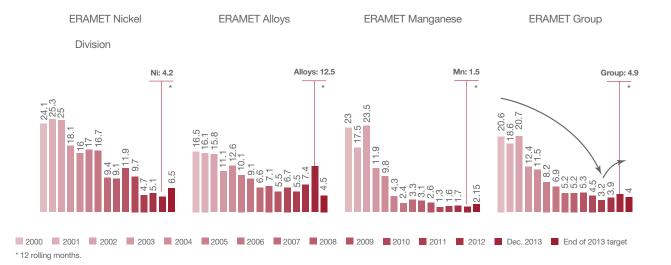
The frequency rate is defined as the number of lost-time accidents per million hours worked.

The chart below shows the Lost Time Injury (LTI) frequency rate (TF1) for the past thirteen years at a virtually constant scope (excluding Chinese metallurgical plants before 2003 and including successively Setrag in 2007 and Weda Bay in 2008).

A steady improvement in the frequency rate since 1999 (with the exception of 2002) can be seen, with the Group rate falling by a factor of over four and a half in eight years, then this frequency rate levelled off and remained almost constant for three consecutive years, at around 5.2. The initiatives taken in 2011 and 2012 led to a further improvement in the frequency rate (value of 3 at the end of 2011) and then a deterioration in 2012 (3.6) and 2013 (4.9).

The improvement noted between 1999 and 2008 is mainly due to initiatives in the Manganese Division (which accounts for half the hours worked in the Group), to a lesser extent the Alloys Division and, lastly, for 2007 and 2008, to the Nickel Division and more specifically the Société Le Nickel-SLN in 2007 (the Weda Bay site was included in the Group's scope of consolidation in 2008).

The improvements achieved by the Manganese and Alloys Divisions were wiped out in 2009 due to the considerable deterioration in the accident rate at the Nickel Division and more specifically at the SLN.



2010 and 2011 saw a significant improvement in the Group's frequency rate which broke away from the previously mentioned plateau (minus 0.7 then 1.3 point for each of the two years) and reached 3.2.

In 2012 and 2013, the Group's accident frequency rate deteriorated slightly and went up to 5. This deterioration is related to a sharp increase in the accident rate in the Alloys Division (and more specifically at Aubert & Duval where the frequency rate increased by a factor of almost 2), and despite the continuing good results at the Nickel Division (4.2) and the Manganese Division (1.5).

After a bad year in 2008 marked by five fatal accidents and 2009 in which there was one fatal accident, none of the Group's employees were victims of fatal accidents in 2010, 2011 or 2012. Regrettably,

in 2013, there were two fatal accidents at the Gabonese sites of Somivab and Setrag.

ERAMET has developed and implemented other indicators to better monitor and analyse the overall accident rate at sites:

- The severity rate (<u>number of lost days</u> (excluding the day of the accident) <u>per thousand hours worked</u>. This severity rate which went down in previous years (0.55 in 2010, 0.34 in 2011) worsened at Group level in 2012 (0.377) then once again in 2013 (0.46 – 11,095 lost days).
- The number of serious accidents: it is important to monitor this indicator because when a serious accident occurs, a specific plan of action is required to prevent it from occurring again on that particular site or on other sites with similar environments.

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- Frequency rate 3 which represents all the events likely to cause some kind of human injury (lost-time-injury, no lost-time-injury and health-care slip) in relation to one million hours worked. Unfortunately, not all the Group's sites have the same system for recording these events and analyses of changes and comparisons between sites and/or Divisions are not really very meaningful, despite the attempts to harmonise the systems in 2012.
- In accordance with objectives set out in the plan of action, "small sites" were integrated into the Group's reporting system.

### **5.8.1.3.** Remarkable results

Out of the fifty industrial sites monitored in the integrated reporting system, 25 have not suffered lost-time accidents for over one year, and even for several years. These achievements may be fragile but they are regularly celebrated at the sites to highlight the efforts accomplished every day by operators and their managers.

In 2013, the following sites were honoured:

- Erachem Baltimore (Manganese Division) which has not had a lost-time accident for over five years. An electronic display informs staff in real time of this Group record;
- the Thio mine (SLN) in New Caledonia (Nickel Division) boasts more than one million hours worked without any lost-time accidents. This important milestone called the "Golden Helmet" was celebrated by giving the staff a souvenir symbolising this remarkable performance;
- for the second time, staff at the Grande Côte project in Senegal worked 4 million hours without any lost-time accidents. Given the scope and diversity of operations, the site's geographic location and the enclosed nature of the area in which the project operates, this result is a "reference" for the Group;
- lastly, the UKAD site in France has not experienced any accidents, with our without lost-time, for over one year.

#### **5.8.1.4.** Main spheres of action

#### Safety audits

A site assessment policy is carried out through systematic audits at the average rate of one audit every two years for every site worldwide. The audits are carried out by the safety coordinators on sites overseen by the Health and Safety Manager based on a customised framework for the Group. This framework was drawn up several years ago in cooperation with DNV and is based both on the International Safety Rating System and on the Group's Health and Safety policy.

Since 2009, the ERAMET group has carried out all H&S and Health Safety and Environment (HSE) audits with the Health Safety and Environment V3 framework (which, compared to V2, introduces new requirements, including those of the international framework OHSAS 18001-2008 and the international standard ISO 14001-2004).

In light of the significant changes to the framework, it is no longer possible to correlate the results of the audit for a site with those obtained during the previous audit. In order to optimise the added-value for the sites, in 2009, the ERAMET group supplemented these audits with additional initiatives providing support, sharing best practices, training, use of Gap Analysis, etc.

The results of these audits partly serve as the basis for the Group's action plan and then (and above all) the sites' action plan for the following two years.

#### Health and Safety audits in 2013

In 2013, following specific requests from sites, the teams of auditors (always made up of the Group Health & Safety Manager and senior auditors such as the Medical Officer or the Safety and/ or Environment Coordinators) carried out Health & Safety or Health, Safety and the Environment audits at 10 sites:

- Health, Safety and the Environment audits at seven sites (Erasteel Champagnole, Erachem Comilog in Baltimore (USA), GECC in Chongzuo (China), ERAMET Norway in Sauda (Norway), Valdi in Le Palais-sur-Vienne, Eurotungstène in Grenoble, and ERAMET Research in Trappes);
- Health & Safety audits at three sites (the Alloys Division's ADES Acciai distribution centre in Italy, SLN's Kouaoua Mining Centre in New Caledonia, and Somivab, a subsidiary of Comilog in Gabon).

Following these audits and before leaving the site, the audit team and Management draw up the guiding principles of the Action Plan to deal with any significant anomalies observed, highlighting, if appropriate, any of the other sites' Best Practices that the site could adopt.

#### HSE Seminar (Health, Safety and the Environment)

The 2013 international HSE (Health, Safety and the Environment) seminar on "People's Involvement", scheduled to take place in Lille in November, could not be held.

The previous seminars were held:

- from 4 to 6 October 2011 in Deauville, on "The sites, the Divisions and ERAMET group face-to-face with their responsibilities regarding chemicals";
- from 13 to 15 November 2012 in Paris on "Risk Control within ERAMET".

In general, these seminars offer a great variety of first-hand accounts, feedback and interactivity and enable the Group's HSE teams to exchange ideas and share their Best Practices and also their difficulties, while drawing up the framework for the action plan to implement.

#### **Special Training Programmes**

In addition to the "prescribed" training programmes (handling fire extinguishers, driving handling equipment, basic life-saving skills, prevention of physical activity-related risks, etc.) in recent years the ERAMET group has developed special training programmes for supervisors and/or operators.

The purpose of these modules is to explain and inform the Company's employees about a certain number of topics such as shared definitions for frequently used terms (accident, incident, danger, risk, etc.), accident occurrence methods (risk tolerance), roles and responsibility ("ordinary" and criminal) of supervisors, the rights and duties of operators, statistics, the increasing incidence of behavioural causes in the occurrence of accidents, management tools (BIRD pyramid, safety minute, audits, etc.), occupational health and safety management systems, Prevention Plans for external companies, the employer account, etc.

Since 2010, ERAMET group has organised a training course for instructors in order to multiply the number of modules provided within the sites (formalising a H&S training module for managers which can be customised for each Division, putting together teams of instructors in New Caledonia, France, Gabon and the United States).

In 2011, the two-day H&S training course was successfully given to all the members of the supervisory staff at the SLN (about 600 managers) then to members of the supervisory staff at the two Valdi sites and the sites of Erasteel in France (Commentry, Champagnole and Maine-Montparnasse tower), Sweden, the United States (grouped together in Baltimore) and China (Tianjin).

In 2012, the range of training courses was expanded, in coordination with IMaGE (ERAMET group's Management Institute), to include:

- a training module for operators, developed at the request of the SLN, and given to all operators;
- a training module for Top Managers (Directors of sites or of entities of the same nature).

In 2013, the two-day (Manager) training courses for Engineers at ERAMET Research in Trappes and the supervisory staff at Comilog in Moanda were continued. At the beginning of December, the first IMaGE module for Executives was launched.

#### Workstation Risk Analysis

Workstation risk analysis is the mainstay of a properly prioritised prevention policy. Since 2010, stages have been set every year to list all the existing workstations and analyse and assess the risks at the workstations identified. The goal of analysing and assessing risks on 100% of the workstations by 2013 has been achieved (97%), taking into account the integration of new sites into the scope of this initiative.

#### Safety campaign

Since 2011, ERAMET has organised a safety campaign on a specific theme at each of the Group's sites or entities.

Starting on 20 June 2011 and lasting two or three weeks, the campaign focused on risk prevention in handling operations, the most common cause of accidents in the Group (almost 40% of our lost time accidents). A satisfaction survey revealed the strong points and the points that needed to be improved to ensure that the 2012 campaign (from 10 to 21 April 2012) on "working at heights" was even more pertinent.

In 2013, the campaign ran from 8 to 20 April and was on the Lock out/Tag out process. There were three posters, a comic strip and a short video to accompany the PowerPoint presentation prepared by an in-house working group. The documents, available in ten languages, were greatly appreciated by the leaders because of their instructive nature and the parallel they drew with circumstances in our private lives. The assessment survey revealed the need for these campaigns and put forward two themes for 2014: confined spaces and road risks.

#### **Sharing experience**

Giving feedback and sharing experiences are essential aspects of risk management because by methodologically analysing accidents and malfunctions we can adjust our understanding and perception of risks and take steps to make the necessary corrections and improvements. They are also learning tools for everyone in the Company involved in operations or risk prevention, calling upon everyone to identify avenues of progress and to implement them, taking account of the various technical, human and organisational aspects.

In 2012 and 2013, ERAMET formalised and expanded experience sharing by setting up:

- a monthly feedback session at Group level, usually based on a serious or significant accident that occurred in the previous month, the conclusions of which are passed on to the H&S network and 250 Group managers;
- systematic feedback drawn up by sites following accidents, incidents, or the implementation of good practices;
- the launching of a specific campaign on "Handling" in the Alloys Division (duration: one year) during which each site issues good-practice sheets on techniques used, efficient procedures and organisations, etc.

#### Preventing difficult working conditions

In 2010, the French law on retirement made it compulsory to prevent difficult working conditions.

Management from ERAMET met with Trade Union Organisations during the four negotiation meetings held in 2011 on the prevention of difficult working conditions. Discussions revealed that the in-depth analysis of employees' situations, as required by the law, and then the implementation of individual follow-up sheets involved a considerable amount of work. In view of this essential preliminary work, a consensus was reached to first of all establish a Group Action Plan on the prevention of difficult working conditions.

The Action Plan concerns all the personnel in the ERAMET group in mainland France. It aims to reduce and even remove difficult working factors resulting from notable physical stress or a harsh physical environment, especially those related to handling and noise. This three-year Action Plan (2012-2014) includes the following initiatives:

 harmonise the methods and tools used to diagnose difficult work in the Company;

#### SUSTAINABLE DEVELOPMENT

5.8. HEALTH AND SAFETY

- analyse the risks at each workstation;
- establish a map indicating workstations where noise is a major risk factor;
- establish a map indicating workstations where handling is a major risk factor;
- acquire and implement a software programme to assess risks and track exposure (Evaluthyss). Set up the individual follow-up sheets in this software programme;
- take action on 10% of workstations exposed to noise;
- specific training for operators on the prevention of factors that lead to difficult working and occupational risks (handling, movements and postures, etc.);
- tutorial initiatives: identify employees approaching the end of their careers who, in senior employee interviews, expressed their wish to act as tutors alongside the training and risk prevention initiatives;
- interview all employees in the second part of their careers.

# 5.8.2. Health and Safety \_\_\_\_\_

ERAMET group gives top priority to the health and safety of its employees. This concern applies to all staff, whatever their status, and also to employees from outside companies, visitors and people living close to the operating sites.

The main objective of the Group Health Policy adopted in 2007 is to control health hazards.

ERAMET is determined to gain a detailed, in-depth understanding of all the dangers and potential health hazards related to its activities. The Group also wishes to play an active role in initiatives that promote public health.

The Group's Medical Officer is in charge of coordinating this Health Policy. In its Sustainable Development policy of 2010, ERAMET reasserts its desire to protect its employees and control the impact of its industrial processes on health and the environment.

# **5.8.2.1.** The Guiding Principles of the Health Policy

- Reducing work-related health risks or the health impact of ERAMET products or industrial activities by focusing on the involvement of all concerned and in liaison with occupational health specialists, management and personnel representatives.
- Complying with local regulations, applicable rules and health standards drawn up by the Group.
- Promoting individual and company responsibility in safeguarding health via clear, transparent information on health hazards and suitable preventive measures.
- Actively contributing to scientific work aimed at a better understanding of products and processes and their potential health

hazards and ensuring the work leads to concrete preventive measures.

### **5.8.2.2.** Top priority health initiatives

- Making health and working conditions a decisive factor on a day-to-day basis and at all management levels in the same way as safety and the environment.
- Drafting, distributing and applying the standards, guidelines and procedures resulting from the objectives of the Group's Health Policy.
- Preparing a health action plan for each unit making it possible to respond to risk assessments. Providing the most suitable work equipment to protect health, informing employees and raising their awareness of the risks, and listening to staff representative bodies are all aspects of this approach.
- Setting up a monitoring system to quickly detect high-risk situations and recognise health problems that may be related to work. Measuring exposure levels (atmospheric measurements) and ensuring medical monitoring, in line with current scientific data, are essential for occupational exposure tracking.
- Continuing the scientific watch and benchmarking on new health warnings and best practices. Actively contributing, particularly within professional organisations, to the development of scientific knowledge on the impact that the Group's activities and products have on health.
- Developing a policy to combat addictive behaviour.
- Adopting an analytical approach to identify the workstations that cause lumbago and musculoskeletal disorders in order to make the workstations in question more ergonomic.

### 5.8.2.3. The resources implemented

The Group's health-related initiatives are overseen by the Group Medical Officer and implemented in coordination with the Divisions and sites, through a network of healthcare professionals (doctors, nurses) and HSE (Health, Safety and the Environment) coordinators. These preventionists meet regularly at HSE seminars and "professional clubs". In 2013, a specific health seminar brought together the Group's doctors and nurses; the subjects discussed included biometrology, chemical agents, psychosocial risks and emergency management.

The Group's Medical Officer is also responsible for putting in place strategies for knowledge / skills sharing between the health units and the safety and/or environment units and for making the main operational managers aware of these initiatives. He acts as an interface between occupational health and environmental health aspects and helps draft the health sections of impact studies with regards existing facilities and planned facilities. Health & safety coordinators have been put in place at the Manganese and Alloys Division to facilitate the operational implementation of the Group's action plans. The Medical Officer is called upon to approve the Group's Product Safety Data Sheets.

The implementation of the Psychosocial Risk Prevention programme continued in 2013. After the surveys were finished and the results were interpreted, and after the training initiatives (90% of the managers had been trained in 2012) were completed, action plans were proposed by each French and New Caledonian site.

# **5.8.2.4.** Annual and multi-annual objectives within the framework of the Sustainable Development Policy

As part of the implementation of its Sustainable Development policy, the Group has defined annual and multi-annual objectives that integrate health aspects. These objectives were updated for 2014-2016.

# 5.8.2.5. Tangible initiatives

The Group's determination to ensure early detection of health problems that may be related to production processes has led to improvements in monitoring employees' exposure to chemical risks, in particular, atmospheric measurement and biometrology. The traceability of exposure in certain establishments is ensured. Efforts to implement these practices at other sites continued in 2013.

Scientific monitoring, benchmarking of new risks and best practices are developed thanks to involvement in professional organisations, national and international conferences and enable occupational health and environmental health to be monitored. All this work enhances the health and safety standards established and shared by the Group.

Guidelines on the medical surveillance of workers potentially exposed to manganese, based on the work carried out by the International Manganese Institute (IMnI), are being implemented, with priority given to Norway and the USA.

#### Knowing the products

ERAMET continued to contribute to work carried out by professional bodies on the enhancement of knowledge.

The work carried out at the IMnI (International Manganese Institute) is scheduled to last five years and focuses on watching for changes to international regulations and anticipating the changes, developing acceptable occupational exposure threshold values and enhancing our knowledge on health, especially via research programmes on neurotoxicity and reproductive toxicity.

The Nickel Institute and NIPERA continued to enrich our knowledge and assess the toxicology mechanisms of nickel compounds.

#### Taking action at sites

Fully aware of its social responsibilities, wherever necessary, ERAMET takes part in the health policies of the countries in which it operates and near its facilities:

- Through its medical, surgical and maternity units, Comilog's Marcel Abéké hospital in Moanda Gabon provides healthcare to the company's employees, to their beneficiaries and to some of the population. Specialist services (in gynaecology and paediatrics) are also provided. Repair work on existing premises and renovation of the operating theatre continue. The radiology department was renovated and equipped with a new machine. A room to deal with serious emergencies (resuscitation room) was installed and an emergency doctor's position (24 hours-a-day) was created in 2012.
- In Moanda once again, an independent occupational healthcare department was set up in 2013 and a full-time occupational health physician was recruited.
- In Owendo (Gabon), Setrag has a dispensary which provides consultations for employees and their beneficiaries thanks to the presence of four medical officers, two of whom are occupational health officers.
- These two establishments have laboratories and provide the medicines needed for treatments. Setrag's care facilities in the stations along the railway line are the subject of agreements with local doctors.
- In 2006, a programme called the "GAMMA Plan" was launched in Gabon to combat AIDS and this initiative continues. Intended for employees of Comilog, Setrag and Sodepal together with their families, it includes information campaigns, health education, preventive action, and support for those infected by HIV.

The voluntary and anonymous screening campaigns continued in 2013, with an average of 100 people a week receiving awareness-raising training (including trainees), 20% of whom were tested. Since 2006, almost 2 million condoms have been handed out to employees and their families. Staff and members of their families who wish to be tested, or who have HIV, are supported by the Company, at Comilog and at Setrag, under partnerships with Government health organisations and in accordance with the National Plan to combat AIDS. Three hundred and fifty people concerned by HIV are given health care support and kept in employment.

Information campaigns and grassroots initiatives continued in 2013 in the workplace and outside (housing estates, high schools, public places, etc.). A variety of events were organised based around the theme of AIDS, e.g. radio commercials, sporting events (football, basketball, tennis) and cultural events (theatre).

Following the recommendations of AEDES (European Agency for Development and Health) and in the framework of the 8<sup>th</sup> FED SYSMIN, Comilog is going to conduct a series of epidemiological studies in Moanda in 2014, in order to assess the potential impact of its mining and industrial activities on the health of surrounding populations. 5.9. HUMAN RESOURCES

To ensure these studies are properly carried out, careful preparatory work was conducted throughout the whole of 2013: scientific assessments, determining the types of studies and measurements, methodology, invitation for tenders and choice of service providers. All the stages were approved by Gabonese Ministry of Health and by the Moanda Consultation Framework that brings together all the stakeholders.

- The HCVP programme (Health Check and Vaccination Program, formerly called "Go Care") has been running since 2008. Almost 400 people in the Group benefit from it. It provides travellers and ERAMET expatriates with very comprehensive medical surveillance that covers travel-related problems. This programme now includes personal, confidential electronic files which employees can access from anywhere in the world via the Internet. At the same time, the Group's Safety Manager and Medical Officer have started to give health & safety training sessions.
- Initiatives aimed at managing Carcinogenic, Mutagenic and Reprotoxic (CMR) products and Hazardous Chemical Agents were continued. In France, all the sites acquired CHEMHYSS, the software programme that manages chemicals. The Group's main priorities remain the same: finalise inventories, establish characterisation of exposure situations, a policy of introduction and substitution, traceability. Moreover, an e-learning training programme has been chosen and will be rolled out in 2014.

#### **5.8.2.6.** Asbestos-related Risks

As regards environmental asbestos, the Group continued to work with other mining companies in New Caledonia to ensure that the new national rules introduced in May 2011 are implemented in a consistent, coherent manner. An "asbestos committee" was set up including a sector on healthcare which groups together the doctors and healthcare professionals from the companies concerned. It aims to reach a consensus on medical surveillance and post-occupational monitoring of all the potentially exposed employees.

At the Weda Bay Nickel project in Indonesia, ERAMET adopted the same approach, despite the absence of statutory obligations.

The Group has a central in-house unit which tracks all cases of occupational illnesses and, in particular, those related to asbestos. It can prove that none of its industrial sites have ever produced or transformed asbestos nor sold materials that are fully or partly made of asbestos. This material has never been a raw material for the Company but only a constituent of some of the materials used in its heat transfer equipment.

For example, heat-resistant materials containing asbestos, used in the past at the Les Ancizes site, represented less than 1% of all heat-resistant materials used at the site.

In line with applicable regulations, most notably in France, technical asbestos audits were carried out by approved inspectors at all the Group's industrial sites, and the audit findings and recommendations have been used to prepare detailed action plans.

A survey carried out at ERAMET's French sites (including New Caledonia) covering the past five years (from 2008 to 2013) revealed 90 cases of asbestos-related occupational illnesses, primarily pleural plaques and pleural thickening (80%), 23 of which were recognised and attributed to Group companies. 19 actions for gross negligence were filed during this period. Provisions for asbestos-related risks have been recognised based on the compensation typically awarded in such cases.

# **5.9.** HUMAN RESOURCES

### 5.9.1. The Group's Human Resources Policy \_\_\_\_\_

The ERAMET group feels that the men and women in its community are the leading factors that drive its performance. They are responsible for the strength of the customer relationship, which is at the heart of the Group's business development. They are responsible for future growth driven by enhanced technological leadership and on the most comprehensive possible demonstration of their managerial and technical capabilities. Lastly, they are responsible for controlling the management and operational excellence in each Division. The ERAMET group's Human Resources strategy is an adaptation of the strategy adopted by the Group to deal with its challenges. It is based on six main strategic objectives:

- identify, attract, retain and develop talented people;
- develop and recognise performance that creates value;
- strengthen managerial skills, define and promote the role of management;
- help implement an employee-friendly working environment that complies with Group values;
- develop and promote constructive relations with social partners;
- develop the operational excellence of the HR function.

While ERAMET has a very marked international dimension (more than 63% of its workforce works outside mainland France), the Group also relies on subsidiaries which are highly present and well-known locally. The Group's human resources management is thus decentralised but it is still based on unifying principles and tools that are shared by all Group companies and sites.

ERAMET group's social policy clearly reflects its desire for:

 strong Group management involvement (information and discussion seminars, development courses, meetings with Group and company managers, intra and inter-divisional career development and mobility);

- employee involvement in the life of their Company and Group via regular, clear information (regularly distributed company and site newsletters, Group intranet, induction days for new recruits);
- dialogue with social partners, both formally (remuneration policy, training, welfare and employment management) and on a day-to-day basis on sites.

# 5.9.2. Employment \_

# 5.9.2.1. Total workforce and geographic breakdown

#### Workforce on 31 December (open-ended and fixed-term contracts)

On 31 December 2013, the Group employed 14,026 employees in 21 countries, compared with 14,353 employees on 31 December 2012, representing a reduction of 2.27%.

	2013	2012	2011	Breakdown in 2013
France	5,368	5,321	5,181	38%
Europe excl. France	1,370	1,392	1,431	10%
The Americas	693	732	713	5%
Africa	3,331	3,188	2,908	24%
Asia	1,045	1,476	2,215	7%
Pacific	2,219	2,244	2,301	16%
TOTAL	14,026	14,353	14,749	100%

#### **Total workforce**



# **5.9.2.2.** Breakdown of total workforce by Division

Between 2012 and 2013, the listed workforce remained more or less stable in the Nickel Division and Alloys Division and dropped 6% in the Manganese Division. Over the past few years, the Holding company's workforce has increased. This is due to the fact that the workforce has increased at the Group's Research Centre (+18% in 2013), the teams working on the Lithium project in Argentina have grown (+29%) and the teams dedicated to IT projects have expanded.

	2013	2012	2011	Breakdown in 2013
Holding company	514	476	422	4%
Nickel Division	2,974	2,999	3,061	21%
Manganese Division	5,673	6,021	6,377	40%
Alloys Division	4,865	4,857	4,889	35%
TOTAL	14,026	14,353	14,749	100%

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# **5.9.2.3.** Breakdown of total workforce by type of employment contract

Out of the 14,026 Group employees on 31 December 2013, 13,079 (i.e. 93%) had open-ended contracts and 947 had fixed-term contracts.

The technical nature of mining and metallurgical jobs calls for a long period of professional training. Very little use is made of short-term contracts, which represent about 4% of the workforce outside Asia.

46% of the fixed-term contracts concerned Asia where the use of fixed-term contracts is more widespread and corresponds to modes of management that are specific to these countries.

Employees on fixed-term contracts within the Group have the same social entitlements and benefits (insurance schemes, healthcare costs, profit-sharing, etc.,) as employees on open-ended contracts.

Moreover, the employment of temporary staff has risen sharply, by approximately 142%, but it mainly concerns the Grande Côte project in Senegal which employs 77% of temporary staff (2,010 temporary staff on 31 December 2013).

	2013	2012	2011	Breakdown in 2013
Open-ended contracts	13,079	13,018	13,106	93%
Fixed-term contracts	947	1,335	1,643	7%
TOTAL	14,026	14,353	14,749	100%
Temporary staff	2,627	1,083	1,271	
Temporary staff in full-time equivalent	2,557	902	1,065	

# **5.9.2.4.** Breakdown of total workforce by socio-professional category

The concept of socio-professional category in the French sense of the term is difficult to transpose to every country in which the Group operates. However, companies located in mainland France, New Caledonia and Gabon share the same concepts. Therefore, it seems appropriate to use the following definitions:

Management:	executives, managers, post-graduate staff, civil engineers (white collar).			
Supervisory staff:	clerks, technicians, foremen (white collars			
Workers:			(blue collars).	
	2013	2012	2011	
Workers	52%	55%	55%	
Supervisory staff	34%	32%	32%	
Management	14%	13%	13%	

# 5.9.2.5. Average age and age pyramid

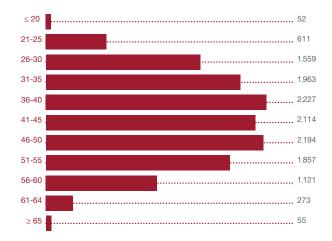
The average age was 43 on 31 December 2013.

	Workers	Supervisory staff	Management
Total	41	43	45

Employees over 50 accounted for 27% of the total workforce and those aged 30 or under a little over 15% of the total workforce.

ERAMET keeps a close watch on changes to the managers age pyramid, in order to anticipate the retirement of its key members of staff. Since the People Review process was set up locally, in Divisions and at Group level, ERAMET has access to updated succession plans every year for all its key positions.

#### Group age pyramid



### 5.9.2.6. Recruitment

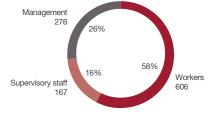
Companies in the Group recruited 1,330 employees in 2013 (excluding transfers between companies), down 20% compared with 2012. Since the summer of 2013, the Group has stopped recruiting managerial staff from outside the Group and has actively encouraged internal mobility.

The breakdown of new employees by geographic region (excluding transfers between Group companies) is as follows:

	2013	2012	2011
France	503	621	554
Europe ex. France	115	266	69
The Americas	145	62	156
Africa	359	421	133
Asia	126	122	182
Pacific	82	91	142
TOTAL	1,330	1,665	1,355

The recruitment of employees on open-ended contracts can be broken down into the following professional categories:

#### Recruitments on open-ended contracts 2013



Since 1 January 2013, ERAMET pays close attention to the recruitment of employees on open-ended contracts aged under 30 and over 55.

	Recruit on open-ended contr	ment of staff racts in 2013
	< 30	> 55
TOTAL	306	26
Total percentage of employees recruited on open-ended contracts	29%	2.5%

#### 5.9.2.7. Departures

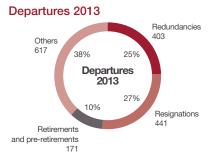
The total number of departures in 2013 reached 1,632, including 171 retirements (10% of departures) and 441 resignations (27% of departures). More than one third of departures resulted from the end of fixed-term contracts.

	2013	2012	2011
France	439	469	358
Europe ex. France	134	121	64
The Americas	199	63	197
Africa	208	114	81
Asia	551	788	316
Pacific	101	134	123
TOTAL	1,632	1,780	1,144

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#### 5.9. HUMAN RESOURCES

Breakdown of the reasons for the departures in 2013:



The table below gives an indication of employee turnover within the Group (excluding end of fixed-term contracts and transfers) by geographic region. The high turnover rate in Asia is mainly due to the reduced workforce at the Guilin plant in China.

		Europe					
	France	excl. France	The Americas	Africa	Asia	Pacific	Total
2013	4.3%	5.6%	13.7%	1.4%	60.0%	4.0%	7.8%

#### Work organisation \_\_\_\_\_ 5.9.3.

#### 5.9.3.1. Working hours

The types of working-hour organisation vary by company, their type of business and locations and are defined to match business needs and employee preferences as much possible. Wherever it operates, the ERAMET group complies with applicable legislation on working hours. For information, working hours are as follows:

- in mainland Fra
- in Norway: 37 ł

## 5.9.3.3. Work

ance: 35 hours per week;	
hours 30 minutes per week;	
k Organisation in 2013	

		Europe					
	France	excl. France	The Americas	Africa	Asia	Pacific	Total
Employees working daytime hours	3,075	806	280	2,140	545	1,635	8,481
Employees working on shifts	2,293	564	413	1,191	500	584	5,545
TOTAL	5,368	1,370	693	3,331	1,045	2,219	14,026

8,481 employees worked daytime hours, i.e. 60% of the total workforce. The remaining 5,545 employees, i.e. 40% of the workforce, work on shifts.

#### **5.9.3.4.** Absenteeism in 2013 (data from the CSR survey)

In 2013, the rate of absenteeism was 3.25% (1). In the Group's French companies, it ranged from 0.79 to 10.7% depending on the sites. On average, the rate was 5.37% for Europe, 1.87% for the Americas and 2.0% for Asia. In New Caledonia, the average rate was 4.5%. In Gabon, it was 1.37%.

(1) Excluding the sites of Aubert & Duval Gennevilliers, Airforge, Somivab, Transmet.

in New Caledonia: 37 hours 50 minutes per week;

■ in China, Gabon, the USA, Sweden: 40 hours per 5-day week.

## 5.9.3.2. Part-time workers

On 31 December 2013, 1.8% of ERAMET's total workforce were employed on a part-time basis, i.e. a total of 251 people. Two-thirds of the part-time employees were women.

76% of these part-time employees, i.e. 188 people, work in France, representing 3.5% of the workforce in mainland France.

# 5.9.4. A fair and competitive remuneration policy \_

Employee expertise and level of responsibility are remunerated with a fixed salary in line with past experience and the practice of each business in the sector. The Group's remuneration policy aims to be equitable and competitive but also tailored to the specific local factors of the country in which activities are carried on.

One in two executives has variable individual remuneration arrangements based on annual quantitative and qualitative objectives. Moreover, these arrangements were reviewed at the end of 2012, to gradually increase the number of people concerned, while reinforcing the system to assess performance via a common framework for setting and assessing annual objectives.

Remuneration arrangements based on collective results may exist in some countries; they can be legal arrangements (profit-sharing schemes in France, etc.) or voluntary arrangements set up by the Group according to local practices (incentive plans based on company results, collective saving plans). Profit-sharing schemes are often based on negotiated criteria related to safety, the environment and the Company's activity. Depending on the arrangements in force, these bonuses can be invested in saving schemes offering advantageous terms. In 2013, one in two employees was entitled to variable collective compensation.

Surveys on remuneration are carried out each year to assess the competitiveness of the remuneration packages offered by the Group in relation to those offered by companies working in the same business sectors.

In each country in which the Group operates, the remuneration policy is designed to reward performance while adapting to the local environment.

# 5.9.4.1. Personnel – payroll charges

Salaries account for the main part of employee remuneration.

In 2013, personnel costs for the ERAMET group stood at  ${\rm €695}$  million, up 3.3%. In 2012, they amounted to  ${\rm €673}$  million.

In 2013, the average cost of personnel, excluding temporary staff, was approximately  $\in$ 49,700.

Over 10,800 employees, i.e. 77% of the workforce, had their fixed salary increased in 2013, either via a general increase or via an individual performance-related increase.

# 5.9.4.2. Employee benefits

In line with Group agreements on staff provident schemes for major risks and unforeseen events, the ERAMET group wants all mainland France employees to benefit from supplementary healthcare cover. On July 9, 2007, ERAMET and the five unions represented in the Group in France signed a Group healthcare agreement. The principles underpinning the negotiations are of greater coherence, responsibility and solidarity:

- coherence across ERAMET production sites in France to favour a sense of equity;
- responsibility of the employer and employee in their shared desire to protect the health of the family;
- solidarity of employees and sites.

Thus, as from 1 January 2008, all mainland France production site employees had joined this scheme, which offers high-quality benefits.

In 2012, negotiations were successfully pursued, enabling benefits in France to be harmonised and improved and contributions to be reduced for some employees.

The scheme is jointly financed by employees and ERAMET group companies, which make 54% of the contributions. It covers the employee and dependent family members.

Arrangements for healthcare cover, insurance cover and pensions are regularly audited and the results analysed so that optimal cover can be offered to the Group's employees.

Provisions have been recorded for all pensions, severance compensation, medical coverage, staff provident schemes and other benefits for working or retired personnel in line with current practices in each country.

Provisions are also recorded for the portion not covered by insurance companies or pension funds, particularly for US and Norwegian companies (generally defined-benefit plans). The liabilities under these specific plans are in the USA (42%), Norway (17%), New Caledonia (7%) and in France (very old specific plans which are now closed). The other plans are defined contribution plans whereby employer contributions are expensed in the period to which they relate. Details of the main assumptions used to calculate these liabilities are set out in the consolidated financial statements.

Finally, a supplementary pension plan for a group of managers has also been fully provided for. The estimated actuarial value of the plan for staff working on 31 December 2013 was €43.4 million.

# 5.9.4.3. Employee share ownership

In an effort to develop a sense of Group belonging worldwide and to share the value created, in 2009, the ERAMET group decided to implement worldwide bonus share plans, called EraShare. EraShare is a programme designed to develop employee shareholding within the ERAMET group in the 20 countries where the Group is represented. Therefore in 2009, the ERAMET group implemented a democratic plan to allocate bonus shares, which consisted of granting 5 bonus shares to each Group employee, regardless of the country, Division, job or level of responsibility. 5.9. HUMAN RESOURCES

Since July 2011 in France and Italy, and since July 2013 in other countries, employees have been entitled to all rights associated with ERAMET shares. These rights include voting rights and dividend entitlement.

An information leaflet on EraShare was also prepared in the nine languages used within the Group to support the worldwide implementation of the arrangement.

Four new plans to allocate bonus shares were implemented in 2010, 2011, 2012 and 2013 involving the same scope, and allowing two extra shares to be allocated to over 14,000 employees each year.

### 5.9.4.4. Employee profit-sharing scheme

In mainland France and New Caledonia, discretionary profitsharing agreements are regularly negotiated and signed with the social partners. They supplement any regulatory provisions on profit-sharing. The discretionary profit-share is paid to employees with over three months' service on 31 December broken down into a fixed standard amount and a portion that depends on the reference gross annual remuneration. It can represent up to 15% of the wage bill of the company in question. All the discretionary profit-sharing agreements for the French sites were renegotiated in 2008 in order to raise the maximum discretionary profit-sharing from 12 to 15% of payroll.

In 2013, seven of the Group's French companies paid out the profit-sharing amounts with respect to 2012. Thus more than  $\notin$ 3 million was paid to the beneficiaries concerned.

Equivalent provisions in Sweden are based on the ratio of total payroll to profit.

# **5.9.4.5.** Employee savings plan

In mainland France and New Caledonia, ERAMET group employees can sign up to a Company Savings Plan to set up salary savings. The sums paid under mandatory and discretionary profit-sharing schemes may also be paid in, as well as voluntary payments made monthly or on a one-off basis by employees. Group companies participate in the savings plan through a top-up to the sums paid by employees. The arrangements for paying the top-up vary from company to company.

In 2009 and 2010, the Group took steps to centralise saving account operations, via a call for tenders, in order to improve the quality of services, logistics and monitoring. The choice of placement made available to our staff was also reorganised and extended. The FCPE (*Fonds Commun de Placement d'Entreprise*) mutual fund is now available to all the Group's employees in France. A range of diversified multi-enterprise FCPE mutual funds, reserved for Group employees and based on the existing setup, has been developed with an independent management company and implemented in the Group. Alongside these projects, the Group has worked on the design and implementation of a PERCO (*Plan d'Épargne Retraite Collectif*) collective pension fund, with the social partners which obviously benefitted from the progress made in the logistics and financial management of the saving plans in the Group.

On 31 December 2013, 5,800 employees and former employees of ERAMET in France were members of an Employee Savings Plan, with total assets of about €62 million, i.e. approximately €10,700 per saver. In 2013, the Group's French companies paid approximately €2 million top-up money into the Employee Savings Plan (PEG) and the PERCO, i.e. an average of €1,000 for each employee who paid into the plan.

# 5.9.5. Comprehensive and constructive social dialogue \_\_\_\_\_

# **5.9.5.1.** Adapting to market trends and following competitiveness improvement programmes underpin social dialogue

2013 was a continuation of 2012, and market performance once again varied greatly between the Group's Divisions and also within each Division.

The Nickel Division saw a slow but steady fall in the nickel prices, which was particularly marked in the second half of the year. The Manganese Division maintained a good level of production of manganese ore at satisfactory prices, while the industrial production of manganese alloys was effected by a drop in prices. The Alloys Division continued to pursue its improvement objectives in the area of superalloys but encountered problems in the market for high-speed steels.

In this context:

- Local Management kept up regular and sustained discussions with their social partners on the economic situation and its impact on results. In some cases, negotiations on the adaptation of working organisations and on redundancy plans took place;
- centrally, support was provided via regular exchanges to monitor these cases within the framework of the Group Works Council for French cases and more generally with members of the European Works Council board for transnational cases and cases outside of France.

Management teams at the Nickel Division coped with the excess capacity of supply and the drop in nickel prices in the following way:

- by intensifying efforts in the ongoing improvement phase introduced at the SLN (New Caledonia) in 2012, Within this context, Management at the SLN have entered into important discussions with social partners to draw up a list of actions to take which should lead to the negotiated implementation of a new Social Pact;
- moreover, the poor economic situation prompted the Nickel Division to delay its decision to invest in the Weda Bay project, by organising, after consulting its social partners, the demobilisation of teams working on the project, in Malaysia (Kuala Lumpur) and to some extent in Indonesia.

Teams in the Manganese Division managed their activities according to the contrasting situation of their different markets:

- In Gabon, where the mining activities are thriving, Comilog's Management and social partners finalised negotiations on measures to enable staff in Moanda to become home owners and started negotiations to reach a local agreement;
- in China, local Management adapted production capacities to the manganese alloys market in a context of strained labour relations;
- in the United States, Management teams in New Johnsonville and Marietta conducted important negotiations with the trade unions setting out the new terms of their "Labour contract".

Teams at the Alloys Division handled the very uneven order levels in the following manner:

- Erasteel continued adapting the size of its teams to the state of the powders and high-speed steel market (Sweden) and maintained the short-time working measures for activities related to tooling and conventional products (France);
- at Aubert & Duval, an analysis shared by Management and social partners enabled a new organisational framework to be put forward for the industrial site of Firminy (France), leading to the re-sizing of teams combined with a multi-skills development plan.

# **5.9.5.2.** Wage issues and purchasing power maintenance

In 2013, wage issues remained an important subject of negotiations in the Group. Wage negotiations were conducted by local Management teams and Trade Unions at the Group's subsidiaries. These negotiations enabled numerous agreements to be reached worldwide, including two Labour Contracts in the USA.

# **5.9.5.3.** Consolidating the social policy

In 2013, after being in place for several years, the Group's social policy was consolidated by making technical, statutory and legal adaptations to the measures in force, in consultation with the trade unions.

Thus, negotiations concerning mainland France led to:

- the Senior Staff Plan developed into a Generation Contract Action Plan,
- changes resulting from national inter-professional agreements, re-transcribed by the legislator, were anticipated, i.e. on governance, health expenses and adjustments to the difficult working conditions of employees at the end of their careers.

In the framework of joint monitoring committees, discussions with trade unions continued on subjects like employee savings plans, the quality of life at work, the prevention of difficult working conditions, gender equality, etc.

### 5.9.5.4. Training elected representatives

Lastly, the Group's various entities provided training in economics and negotiating skills for their elected representatives when they took up their term of office.

# 5.9.6. Employee development and career management \_\_\_\_

### 5.9.6.1. The process of career management

ERAMET pays particular attention to the development of its employees. Respecting people and developing their potential is one of the Group's values and is the first objective of its HR Strategy.

2013 gave ERAMET the opportunity to formalise and communicate about the process of career management and the roles and responsibilities of each person.

Indeed, following the manager commitment survey conducted in 2011, different multi-disciplinary and cross-departmental working groups were formed in order to propose concrete answers to the main issues raised by the managers.

One of the groups dealt with career management and drew up a "Career Development and Mobility Charter" aimed at determining everyone's roles and responsibilities (employee, Manager and HR) so that the development and evolution of people's careers can be promoted and encouraged in a clear, precise and shared framework using tools and processes that were the subject of Group information campaigns in 2013.

It emphasises the importance of encouraging employees to take initiatives and be proactive in their own career development.

A brochure called *"Parcours: Carnet de route"* (Careers – a roadmap) was widely circulated in 2013. It illustrated the Charter's essential points via examples and testimonies from employees.

This "Roadmap", given to all the Group's managers, explained the basic aspects of the Charter, described the tools and processes available for career development and above all showed the managers the vast range of opportunities and progressions possible via testimonies and examples.

To ensure this career development plan is implemented in an optimal manner, management processes are set up and coordinated throughout the year.

Annual Performance Reviews (APR) enable mobility wishes to be collected and taken into account at the monthly HR network meetings and the "People Reviews". These Manager Reviews are organised in the sites, Business Units, entities and countries.

#### SUSTAINABLE DEVELOPMENT

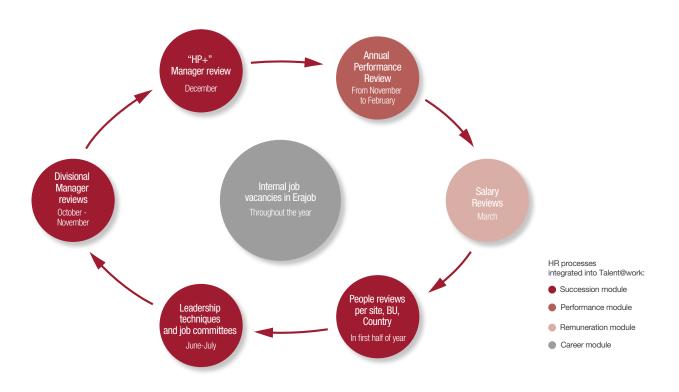
5.9. HUMAN RESOURCES

They aim to identify people who need to progress, to discover their potential, etc.

Other meetings are organised half way through the year, for each type of job (leadership techniques and job committees). These needs for progression are reviewed in a cross-departmental manner, and the medium-term needs and resources are assessed for each type of job. These exchanges are consolidated in each Division at the Divisional Manager Reviews held at the end of the year, thus enabling concrete suggestions to be made at the Annual Performance Reviews.

A review of executives and key Group positions was held at the end of the year with the COMEX.

Reports are drawn up and the Talent@Work Succession module is used to record these career prospects.



# **5.9.6.2.** A training module on recruitment / mobility for Managers and HR

To help Managers fulfil their role as career managers, a **training module on recruitment and mobility** was set up in the framework of **IMaGE**.

This module trains managers and HR to conduct **job interview using the same tools,** to choose people in an **objective** and **transparent** manner, to provide **good-quality feedback** to internal and external applicants.

This training is also based on the **"Recruitment" module** developed in Talent@Work which raises participants' awareness on subjects related to **non-discrimination.** 

# 5.9.6.3. ERAJOB 2.0 and the Career Module

ERAJOB (the Group's internal job exchange) was re-developed in 2012 on the Human Resources Information System "Talent@Work": ERAJOB 2.0. The job offers are available via the **Career module** so people can apply online, transfer a job offer to another person, set up alerts for specific jobs, etc.

These offers can also be advertised outside the Group if the job is not filled by internal resources, and posted on the job vacancies page of the Group's website.

Almost 300 positions were published in 2013 (open-ended contracts, fixed-term contracts, internships, international volunteers in business) and almost 2,800 applications were recorded in 2013.

Due to the Group's difficulties, a measure to freeze the outside recruitment of managers on open-ended contracts has been in force since July 2013. However, special dispensations can be obtained upon approval from the COMEX. A **Recruitment module** has also been developed in Talent@ Work, enabling HR and managers in charge of a recruitment to follow the process, from the moment a position is defined to the moment it is filled.

### **5.9.6.4.** HR Communications

The Group's Communications Department helped the HR Department create the Talents section for the Group's new website. This section aims to provide information on our HR policy, which is discussed, and on mobility and the development of Talents.

Testimonials (written or video versions) from employees on their careers are available, together with documents such as the Career Development and Mobility Charter and the "Roadmap" brochure. Users can now access job vacancies via the recruitment section.

ERANET, the Group's intranet site has been redesigned, thus enabling users to find these documents, testimonials, job vacancies (ERAJOB), IMaGE training programmes, etc. via the new tab "Human Resources"

This also gives greater visibility to the Group's careers management process.

These processes were also highlighted when managers were sent a dedicated E-Newsletter concerning the results of the commitment survey, and when an article was published in the Group's magazine ERAMET World.

# **5.9.6.5.** A position of International Mobility Specialist is created

To provide the best possible support to the 220 or so Group employees who work outside their country of origin (and those who would like to), a position of International Mobility Specialist has been created in the Group's Remuneration and Employee Benefits Department.

### **5.9.6.6.** Training

The different training modules designed within IMaGE (ERAMET group's Management Institute) are intended for Group employees:

- to encourage their integration by giving them the keys to understanding the Group's processes of organisation and management;
- to develop the Group's managers by giving them access to technical and managerial programmes;
- to encourage participants to exchange best practices;
- to build development courses.

Integrating and improving know-how, raising awareness of specific risks, sharing experience and best practices, developing a crosscompany approach at Group level, promoting the application of managerial methods and reaffirming the Group's expertise and its technical leadership – these are the challenges for the training programmes that are undertaken by the Group annually at all its sites.

As regards the vocational training of its employees, the ERAMET group prioritises training that focuses, firstly, on safety and, secondly, on the development of technical skills giving employees a better understanding of processes and their environment.

In 2013, IMaGE (ERAMET group's Management Institute) provided over 16,000 hours of training. Almost 1,363 people followed these various training programmes in 2013. This school now offers several training courses aimed at integrating and developing managerial staff.

It follows on from the creation of the AMI (Alloys Management Institute) in the Alloys Division.

IMaGE offers Group induction courses and also managerial development courses.

Courses aimed at improving managerial skills, designed in 2012, were widely rolled out in 2013. For example, two 2-day training courses on "Basic Management" and "Performance Based Management" were given. These training courses were given to 138 members of management in Gabon as part of an overall training programme. There is also a module on internal and external recruitment for both Human Resources Managers and other Managers. This programme accompanies the new Human Resources Information System module (Talent@Work) dedicated to recruitment and internal mobility, and promotes objective selection practices and applicant feedback. The importance of non-discrimination is also stressed to course participants.

As is the case every year, the ERAMET Discovery Days brought together almost two hundred participants from all over the world who had joined the Group that year or who wanted to learn more about the organisation of the Group, its major projects and its strategy.

More than 20 Group executives and managers attended the 10<sup>th</sup> session of the ERAMET Leaders Program lasting one week. Since 2006, 199 executives have taken part in this programme which allows them to create a network, improve their knowledge of the Group, discuss strategic development policies with senior management, etc.

In 2013, the executive development programme was organised once again. The ERAMET Executive Development Program is a twelve-day course given in English in partnership with Duke Corporate Education. It aims to enhance the participants' leadership skills and prepare them for their career within the Group. The second group to do this course followed the first session in Paris (5 days in the classroom in France) and went on a Learning Trip to India (7 days). These twenty ERAMET executives, from six of the Group's countries of operations, took part in this programme in 2013.

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As part of the Leaders Programme, IMaGE or AMI gave one-day introductory courses on project management culture to enable managers to share the same framework and vocabulary with regards the main concepts of project management. In 2013, a new Level 2 Project Management module was added to this programme to help managers understand project management tools.

In the same way, a one-day course on Benchmarking awareness was designed in 2011 and has since been rolled out. A module on expert interviews as part of Knowledge Management is also available.

In 2013, a training module on Continuous Improvement tools was also developed and will be rolled out in 2014.

New training modules were created in 2013 and were added to the IMaGE training catalogue. In particular, there are three modules on Safety at Work intended for operators, Managers and executives (see Chapter on Safety, 5.8.1.4 "Main spheres of action / Special training programmes").

About 500 people followed these modules in New Caledonia in 2013.

The module "Communicating and Presenting subjects orally" was another favourite in 2013.

Lastly, a training module designed for Group Purchasers called "Preparing for Purchasing Negotiations" was developed in liaison with a steering committee made up of purchasers from the Group's different Divisions. This e-learning module is the first of its kind and will be rolled out to its target group in 2014.

More particularly, within the Alloys Division, the AMI (Alloys Management Institute) provides specific training courses for managers at the Alloys Division to help them deal with the technological, economic and environmental changes affecting the various businesses and to help them achieve their development goals.

For this purpose and to help our managerial staff assume their responsibilities, more than 3,000 hours of training were given in 2013 (induction courses, basic management courses, personal development and time management courses).

At the same time, the Alloys Division provides sector-based courses adapted to each socio-professional category, each type of work station and each level of experience and expertise. Each course is accompanied by Health, Safety and Risk Control training.

Altogether, in 2013, ERAMET group employees received more than 376,000 hours of training, i.e. about 26 hours of training per employee for the year. In France, training costs in 2013 amounted to 3% of payroll expenditure, on average. They represented almost 5% of payroll expenditure in New Caledonia, 2.5% in Gabon and between 1% and 11% of payroll expenditure in the other countries where the Group operates.

Thus, more than 11,000 employees, i.e. 78% of the total work-force, received training in 2013.

#### 5.9.6.7. Performance monitoring

There are three aspects to successful mobility and career development:

- good performance in one's job;
- the existence of an opportunity;
- the desire to demonstrate mobility functionally and/or geographically.



Therefore, the Annual Performance Review (APR) is an important opportunity for employees to talk to their direct superiors about their performance, reaching their goals, determining the roadmap for the coming year and also their wishes as regards mobility.

The dedicated Talent@Work form is then completed with details from the APR. Thus, the details expressed are extracted and processed by the HR, as part of the People Reviews for example.

For several years, all members of Group management have had an Annual Performance Review, during which their performance is evaluated in relation to the goals set for the elapsed year alongside application of the values of the ERAMET group.

In 2013, more than 6,800 managerial and non-managerial staff had annual performance reviews. Indeed, many sites have started to extend the benefits of this system to non-managerial staff.

Moreover, the document used for the 2013/2014 Annual Performance Review (APR) has been modified to integrate the roll-out of a new Goal Management module. Indeed, following the commitment survey, and in an effort to better monitor and assess performance, the working group in charge of performance decided to implement this module which enables managers to follow the progress of goals set for their teams, adjusting them if necessary, and using this tool for mid-year reviews, etc.

The widespread use of the APR form in Talent@Work has now considerably improved access to information on staff mobility requests and ensured that these requests are better taken into account in career management and people reviews and has optimised the follow-up.

# 5.9.7. Equal opportunities – Measures to promote non-discrimination and diversity \_\_\_\_\_

#### 5.9.7.1. Ensuring gender equality

Currently, 15% of the Group's total workforce is female, and more specifically: 7% of operators, 25% of supervisors, technicians and workers and 22% of managers are women (compared with 19.3% last year).

% of women in total workforce	15%
% of women in managerial positions	19%
% of women hired on open-ended contracts in 2013	14%
% of women hired as managers on open-ended contracts in 2013	17%

All Group entities are striving to take initiatives to promote the employment of women even in jobs that, in the past, have usually been held by men.

Therefore, efforts are being made locally to encourage secondary and high school pupils and students to consider technical careers. Premises are being adapted to integrate the needs of female staff (changing rooms, etc.), and equal gender measures are being introduced in the collective agreements signed at many of the sites in mainland France. Moreover, Aubert & Duval was awarded the Diversity Label by Afnor for the implementation of a managerial process to prevent discrimination and promote diversity at its Heyrieux site.

Initiatives to prevent discrimination are also taken in the United States, at the ERAMET Marietta Inc. site for example, where a course on diversity and anti-harassment is given every year to raise awareness.

On 8 March 2013, on the occasion of International Women's Day, the SLN organised several initiatives to honour its female staff at Doniambo and at three mining sites.

Almost 200 of the 2,200 employees at the SLN are women. They are technicians, geologists, accountants, mining centre managers and even construction equipment drivers. The SLN wanted to take advantage of International Women's Day to highlight their involvement in the Company.

## 5.9.7.2. Life-work balance

The Group continued its efforts to raise team awareness on Psycho-Social Risks via the ZEPHYR Programme, in Mainland France. This programme was introduced two years ago. This matter is also addressed during the Annual Performance Reviews. Indeed, during this special annual meeting, some of the interview between the employee and his/her manager is devoted to the organisation of work, the workload and the life-work balance.

In this field, the Group also encourages a certain number of local initiatives of different natures but all aimed at promoting this essential balance: sabbatical leaves were granted to employees wanting to pursue personal projects, teleworking measures were introduced for employees encountering personal problems, measures to facilitate parenthood were also introduced at some sites: the organisation of working time, the allocation of CESU cheques (cheques for universal employment services) to pay for home helps (child-minders, homework helpers, cleaners, etc.).

An initiative taken by the Sandouville site should also be noted. Indeed, it played an active role in setting up a Company crèche which was inaugurated in October 2013 in Harfleur (France). To date, Sandouville has contributed to the creation of four "beds" or places. Six children are enrolled at the crèche, either full-time or part-time in the daytime, at staggered hours and on Wednesdays and during school holidays. This initiative helps promote the employment of women on shift work, given the long opening hours of this crèche which allows couples working on shifts to drop their child off between 4.45 a.m. and 9.15 p.m. Moreover, the crèche is located just 10 minutes from the ERAMET plant in Sandouville.

# **5.9.7.3.** Employment and integration of disabled people

ERAMET group strives to employ and integrate disabled people.

The Group employs 279 disabled people (data from the CSR survey). This figure is probably an under-estimation because regulations in some States do not allow the number of disabled people to be counted.

At most of the Group's sites, different initiatives are undertaken to encourage the employment of disabled people: adapting premises, access points and workstations, organising awareness-raising campaigns, funding hearing aids, contributing to organisations and associations that help disabled people and at Aubert & Duval in Les Ancizes, there is even a firm that comes to the site two days a month to provide support and enable disabled employees to remain in work.

Work is also subcontracted out to sheltered workshops and associations that employ disabled people. Many of the Group's sites also address the issue of accessibility to premises.

In Norway, workstations have been adapted for visually-impaired employees.

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In February 2013, the HR teams from Tour Maine Montparnasse and Trappes took part in the recruitment forum Jobekia dedicated to disabled people. This initiative is in line with a commitment made several months ago when the Group adopted a Charter on the Employment of Disabled People and distributed an information brochure to raise awareness on the subject "Discovering Disabilities".

In November 2013, a Handicap mission made up of representatives from the entities present in Paris and Trappes (ERAMET TMM (Holding and Nickel), ECM, Erasteel, Aubert & Duval, ERAMET Research, ERAMET Ingénierie, ERAMET International) organised various awareness-raising events during the Disabled People's Employment Week (a play followed by a debate to enable participants to better understand the specific aspects of everyday life and life at work, competitions, etc.).

The Handicap Mission undertaken by ERAMET group entities based in Paris (Maine-Montparnasse tower) and Trappes apply the measures set out in the law on Equal Rights and Opportunities, Participation and Citizenship of 11 February 2005. It was created in 2012 in order to make employees in the Group aware of the disability issues. It is made up of representatives of the entities' different departments (Health/Safety, HR, Communication, Purchasing). One of its objectives is to develop appropriate partnerships with companies that work in the adapted sector (catering services and meal trays, floral decoration, etc.).

ERAMET is a partner of *Officiel du Handicap*, an organisation made up of public and private players committed to promoting a better integration of disabled people in France (employment, sub-contracting, accessibility, technology, etc.).

## 5.9.7.4. Employing younger and older workers

In mainland France the Group's Management has signed an action plan related to the Generation Contract and it is committed to implementing inter-generational synergies. This plan expresses a desire to integrate young people and help them progress while at the same time putting the experience of older people to advantage and preserving their know-how. Quantitative commitments have been made and will be evaluated every year (20% of recruitments dedicated to young people, at least 10% of the workforce made up of older employees kept in work).

Across the scope of the Group, 57 people who are 10 years from the legal age of retirement were recruited (data from the CSR survey).

In 2013, the Group received over 1,411 young people on workbased training contracts (apprenticeships or professional training contracts) internships.

Together with 60 major groups, and within the framework of the AFEP (Association Française des Entreprises Privées), in 2013, ERAMET committed itself to the employment of young people. Indeed, the Group is a signatory to an initiative called "Jeunes et Entreprises" (Youth & Business).

The Group is particularly involved in the employment of young people on apprenticeships or work-based training courses and enables them to gain their first work experience. More than 450 young people were received into the Group in 2013. Moreover, in mainland France, measures have also been taken within the framework of the Generation Contract.

Furthermore, ERAMET has developed relations with educational establishments locally and nationally. This has led to various initiatives and partnerships: for example, numerous visits have been organised to more than 27 Group entities which have received pupils from nearby secondary and high schools, students from local universities and *grandes écoles*, teachers and professors. Thus, Aubert & Duval in Pamiers received more than fourteen visits of this type in 2013 (see Chapter 5.5.1.3 "Dialogue with educational institutions and support for education and training").

ERAMET takes part in many school forums in mainland France and in the countries in which it operates. This is an opportunity to present the Group and its different businesses, to talk to young people and advise them on the direction to take. Many of the Group's employees also contribute to the curriculum, most of them voluntarily, by presenting the Company or teaching about specialised technical fields. Some of these experts are also on school advisory boards or school boards of governors. During the Employment Forum held in Libreville Gabon in October 2013, ERAMET's stand, which had representatives from Comilog, Setrag, Somivab and Maboumine, received more than 100 visitors including the Prime Minister.

There are also scientific exchanges between some projects and the laboratories of some *grandes écoles* or universities and teachers.

With a great deal of support from the Trappes research centre (ERAMET Research) and its teams, the Group is very involved in partnership operations with some *grandes écoles*: ERAMET sponsors the 2015 class of students from the *École nationale supérieure de chimie de Paris* (Chimie ParisTech). It also has a long-standing partnership agreement with the *École centrale de Paris*; it helps fund study trips or options (ENSG, Montpellier University (Geology), Mines ParisTech (ENSMP Soil and Subsoil option), ECP (Energy option), etc.).

The SLN has a partnership with the preparatory classes at Jules-Garnier high school in Nouméa. The assistance provided by SLN is precious to these young Caledonians who go to mainland France to pursue their scientific studies. Within this framework, when the Kanak exhibition was put on at the *Musée du quai Branly* some students were invited to visit it and about twenty of these New Caledonians pursuing their scientific studies in France were invited to ERAMET's Head Office in Paris by the General Management of the Nickel Division and the Group's HR Department at the beginning of December 2013 to present the Group's activities and particularly the Research Centre and to chat with them during a cocktail buffet. In May 2013, ERAMET also sponsored the country-wide competition *"Faites de la Science"* (celebrating hands-on science) organised by the Universities of La Rochelle and Poitiers and sponsored by the French Ministry of Education, the Ministry of Culture and Communication, the Ministry of Higher Education and Research and by the Academy of Sciences. This competition aims to foster an interest in science among young people through concrete projects, to arouse their curiosity for scientific studies and develop a basic scientific culture in as many people as possible. 2,586 secondary and high school pupils in mainland France took part in this competition. The Manager in charge of school relations in the Group's HR Department was a member of the jury for the final round of this competition which was held for the eighth year.

# **5.9.7.5.** Observing the fundamental conventions of the International Labour Organisation and Human Rights

ERAMET complies with the regulations in force in the different countries in which the Group operates.

As the Group indicates in the Code of Ethics, ERAMET complies with the international standards of the International Labour Organisation, and more generally it complies with the principles of international law related to human rights. In particular, the Group bans the use of forced or child labour, whether directly or via its suppliers or partners and respects the freedom of association.

The Group also guarantees the fair treatment of all its employees in terms of professional equality by combating employment and job-related discrimination, seeks to prevent any physical harm to the people on its sites, and respects the moral integrity of all employees. The Group seeks to ensure good human relations within work teams. In particular, it undertakes to combat all forms of violence and promotes respect for others and warmth in professional relations. **5.10.** REPORT OF ONE OF THE STATUTORY AUDITORS, DESIGNATED AS INDEPENDENT THIRD PARTY ENTITY, ON THE CONSOLIDATED ENVIRONMENTAL, SOCIAL AND SOCIETAL INFORMATION PUBLISHED IN THE MANAGEMENT REPORT

# 5.10. REPORT OF ONE OF THE STATUTORY AUDITORS, DESIGNATED AS INDEPENDENT THIRD PARTY ENTITY, ON THE CONSOLIDATED ENVIRONMENTAL, SOCIAL AND SOCIETAL INFORMATION PUBLISHED IN THE MANAGEMENT REPORT

#### Year ended 31 December 2013

For the attention of the Shareholders,

In our capacity as Statutory Auditor of ERAMET SA, and designated as independent third-party entity, whose request for accreditation was deemed admissible by the French National Accreditation Body (COFRAC), we hereby present you with our report on the social, environmental and societal information presented in the management report prepared for the year ended 31 December 2013 (hereinafter the "CSR Information"), pursuant to Article L. 225-102-1 of the French Commercial Code (Code de commerce).

#### **Responsibility of the Company**

The Board of Directors is responsible for preparing a management report including the CSR Information provided by Article R. 225-105-1 of the French Commercial Code, prepared in accordance with the reporting criteria used by ERAMET (the "Reporting Criteria"), which are available on request at the Company's headquarters.

#### Independence and quality control

Our independence is defined by regulatory texts, the profession's Code of Ethics as well as by the provisions set forth in Article L. 822-11 of the French Commercial Code. Furthermore, we have set up a quality control system that includes the documented policies and procedures designed to ensure compliance with rules of ethics, professional standards and the applicable legal texts and regulations.

#### **Responsibility of the Statutory Auditors**

Based on our work, our responsibility is:

- to attest that the required CSR Information is presented in the management report or, in the event of omission, is explained pursuant to the third paragraph of Article R. 225-105 of the French Commercial Code (Attestation of completeness of the CSR information);
- to express limited assurance on the fact that, taken as a whole, the CSR Information is presented fairly, in all material aspects,

in accordance with the adopted Reporting Criteria (Formed conclusion on the fair presentation of the CSR Information).

Our work was carried out by a team of five people between 16 October 2013 and 12 February 2014, i.e. a period of around sixteen weeks. To assist us in conducting our work, we referred to our corporate responsibility experts.

We conducted the following procedures in accordance with professional standards applicable in France, with the order of 13 May 2013 determining the methodology according to which the independent third party entity conducts its assignment and, with regard to the formed conclusion on the fair presentation of the Information, with the ISAE (International Standard on Assurance Engagements) 3000<sup>(1)</sup>.

# 1. Attestation of completeness of the CSR Information

Based on interviews with management, we familiarized ourselves with the Group's sustainable development strategy, with regard to the social and environmental impacts of the Company's business and its societal commitments and, where appropriate, any resulting actions or programs.

We have compared the CSR Information presented in the management report with the list set forth in Article R. 225-105-1 of the French Commercial Code.

In the event of omission of certain consolidated information, we have verified that explanations were provided in accordance with the third paragraph of the Article R. 225-105 of the French Commercial Code.

We have verified that the CSR Information covered the consolidated scope, i.e., the Company and its subsidiaries within the meaning of Article L. 233-1 of the French Commercial Code and the companies that it controls within the meaning of Article L. 233-3 of the French Commercial Code, subject to the limits set forth in the methodological memo paragraph presented in the chapter 5 of the management report.

Based on our work and considering the aforementioned limits, we attest that the required CSR Information is presented in the management report.

(1) ISAE 3000 - Assurance engagements other than audits or reviews of historical information.

#### SUSTAINABLE DEVELOPMENT

# 2. Formed conclusion on the fair presentation of the CSR Information

#### Nature and scope of procedures

We held around ten interviews with the people responsible for preparing the CSR Information in the departments in charge of the CSR Information collection process and, when appropriate, those responsible for internal control and risk management procedures, in order to:

- assess the appropriateness of the Reporting Criteria with respect to its relevance completeness, reliability, neutrality and clarity, taking into consideration, when relevant, the sector's best practices;
- verify the set-up of a process to collect, compile, process, and check the CSR Information with regard to its completeness and consistency and familiarize ourselves with the internal control and risk management procedures relating to the compilation of the CSR Information.

We determined the nature and scope of the tests and controls according to the nature and significance of the CSR Information with regard to the Company's characteristics, the social and environmental challenges of its activities, its sustainable development strategies and the sector's best practices.

Concerning the CSR information that we have considered to be most important <sup>(2)</sup>:

for the consolidating entity, we consulted the documentary sources and held interviews to corroborate the qualitative information (organization, policies, actions), we implemented analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the data consolidation, and we verified their consistency with the other information presented in the management report; for a representative sample of entities and sites that we have selected <sup>(3)</sup> according to their activity, their contribution to the consolidated indicators, their location and a risk analysis, we held interviews to verify the correct application of the procedures and implemented substantive tests on a sampling basis, consisting in verifying the calculations performed and reconciling the data with supporting evidence. The selected sample represented on average 43% of the Group headcount and between 19% and 73% of the environmental quantitative information.

Regarding the other consolidated CSR information, we have assessed its consistency in relation to our knowledge of the Group.

Finally, we have assessed the relevance of the explanations relating to, where necessary, the total or partial omission of certain information.

We believe that the sampling methods and sizes of the samples we have used in exercising our professional judgment enable us to express limited assurance; a higher level of assurance would have required more in-depth verifications. Due to the use of sampling techniques and the other limits inherent to the operations of any information and internal control system, the risk that a material anomaly be identified in the CSR Information cannot be totally eliminated.

#### Conclusion

Based on our work, we did not identify any material anomaly likely to call into question the fact that the CSR Information has been presented fairly, in all material aspects, in accordance with the Reporting Criteria.

Neuilly-sur-Seine, 24 February 2014 One of the Statutory Auditors DELOITTE & ASSOCIÉS Alain Penanguer Partner

#### (2) Quantitative information:

**Social:** Total workforce and breakdown (by geographic zone, by type of contract, by sex, by socio-professional category); Recruitments and departures; Average age; Overall rate of absenteeism; Numbers of hours of training; Accidents frequency rate; Accidents severity rate; **Environmental:** Total energy consumption; CO<sub>2</sub> emissions related to energy; Total canalized dust; Chemical Oxygen Demand; Quantity of hazardous waste; Total water consumption.

#### Qualitative information:

Social: Compliance with the fundamental conventions of ILO and human rights; Health and Safety;

Environmental: Rehabilitation and restoration actions of sites; Mining environment: sustainable use of resources; Protection of biodiversity; Societal: Stakeholders dialogue; Outsourcing and suppliers; Sustainability in terms of chemical products.

(3) AD Issoire/Interforge (France), Comilog (Gabon), Setrag (Gabon), Erasteel Kloster (Sweden), Société Le Nickel (New Caledonia).

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# 6.1. 2013 CONSOLIDATED FINANCIAL STATEMENTS

### 6.1.1. Financial statements \_\_\_\_\_

### **6.1.1.1.** Statement of comprehensive income

(€ million)	Notes	FY 2013	FY 2012 Restated
Sales	2/25	3,162	3,447
Other income	25	65	34
Cost of sales		(2,745)	(2,823)
Administrative and selling expenses		(204)	(200)
Research and development expenditure	6	(47)	(51)
EBITDA	2	231	407
Amortisation and depreciation of non-current assets	26	(262)	(245)
Provisions	26	(14)	(9)
Current operating profit (loss)	2	(45)	153
Other operating income and expenses before impairment of assets	27.1	(80)	(73)
Operating profit (loss) before impairment		(125)	80
Impairment of assets	27.2	(423)	(1)
Operating profit (loss)		(548)	79
Net borrowing cost	28	(7)	8
Other financial income and expenses	28	(25)	(15)
Share in profit of associates	10	1	-
Income tax	29	72	(29)
Profit (loss) for the period		(507)	43
attributable to non-controlling interests	17	(137)	34
<ul> <li>attributable to equity holders of the parent</li> </ul>		(370)	9
Basic earnings per share (€)	30	(14.11)	0.34
Diluted earnings per share (€)	30	(14.11)	0.34
Profit (loss) for the period		(507)	43
Translation adjustments for financial statements of subsidiaries denominated in foreign currency		(60)	2
Change in revaluation reserve for hedging financial instruments		11	37
Change in fair value of available-for-sale financial assets		(7)	6
Income tax	29	(2)	(12)
Items recyclable to profit or loss		(58)	33
Revaluation of net defined benefit plan liabilities		8	(4)
Income tax	29	(5)	5
Items not recyclable to profit or loss		3	1
Other components of comprehensive income		(55)	34
attributable to non-controlling interests		2	(5)
<ul> <li>attributable to equity holders of the parent</li> </ul>		(57)	39
TOTAL COMPREHENSIVE INCOME		(562)	77
attributable to non-controlling interests		(135)	29
<ul> <li>attributable to equity holders of the parent</li> </ul>		(427)	48

Note: The 2012 financial statements have been restated for the retroactive application of IAS 19 (revised) (see Note 4 – 2012 financial statements restated).

#### FINANCIAL STATEMENTS 6.1. 2013 CONSOLIDATED FINANCIAL STATEMENTS

# 6.1.1.2. Statement of financial position

#### Assets

(€ million)	Notes	31/12/2013	31/12/2012 Restated
Goodwill	5	163	173
Intangible assets	6	455	717
Property, plant & equipment	7	2,536	2,454
Investments in associates	10	32	33
Non-current financial assets	11	119	88
Deferred tax	21	77	31
Other non-current assets	14	5	7
Non-current assets		3,387	3,503
Inventories	13	989	1,038
Trade receivables and other current assets	14	580	690
Current tax receivables		48	38
Derivatives	24	45	51
Current financial assets	15	169	368
Cash and cash equivalents	15	742	621
Current assets		2,573	2,806
TOTAL ASSETS	2	5,960	6,309

### Liabilities

(€ million)	Notes	31/12/2013	31/12/2012 Restated
Share capital		81	81
Share premium		373	373
Revaluation reserve for available-for-sale assets		-	5
Hedging instrument revaluation reserve		10	4
Revaluation reserve for net defined benefit plan liabilities		(37)	(40)
Translation adjustments		(29)	32
Other reserves		2,134	2,539
Attributable to equity holders of the parent	16	2,532	2,994
Attributable to non-controlling interests	17	478	815
Shareholders' equity		3,010	3,809
Employee-related liabilities	18	183	188
Provisions	19	439	428
Deferred tax	21	279	355
Borrowings – long-term portion	22	799	311
Other non-current liabilities	23	27	28
Non-current liabilities		1,727	1,310
Provisions – short-term portion	19	32	30
Borrowings – short-term portion	22	330	230
Trade payables and other current liabilities	23	746	805
Current tax liabilities		80	72
Derivatives	24	35	53
Current liabilities		1,223	1,190
TOTAL LIABILITIES & SHAREHOLDERS' EQUITY		5,960	6,309

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# 6.1.1.3. Statement of cash flows

(€ million)	Notes	FY 2013	FY 2012 Restated
Operating activities			
Profit (loss) for period		(507)	43
Elimination of non-cash and non-operating income and expenses:			
<ul> <li>Depreciation, amortisation, impairment and provisions</li> </ul>		710	253
Accretion expenses		12	11
Financial instruments		4	(10)
Deferred tax		(144)	(41)
Proceeds from asset disposals		-	2
Share in profit of associates		(1)	-
Non-cash income and expenses	2	581	215
Cash generated from operations	2	74	258
(Increase)/decrease in net inventories		27	64
(Increase)/decrease in net trade receivables		52	(2)
Increase/(decrease) in trade payables		16	(79)
Change in other net assets and liabilities		(8)	(24)
Net change in current operating assets and liabilities		87	(41)
Net cash generated by operating activities <sup>(1)</sup>		161	217
Investing activities			
Payments for non-current assets		(583)	(655)
Proceeds from non-current asset disposals		30	11
(Proceeds from)/repayment of borrowings		(33)	13
Net change in other current financial assets		199	105
Impact of additions to consolidation scope		-	(1)
Impact of removals from consolidation scope		-	(1)
Net cash used in investing activities		(387)	(528)
Financing activities		(001)	(020)
Dividends paid to ERAMET SA shareholders	16	(34)	(59)
Dividends paid to non-controlling interests in consolidated companies	17	(187)	(260)
Dividends paid/to be paid to non-controlling interests in consolidated companies		(31)	32
Share capital increases		-	2
Proceeds from treasury share sales/(payments for purchases)		(6)	(1)
Changes of percentage interests in subsidiaries		-	(3)
Proceeds from borrowings	22	1,047	319
Repayment of borrowings	22	(445)	(5)
Net cash used in financing activities		344	25
Exchange-rate impact		3	(4)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		121	(290)
Opening cash and cash equivalents		621	911
Closing cash and cash equivalents	15.2.1	742	621
(1) Of which, included in operating activities			
Interest income	28.1	15	19
Interest paid	28.1	(24)	(19)
Tax paid		(72)	(81)

The ERAMET Group uses the net cash/net debt position concept as an internal management and performance indicator:

Net cash (or net debt) position	22.8	(218)	448

# 6.1.1.4. Statement of changes in equity

(€ million)	Number of shares		Share premium	Reserves/ Assets available for sale	Reserves/ Hedging instruments	Reserves/ Defined benefits plans	Translation adjustments	Other reserves	Attributable to equity holders of the parent	Attributable to non- controlling interests	Total Share- holders' equity
Shareholders' equity at 1 January 2012	26,519,116	81	372	-	(24)	-	28	2,579	3,036	1,043	4,079
First-time application of IAS 19 (revised)	-	-	-	-	-	(42)	-	-	(42)	(2)	(44)
Shareholders' equity at 1 January 2012 restated	26,519,116	81	372	-	(24)	(42)	28	2,579	2,994	1,041	4,035
Profit (loss) for the period	-	-	-	-	-	-	-	9	9	34	43
Translation adjustments of subsidiaries' financial statements denominated in foreign currency	-	-	-	-	-	-	4	-	4	(2)	2
Change in revaluation reserve for hedging instruments	-	-	-	-	28	-	-	-	28	(2)	26
Change in fair value of financial assets available for sale	-	-	-	5	-	-	-	-	5	-	5
Change in net defined benefit plan liabilities	-	-	-	-	-	2	-	-	2	(1)	1
Other components of comprehensive income	-	-	-	5	28	2	4	-	39	(5)	34
Total comprehensive income	-	-	-	5	28	2	4	9	48	29	77
Dividends paid – €2.25 per share	-	-	-	-	-	-	-	(59)	(59)	(260)	(319)
Share capital increases	24,102	-	1	-	-	-	-		1	1	2
Treasury shares	-	-	-	-	-	-	-	(1)	(1)	-	(1)
Share-based payment	-	-	-	-	-	-	-	14	14	-	14
Changes in percentage interests in subsidiaries	-	-	-	-	-	-	-	(3)	(3)	1	(2)
Other movements	-	-	-	-	-	-	-	-	-	3	3
Total transactions with shareholders	24,102	-	1	-	-	-	-	(49)	(48)	(255)	(303)
SHAREHOLDERS' EQUITY AS AT 31 DECEMBER 2012	26,543,218	81	373	5	4	(40)	32	2,539	2,994	815	3,809
Profit (loss) for the period	-	-	-	-	-	-	-	(370)	(370)	(137)	(507)
Translation adjustments of subsidiaries' financial statements denominated in foreign currency	-	-	-	-	-	-	(61)	-	(61)	1	(60)
Change in revaluation reserve for hedging instruments	-	-	-	-	6	-	-	-	6	1	7
Change in fair value of financial assets available for sale	-	-	-	(5)	-	-	-	-	(5)	-	(5)
Change in net defined benefit plan liabilities	-	-	-	-	-	3	-	-	3	-	3
Other components of comprehensive income	-	-	-	(5)	6	3	(61)	-	(57)	2	(55)
Total comprehensive income	-	-	-	(5)	6	3	(61)	(370)	(427)	(135)	(562)
Dividends paid – €1.30 per share	-	-	-	-	-	-	-	(34)	(34)	(187)	(221)
Share capital increases	-	-	-	-	-	-	-	-	-	-	-
Treasury shares	-	-	-	-	-	-	-	(7)	(7)	-	(7)
Share-based payment	-	-	-	-	-	-	-	8	8	-	8
Changes in percentage interests in subsidiaries	-	-	-	-	-	-	-	-	-	-	-
Other movements	-	-	-	-	-	-	-	(2)	(2)	(15)	(17)
Total transactions with shareholders	-	-	-	-	-	-	-	(35)	(35)	(202)	(237)
SHAREHOLDERS' EQUITY AS AT 31 DECEMBER 2013	26,543,218	81	373	-	10	(37)	(29)	2,134	2,532	478	3,010

#### FINANCIAL STATEMENTS

#### 6.1. 2013 CONSOLIDATED FINANCIAL STATEMENTS

Translation adjustments recognise the conversion differences deriving from the translation of the financial statements of foreign subsidiaries into euros. They also incorporate the changes in fair value of hedging net investment in foreign subsidiaries (Notes 1.5 – Translation of foreign currency denominated transactions and financial statements and 24 – Risk management and derivatives).

Premiums essentially consist of issue premiums, representing the difference between the par value of the shares issued (Note 16 – Shareholders' equity) and the amount of the cash or in-kind contributions received on issue.

The change in the revaluation reserve of hedging instruments is mainly due to the recognition of cash-flow hedges pursuant to IAS 32 and IAS 39.

It is offset in "Hedging instruments" under assets or liabilities, depending on whether hedging gains or losses are recognised (Note 24).

The "Hedging instruments" 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 income statement (Note 24). The ERAMET treasury shares are classified under "Other reserves" and recognised at purchase cost (Note 16) for an amount of -€44 million (-€54 million at 31 December 2012).

The reserves called "Assets available for sale" include the cumulative changes to the fair value of the bonds classified as "Other current financial assets" (Note 15).

The change in the revaluation reserve of net defined benefit plans liabilities include the impact of changes to the actuarial assumptions about the commitments (Note 18 – Employee-related liabilities), the differences between actual and expected returns on the plan assets and the impact of asset limitations.

In accordance with the revised standards IFRS 3 and IAS 27, the "Percentage changes in interests in subsidiaries" correspond to the impacts of changes in the consolidation scope not entailing any change of control in the subsidiaries concerned. In 2012, they involve the acquisition, by Comilog SA, of 15% of the shares of the "Transgabonais" concession operator, Setrag SA.

# 6.1.2. Notes to the consolidated financial statements \_\_\_\_\_

# Notes to the financial statements

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

*Via* its subsidiaries and investments, the ERAMET Group operates in the nickel and manganese mining and production sectors, as

well as in the alloys production sector, in which it is amongst the market leaders. A detailed description of the ERAMET Group's activities is presented in Note 1.4 on business segment reporting.

ERAMET's shares have been traded on the Euronext Paris Deferred Settlement System (SRD) since 28 March 2006. On 2 January 2008, ERAMET joined the Euronext Paris N100 index.

The ERAMET Group's consolidated financial statements for the year ended 31 December 2013 were reviewed by the Audit Committee on 18 February 2014, and approved by the Board of Directors on 20 February 2014. They will be submitted to the approval of the General Shareholders' Meeting of 14 May 2014.

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# **Note 1.** Accounting principles and measurement methods

# **1.1.** 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 2013 have been prepared in millions of euros in accordance with IFRS (International Financial Reporting Standards) as adopted by the European Union at 31 December 2013.

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 2013 and available on the website: http://ec.europa.eu/internal\_market/accounting/ias\_en.htm#adopted-commission.

The new mandatory standards and interpretations applicable as from 1 January 2013 are:

- IAS 19 (revised) "Employee benefits" applicable as from 1 January 2013, whose impacts are described in Note 4 – 2012 financial statements restated;
- IFRS 13 "Fair value measurement", applicable as from 1 January 2013;
- the amendment to IAS 12 "Recovery of underlying assets", applicable as from 1 January 2013;
- the interpretation of IFRIC 20 "Stripping costs in the production phase of a surface mine" applicable as from 1 January 2013.

Except for the IAS 19 (revised) and IFRS 13, these amendments to standards and interpretations do not apply to the Group or do not have a material impact on the Group's annual consolidated financial statements at 31 December 2013.

The ERAMET Group did not opt for the early application of the standards, interpretations and amendments that were not mandatory at 1 January 2013, namely:

- IAS 28 "Investments in associates and joint ventures" applicable as from 1 January 2014;
- IFRS 10 "Consolidated financial statements", applicable as from 1 January 2014;
- IFRS 11 "Joint arrangements", applicable as from 1 January 2014;
- IFRS 12 "Disclosure of interests in other entities" applicable as from 1 January 2014.

IFRS 9, the standard that is yet to be adopted by the European Union for financial instruments, applicable as from 1 January 2015.

For the ERAMET group, the potential impacts of the application of these changes to the standards concern only IFRS 11. The proportionally-consolidated companies (Note 3 – Consolidation scope) in these financial statements would be accounted for under the equity method. As a result of the application of this new standard to the 2013 financial year, the income statement would show a decrease in sales and the current operating profit of €80 million and €14 million respectively. On the balance sheet front, investments in associates would show an increase of €241 million while net financial debt would decrease by €99 million.

In order to depict the economic reality of the Group's companies, the operating data of jointly-held companies will continue to be proportionally-consolidated in the Group's internal reporting, for this data is used by the Board of Directors to monitor performance. As a result, in compliance with IFRS 8, the sector-based information given in the financial statements will be in line with this internal information, and the Group's financial communication will use this operating data that will additionally be reconciled with the financial statements consolidated according to IFRS requirements.

The other standards and interpretations will have no material impact on ERAMET's consolidated financial statements.

#### 1.1.1. Use of estimates and judgements

In preparing its financial statements under IFRS, the ERAMET Group is required to make estimates and assumptions that affect the carrying amounts of some assets and liabilities and income and expenses, as well as the information set out in specific Notes.

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. As a result of changing assumptions and conditions, the amounts in future financial statements may differ from current estimates.

The main items affected by the changes in estimates are impairment tests, provisions for employee benefits, for site restoration, and deferred taxes. In principle, the ERAMET Group reviews these estimates only once a year at each annual reporting date. However, when circumstances require, estimates may be updated at interim reporting dates.

#### Impairment losses

In accordance with IAS 36 – Impairment of Assets, when events or economic changes in the markets in which the ERAMET Group operates indicate the possibility of impairment losses on its goodwill, intangible assets and property, plant and equipment, these assets are subject to impairment tests to determine whether their carrying amount has fallen below their recoverable amount or value in use. Goodwill is impairment-tested at least once a year. The recoverable value is the higher of fair value less selling costs and the value in use. In the event that the recoverable amount is below the net carrying amount, an impairment loss is recognised for the difference. The value in use is determined by applying the method of future cash flows expected from the use of the assets, projected over a five-year period, to which a terminal value is added (Note 1.10).

#### **Employee-related liabilities**

ERAMET Group companies offer their employees various long-term benefits such as retirement packages, pension plans and healthcare plans (Note 1.17). Under IAS 19 (revised) – Employee benefits, all these liabilities are estimated on the basis of assumptions such as discount rates, salary increases, employee turnover rates and mortality tables. The Group generally updates these assumptions once a year and the most recent assumptions used are included in the specific note (Note 18).

#### Provisions for site restoration

ERAMET Group companies must provide for their regulatory and constructive obligations with regard to the restoration of their mining sites at the end of operation. Accordingly, under IAS 16 – Property, Plant and Equipment and IAS 37 – Provisions, Contingent Liabilities and Contingent Assets, when a mining site is opened, a restoration provision is recognised, offsetting a dismantling asset. These provisions are estimated on the basis of forecast cash flows by maturity and discounted using inflation and discount rates determined in accordance with local economic conditions (Note 19.5). In the absence of regulatory and constructive obligations, the sites for which the end of operation is not determined are not provisioned (Note 1.19).

#### **Deferred tax**

Deferred tax assets recognised mainly relate to deductible temporary differences and tax loss carry-forwards in accordance with IAS 12 – Income Taxes (Note 21). These deferred tax assets are recognised whenever it is likely that the ERAMET Group will have sufficient future taxable profit to absorb these timing differences and tax losses. The estimate of the Group's capacity to recover recognised deferred-tax assets is based in particular on the earnings forecasts drawn up by each tax entity (Note 1.18).

# 1.1.2. Changes in accounting methods, errors and estimates

A change in accounting methods is applied only where required under a standard or interpretation and where it provides for more reliable and more pertinent information. Accounting changes are applied retrospectively, except in the event of transitory provisions specific to the standard or interpretation. The financial statements affected by a change in accounting method are adjusted for all the periods presented, as though the new method had always been applied.

Once an error is detected, it is likewise adjusted retrospectively.

Changes to estimates are recognised prospectively; they affect the financial year in which they arise and, as the case may be, future financial years.

The changes in accounting methods, errors and changes to estimates occurring during the year are detailed in a specific note.

#### 1.1.3. "Current" and "non-current" assets and liabilities

"Current" refers to assets and liabilities that are part of the operating cycle, regardless of their maturity, and other assets and liabilities with a maturity of less than one year from their balance sheet entry date. "Non-current" assets and liabilities comprise other assets and liabilities, namely those with maturities of over one year that are not part of the operating cycle.

#### **1.2.** Scope and method of consolidation

All material entities that ERAMET exclusively controls either directly or indirectly are fully consolidated. Companies over which ERAMET has significant influence and in which it directly or indirectly holds an interest of over 20% are accounted for under the equity method (Note 10). Jointly controlled companies (joint ventures) are consolidated proportionally.

The list of consolidated companies is provided in Note 3. Material transactions between consolidated companies are eliminated on consolidation.

#### **1.3.** Business combinations

The Group recognises business combinations pursuant to IFRS 3 (acquisitions prior to 1 January 2010) or IFRS 3 (Revised) (acquisitions from 1 January 2010). The assets, liabilities and contingent liabilities of an acquired company are measured at their fair value and valuation differences are charged to the relevant assets and liabilities, including the share of non-controlling interests. Any difference between the cost of the business combination and the share in the net fair value of the assets, liabilities and identifiable contingent liabilities is recognised as goodwill under balance sheet assets (Note 1.6).

When the ERAMET Group acquires assets and liabilities from non-controlling interests in a company already controlled, no additional fair value adjustment is recognised and the difference between the purchase price and carrying amount of the net assets acquired is recognised in equity (Note 1.6).

#### **1.4.** Operating segments

In accordance with IFRS 8 "Operating Segments", the business segment reporting presented is prepared on the basis of the internal management data used by the Executive Committee, the Group's main operational decision-making body, to analyse business performance and allocate resources.

An operating segment is a separate component of the Group that engages in the provision of distinct products and services and is exposed to risks and profitability that differ from the risks and profitability of other operating segments. Each operating segment is monitored individually for internal reporting purposes on the basis of performance indicators that are common to all segments. The management data used to assess a segment's performance is prepared in accordance with the IFRS principles applied by the Group for its consolidated financial statements.

The segments presented for the purposes of segment reporting are either operating segments or combinations of similar operating segments. These are the Nickel, Manganese and Alloys Divisions:

- the Nickel Division, including mining, production and sales subsidiaries focused on nickel and its derivative applications (ferronickel, high purity nickel, cobalt and nickel salts, and cobalt and tungsten powders);
- the Manganese Division, including mining, production and sales subsidiaries focused on manganese alloys (ferromanganese, silicomanganese and refined alloys) and manganese chemical derivatives (oxides, sulphate, chloride). The Manganese Division also includes subsidiaries that provide services to industry for the recovery and recycling of metals contained in oil-industry catalysts, electric batteries and acid solutions from the electronics industry, as well as the mineral sands project;
- the Alloys Division, including subsidiaries that produce and market special high-performance steels, superalloys and pre-machined parts based on these materials or aluminium and titanium.

The column headed "Holding company and eliminations" comprises the Group's corporate departments as well as the financial entities Metal Securities (treasury management) and Metal Currencies (exchange rate risk management), and Eras SA, the captive reinsurance company. Commercial relationships between the Divisions are not material. The main relationships primarily arise from the billing of management fees and financial transactions.

Other relationships concern the reinsurance company Eras SA and the financial companies Metal Securities and Metal Currencies, all three of which are fully consolidated *via* the Holding Division (Note 3):

- Eras SA is a captive reinsurance company that acts as a primary insurer in certain reinsurance programmes;
- Metal Securities is a financial company responsible for pooling subsidiaries' cash to optimise its investment with financial organisations outside the Group;
- Metal Currencies is a financial company responsible for managing the Group's exchange rate risks.

#### **1.5.** Conversion of foreign currencydenominated 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 under IAS 21 – The effects of changes in foreign exchange rates. Translation adjustments resulting from this translation are recognised in net income for the period (Notes 1.24 and 1.25), except those involving loans and borrowings between Group companies considered an integral part of the net investment in a foreign subsidiary. These are recognised directly in shareholders' equity under "Translation adjustments" and linked to the foreign subsidiary.

The financial statements of foreign entities with functional currencies other than the euro are translated using the official exchange rates at the end of the period for balance sheet items, except for shareholders' equity, for which historical rates are applied. The items in the comprehensive income statement and the cash flow statement are translated at the average exchange rates for the period. Goodwill arising from an acquisition is considered part of the acquired entity and therefore denominated in its functional currency; it is then translated in the same way as the other balance sheet items. 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 adjustments is recognised in net income for the period under "Other financial income and expenses" (Note 28.2).

# **1.6.** Goodwill

The cost of a business combination recognised when taking an interest is allocated to the fair value of the assets, liabilities and identifiable contingent liabilities of the acquired entity. The residual, unassigned part is recognised as "Goodwill" under balance sheet assets. Any resulting goodwill is allocated to the relevant cash generating units (CGU). Goodwill is not amortised as per IFRS 3 (acquisitions prior to 1 January 2010) and IFRS 3 (revised) (acquisitions from 1 January 2010), but is tested for possible impairment losses (Note 1.10). Goodwill is impairment-tested at least once a year at the annual reporting date. These impairment losses are not reversible.

If the cost of the business combination is less than the share in the net fair value of the assets, liabilities and contingent liabilities, the identification and measurement of the items acquired are reassessed and any remaining surplus (negative goodwill, or "badwill") is recognised directly in income for the period under "Other operating income and expenses" (Note 27).

Since 1 January 2010, for the acquisition of additional interests in a company that is already controlled, the difference between the acquisition price and the carrying amount of the non-controlling interests acquired is recognised in equity.

Goodwill in associates is recognised under investments in associates (Note 10).

## **1.7.** Intangible assets

#### 1.7.1. Geology expenses

Geology, exploration, prospecting and mining research expenses incurred prior to operation are recognised as intangible assets under "Other intangible assets" pursuant to IFRS 6 (Note 6). Geology expenses for mining sites already in operation are recognised in income under "Research and development expenditure" (Note 1.24). In accordance with IFRS 6 – Exploration for and Evaluation of Mineral Resources, royalties paid for mining prospecting and exploration are capitalised as intangible assets (Note 6). They are measured at acquisition cost less amortisation and any impairment losses.

#### 1.7.2. Other intangible assets

Intangible assets are measured at acquisition cost and amortised on a straight-line basis or on the basis of work units in current operating profit (loss) (Note 26.1).

Amounts capitalised with respect to mineral deposits relate to partial asset contributions or permits acquired since 1974. Depending on operating specificities, mining deposits are amortised on the basis of the ratio of annual production to the estimated reserves or the length of the concession (Note 6).

Computer software is amortised over a variable period not exceeding five years.

Intangible assets are allocated to cash generating units (CGUs) (Note 1.10). When the net carrying amount of an intangible asset exceeds its recoverable amount, an impairment loss is recognised (Note 1.10).

#### **1.8.** Research and development expenditure

Research and development expenditure includes expenses for scientific and technical activities necessary for the development and implementation of new manufacturing processes or the improvement of existing processes.

Development expenditure is capitalised where it satisfies the restrictive criteria set out in IAS 38 – Intangible assets, namely, solely when the following conditions are fulfilled:

- the technical and industrial feasibility of the project has been proven;
- the intention is to finish the project and put the results of the project to use;
- the project is clearly identified and the costs attributed are broken down and measured reliably;
- the likelihood of obtaining future economic benefits has been demonstrated; and
- the technical, financial and other resources allocated for the development and use or sale of the intangible assets are available.

Any other research expenditure not satisfying the criteria of IAS 38 – Intangible Assets is expensed in the period in which it is recognised (Notes 1.24 and 6).

## **1.9.** Property, plant and equipment

Items of property, plant and equipment are recognised in the balance sheet at acquisition or production cost (Note 6). They are depreciated on a straight-line basis over the estimated lifespan or useful life, based on the components of the asset, in current operating profit (loss) (Note 1.24).

For reference:

Buildings	10-50 years
Industrial and mining facilities	5-50 years
Other Property, plant & equipment	2-10 years

Land is not depreciated.

Capital grants are recognised as deductions from the gross amounts of the items of property, plant and equipment in question. 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 recognised as an item of property, plant and equipment and depreciated over its likely useful life. Major repairs are deemed to be components of items of property, plant and equipment. The borrowing costs that are directly attributable to the acquisition or production of an asset are incorporated in the asset's cost where they are significant.

A provision is recognised upon starting up operations for the restoration of mining sites, with counterpart recognition of component of an item of property, plant and equipment depreciated on a straight-line basis during the operation of the mine.

Mine stripping costs are capitalised under property, plant and equipment and depreciated on the basis of mined tonnage (Note 7).

Leases transferring the risks and benefits inherent in ownership (finance leases) to the Group are recognised as items of property, plant and equipment, offset by a debt (Note 20). 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 where necessary as leases, pursuant to IFRIC 4 – Rights to use assets: conditions for Determining Whether an Arrangement Contains a Lease, and in accordance with IAS 17 – Leases.

All items of property, plant and equipment were allocated to cash generating units (CGU) (Note 1.10). Where the net carrying amount of an item of property, plant and equipment exceeds its recoverable amount, an impairment loss is recorded (Note 1.10).

#### **1.10.** Impairment of assets

Pursuant to IAS 36 – Impairment of assets, 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.

The impairment test consists of comparing the carrying amount of the assets with their recoverable amount. Impairment losses are calculated as the difference between the recoverable and carrying amounts and recognised in the income for the period under "Other operating income and expenses" (Note 27). The recoverable amount is defined as the greater of the fair value less selling costs and the value in use. The fair value is the resale value determined, as appropriate, by reference to similar recent transactions or to appraisals carried out by independent appraisers with a view to disposal.

In order to determine the value in use, the Group uses the method of discounted future cash flows generated from their use. The data used to calculate the discounted forecast cash flows is taken from the annual budgets and multiyear plans prepared by management at the business segments in question. These plans are created on the basis of 5-year projections plus a terminal value corresponding to the capitalisation to infinity of the cash flows determined chiefly from the last year of the plan. The discount rate used to determine the value in use is the weighted average cost of the Group's capital, namely 10.5% for mining and 9.5% for metallurgical activities (compared to 11.5% and 10.0% in 2012).

Impairment tests are performed at the level of the cash generating units (CGUs). All intangible assets, including goodwill, and all items of property, plant and equipment are allocated to CGUs. Cash generating units (CGUs) are homogeneous groups of assets whose continuous use generates independent cash flows. The ERAMET group has determined its cash-generating units (CGUs) by reference to the various production sites of its three major business lines: nickel, manganese and alloys (Note 9 – Impairment of assets).

#### **1.11.** Other non-current financial assets

Other non-current financial assets include financial assets available for sale (Notes 1.11.1 and 12) and other investments (Notes 1.11.2 and 11).

#### 1.11.1. Financial assets available for sale

These assets mainly consist of non-consolidated investments (Note 12) and are measured at fair value. Investments in non-consolidated companies are recognised at their acquisition cost, less any impairment losses. Where those investments exhibit objective evidence of significant or lasting impairment, the impairment loss is recognised in net income for the period under "Other financial income and expenses" (Note 28.2).

Non-consolidated investments are classified under two categories:

- controlled but non-consolidated companies owing to their low impact on the Group's financial statements;
- non-controlled companies that are interests in companies over which the Group has no control or significant influence.

The fair value is measured on the basis of their listed share price or, if unavailable, using the discounted future cash flow method or, failing this, another appropriate method.

#### 1.11.2. Other investments

Other investments (Note 11) relate to loans or current accounts extended to non-consolidated companies. They are initially recognised at fair value plus the acquisition expense and measured on each reporting date at amortised cost using the effective interest rate (EIR, definition in Note 1.14), less any impairment losses, offset in income for the period under "Other financial income and expenses" (Note 28.2).

# **1.12.** Assets held for sale and discontinued operations

A non-current asset or a group of assets with the directly related liabilities, are considered as held for sale where their carrying amount will be recovered from their sale and not from their continued use. They must be immediately available and the sale highly likely. When several assets are intended for sale in a single transaction, the asset group is considered as a whole, including the related liabilities. The assets held for sale thereby determined are measured at the lesser of the carrying amount and the fair value less selling costs. Intangible assets and property, plant and equipment classified as held for sale are no longer depreciated.

A discontinued operation is defined as a material Group activity subject to disposal or classification in assets held for sale. The assets and liabilities relating to this operation are presented under a special item in the Group's consolidated financial statements.

On each reporting date, the amount of assets held for sale must be reviewed to take into account any adjustments to their fair value less selling costs.

#### **1.13.** Inventories

Inventories are measured using the weighted average unit cost for the industrial operations in the Alloys Division, and on a firstin-first-out (FIFO) basis for the industrial and mining operations in the Nickel and Manganese Divisions.

Inventories are assessed at cost price and only include production costs, while not exceeding the realisable value. Costs stemming from sub-normal capacity usage are eliminated from inventory measurement at the end of the period.

Impairment losses for raw materials are recognised when the net realisable value falls below the cost of entry into storage. Consumables are fully impaired 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 impaired. 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 "in-store" products are fully impaired.

Fixed production costs relating to recognised or planned subnormal capacity usage are not incorporated in inventory measurement, and are recognised as ordinary operating expenses for the period in which they are incurred. Capacity usage is established as sub-normal when the actual production volume is below 10% of normal production volume (or normal capacity).

#### **1.14.** Receivables and debts

Receivables and debts are measured upon initial recognition at fair value plus any transaction expenses and are subsequently re-measured at each reporting date at amortised cost using the effective interest rate (EIR) method. The effective interest rate is the rate that precisely discounts the expected future cash movements. Foreign currency receivables and debts are re-measured at the rate prevailing at the period-end date. Resultant translation adjustments are recognised in the income statement as exchange differences under current operating profit (loss) or net borrowing cost, depending on the type of receivable or debt.

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 loss based on past experience of losses on receivables, ageing and a risk assessment. This impairment, offset in net income for the period under "Current operating profit (loss)" (Note 25), reduces the nominal amount.

Receivables disposed of under a securitisation contract are derecognised in accordance with IAS 39 – Financial instruments: recognition and measurement where the Group has transferred the contractual rights to receive the future cash flows and substantially all the risks and rewards attached to these assets have been transferred. Where the risks are retained without prejudicing deconsolidation of receivables, they remain recognised in the balance sheet under other operating receivables together with the related security deposits (Note 14).

Transfers with recourse against the transferor in the event of the debtor defaulting on payment preclude derecognition of receivables transferred and these assets are therefore retained in the balance sheet.

#### **1.15.** Other current financial assets

These assets primarily comprise securities (Note 15.1) that do not meet the criteria for cash equivalents defined in IAS 7. These securities are measured at fair value on their first recognition. The fair value used is the stock-market value for listed securities, and for unlisted securities, is based on estimates using specific financial criteria reflecting the particular situation of each stock (similar transactions or discounted value of future cash flows). Changes in the fair value of these investments are recognised in transferable equity under "Change in fair value of available-for-sale financial assets". Where those assets exhibit objective evidence of significant or lasting impairment, the cumulative impairment loss, previously recognised in equity, is recognised in income for the period under "Other financial income and expenses" (Note 28.2).

#### **1.16.** Cash and cash equivalents

Cash includes cash in hand and demand deposits, excluding bank overdrafts, which appear under financial liabilities. Cash equivalents correspond to marketable securities and consist of investments held to meet short-term cash requirements and are not considered as held to maturity.

Marketable securities are recognised in the statement of financial position at their fair value in accordance with IAS 39 – "Financial instruments". To be considered a cash equivalent, they must be readily convertible to cash and subject to negligible risk of fluctuations in value. Fair value changes are recognised in net income for the period under "Net borrowing cost" (Note 28.1).

#### 1.17. Employee-related liabilities

#### **Defined contribution plans**

For the defined contribution plans granted, employer contributions are expensed in the period to which they relate.

#### **Defined benefit plans**

ERAMET Group companies offer their employees various longterm benefits, such as retirement packages or other additional post-employment benefits (pension plan or healthcare plan). The characteristics of these plans vary in line with the laws and regulations in force in each country and/or subsidiary.

At some companies, these liabilities are wholly or partly covered by policies taken out with insurance companies or pension funds. In this case, the liabilities and hedging assets are measured independently. The defined benefit pension plans are measured using the projected unit credit actuarial method. The provision recognised in connection with defined benefit retirement plans represents the discounted value of the obligation arising from defined benefits less the fair value of the plan assets.

Actuarial differences arise when estimated values differ from the actual results (experience differences) or when the actuarial assumptions are modified (for example, the discount rate).

For long-term benefits (such as long-service bonuses), actuarial differences are recognised in current operating income in the income statement at each reporting date. For post-employment benefits, actuarial differences are recognised in other comprehensive income where they offset equity.

The service cost is recognised in current operating income. Plan liquidations and modifications are accounted for under "Other operating income and expenses" (Notes 1.24 and 27). The net interest burden, calculated as the discounted liabilities less the expected return from the plan assets, is recognised in "Other financial income and expenses" (Note 1.25).

NOTE 1. 2013 CONSOLIDATED FINANCIAL STATEMENTS

#### **1.18.** Deferred tax

The amount of tax actually owed at the reporting date is adjusted for deferred tax, which is calculated using the liability method with regard to temporary differences between carrying amounts and tax amounts, as well as with regard to consolidation restatements. 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. Deferred tax is not discounted.

To assess the likelihood that these assets will be realised, the Group reviews the following information:

- future forecast profitability;
- extraordinary losses not expected to recur in the future;
- past taxable profits; and
- tax strategies.

Deferred tax assets and liabilities are recognised as balance sheet assets and liabilities in the statement of financial position (Note 19). Deferred tax is deemed to be non-current and classified as such.

In the consolidated balance sheet, deferred tax assets and liabilities are offset individually within each tax entity, *i.e.* individually within the legal entity or tax consolidation group (Note 21).

Deferred tax liabilities on investments in subsidiaries, associates and joint ventures are recognised unless where the Group can determine the timetable for the reversal of the related temporary differences. Provisions are made for non-recoverable levies on dividends planned in the foreseeable future.

#### **1.19.** Provisions

Provisions are made, where their amount can be reliably estimated, to cover all liabilities stemming 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 economic benefits in order to settle the liability.

Provisions for mining site restoration are made when the mining sites open. Restoration costs are discounted over the period remaining until the expected end of operation of the mine and the effects of accretion expenses are recognised in net income for the period under "Other financial income and expenses" (Note 28.2).

As regards industrial sites, insofar as there are no plans to discontinue operations, no provision is made for site restoration.

Provisions are made for restructuring and redundancy costs where such measures have been planned in detail and announced before the reporting date or the start of implementation.

#### **1.20.** Recognition of financial instruments

Financial instruments are recognised in the financial statements in line with IAS 39 – Financial instruments – Recognition and measurement.

Financial assets as defined in IFRS 7 – Financial instruments, are derecognised when the Group no longer expects future cash flows and all the risks and rewards relating to these assets have been transferred.

#### Risks

The Group uses financial instruments to hedge certain risks. To manage its foreign currency risk, the 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 Group has defined and documented the hedging relationship and demonstrated its effectiveness. Interest-rate risk is managed using interest-rate swaps. Lastly, the Group also uses collars and swaps when hedging commodity purchases and sales (nickel, fuel oil, aluminium and electricity).

#### Measurement and presentation

Derivatives are measured at their fair value upon initial recognition. Subsequently, the fair value of derivatives is reviewed 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 Group would receive (or pay) to transfer current contracts on the reporting date. The fair value of commodity derivatives is estimated on the basis of market conditions. Derivatives are presented as assets or liabilities in the statement of financial position (Note 24).

#### **Hedge accounting**

Gains or losses on hedging instruments are recognised symmetrically with the gains or losses on the hedged items. However, unrealised losses on financing hedging transactions ineligible under hedging standards are recognised in the income statement.

The 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 re-measured by reference to the hedged risk, and the hedging instrument is measured and recognised at fair value. The changes in both items are recognised simultaneously in operating profit (loss).
- Cash flow hedge: the hedged item is not re-measured. Only the hedging instrument is re-measured at fair value. To offset the re-measurement, 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 recycled to net income for the period when income is affected by the hedged item. The ineffective portion is retained in income for the period.
- 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 profit or loss 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 ineligible for hedge accounting: the Company only uses these derivatives to hedge future cash flows. Changes in fair value are immediately recognised in net financial income.

#### Fair value measurement

The Group measures financial instruments at fair value at each reporting date. The fair values of financial instruments measured at amortised cost are given in Note 24.1 – Financial instruments included in the statement of financial position.

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 for selling the asset or transferring the liability is carried out:

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

The Group applies the same assumptions that the market participants use to determine the price of the asset or the liability, on the consideration that the market participants act in their own best economic interests.

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 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 minimizing the use of non-observable inputs.

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

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

The Group specifies the policy it applies to determine at what point in time a changeover from one level to another in the fair value hierarchy is believed to have occurred.

#### **1.21.** Concession

The Transgabonais railway concession was recognised as follows: own property held by the company holding the concession is recognised as a balance sheet asset and depreciated over the shorter of its useful life or the remaining period of the concession. Return assets representing the assets contributed to the concession by the State that must be returned in kind upon expiry of the agreement are not recognised in the balance sheet. Assets acquired by the concession holder following the signing of the concession agreement that must be turned over to the State 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 risk of non-renewal of the concession in line with investment assumptions.

#### **1.22.** Income

Income mainly comprises the following:

- sales, including the sale of merchandise, goods and services generated in the course of the Group's main business activities. This is a component of "current operating profit (loss)" (Note 25);
- other income that includes other revenue assigned to current operating profit (loss) (Note 25) such as translation adjustments on sales, capitalised production, lease income, operating subsidies and insurance premiums received;
- interest income recognised in net income for the period under "Net borrowing costs" (Note 28.1);
- dividends included in net income for the period under "Other financial income and expenses" (Note 28.2).

The income recognition criteria by category are as follows:

- sales and other income: income is recognised as revenue once the company has transferred the main risks and benefits inherent in ownership of the goods to the buyer. Sales are measured at the fair value of the consideration received or receivable. In the event of a deferred payment having a material impact on the calculation of the fair value, future payments are discounted accordingly;
- interest: income is recognised for the amount of accrued interest;
- dividends: income from investments in associates is recognised whenever the Group is entitled to receive payment as a shareholder.

#### **1.23.** Share-based payment

Various share subscription and purchase option plans (stock options) as well as bonus share plans – all equity-settled plans – have been established by the Group. 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 to the number of options that will have vested by the end of the vesting period. In this regard, the Group uses the Black-Scholes or Monte Carlo mathematical valuation model.

During the vesting period, the total fair value thereby determined is apportioned on a straight-line basis over the full vesting period for the plan in question, 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 as a personnel cost, offset by an increase in shareholders' equity. When the options are exercised, the exercise price received by the Group is recognised in cash and offset in shareholders' equity.

# **1.24.** Current operating profit (loss) and other operating income and expenses

In accordance with paragraphs 88 and 89 of IAS 1, ERAMET presents its income statement using the composite "function and nature" approach, so as to comply with the Group's internal management reporting procedures. The ERAMET Group specifically uses EBITDA and current operating profit (loss) as performance indicators. EBITDA includes 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) includes EBITDA, depreciation, amortisation and provisions; it consists in particular of the cost of employee-related liabilities, the cost of employee profit-sharing and translation adjustments between the rates upon recognition and those at the reporting date (trade receivables and payables).

The tax credit to support competitiveness and employment (CICE) is shown deducted from personnel costs at  $\in$ 4 million for the financial year 2013.

Other operating income and expenses only include very limited, unusual, abnormal and infrequent income and expenses for particularly material amounts that the Group presents separately in its income statement in order to facilitate understanding of current operating performance. This item primarily consists of:

- restructuring costs;
- costs incurred for development projects whose profitability has yet to be demonstrated;
- defined benefits plan liquidations and modifications;
- capital gains and losses from sales of assets;
- impairment losses on goodwill, intangible assets and property, plant and equipment.

## **1.25.** Net financial income

Net financial income consists of the following items:

 net borrowing costs, these being income statement items relating to balance sheet components of net borrowing, namely, financial liabilities and cash and cash equivalents; other financial income and expenses, such as dividends, provisions for securities, accretion expenses, net interest expense for employee benefits, and gains/losses on instruments that are non-eligible as hedges under IAS 39.

## **1.26.** Earnings per share

Basic earnings per share before dilution are obtained by dividing the Group profit (loss) by the average number of shares outstanding during the period. This average number of shares outstanding excludes treasury shares.

Diluted earnings per share are obtained by adjusting Group profit (loss) for the period and the number of shares for potentially dilutive effects, mainly represented by employee subscription and purchase option plans (stock options).

# **1.27.** Risks

#### **Environmental risks**

Where there is a legal or contractual obligation to restore mining sites, a restoration provision is made, offset by a dismantling asset. The provision is based on site-by-site estimates of the cost of this work, the total cost being apportioned over the life of the operation of the mine (Notes 1.9, 1.19, 6 and 19.5).

Provisions are made for any other environmental contingencies on the basis of estimated future costs without, however, making any allowance for insurance indemnities receivable (Note 19.5).

#### Market risks

To manage its interest rate and foreign currency risks, the Group has recourse to various financial instruments. The Group's policy is to reduce its exposure to interest rate and foreign currency fluctuations, but not to speculate. Positions are traded either on organised markets, or over the counter with top notch banking counterparties.

Gains or losses on hedging instruments are recognised symmetrically with the gains or losses on the hedged items. However, unrealised losses on financing hedging transactions ineligible under hedging standards are recognised in the income statement.

All transactions outstanding at the reporting date are recognised in the statement of financial position, with no set-off (Note 24).

#### Foreign currency risks

When the exposure stemming from borrowings taken out by Group companies in currencies other than their functional currencies is not offset by income in those currencies, the Group may have recourse to hedging (Note 22). In addition, the Group uses financial instruments to limit its exposure to the currency risk on its sales and on certain dollar-denominated costs.

#### Interest rate risks

Depending on market conditions and on forecast changes in net debt, the Group Finance Department monitors the breakdown between fixed and floating rate debt and cash investments. The financial instruments used are interest-rate swaps, caps and floors (Note 24).

#### **Commodity risks**

The Group holds derivative instruments for purposes of reducing its exposure. For this purpose, ERAMET mainly uses futures, combined call and put options (collars) and call options (Note 24).

#### **Counterparty risks**

The Group can be exposed to credit risk in the event of default by a counterparty. To limit this risk the Group collects and reviews information ahead of financial transactions from, e.g., rating agencies and published financial statements. No systematic arrangement is therefore in place to hedge counterparty risk (Note 24).

#### Liquidity risk

The Group is obliged to repay its financing borrowings, and to pay its other liabilities. To cover its liquidity risks, ERAMET has additional sources of finance consisting of credit lines and commercial-paper facilities (Note 24). NOTE 2. 2013 CONSOLIDATED FINANCIAL STATEMENTS

# **Note 2.** Segment reporting

# **2.1.** By business segment

(C. e.e. W. e.e.)	Nielest		Allaura	Holding Div & Interco	Tabal
(€ million)	Nickel	Manganese	Alloys	eliminations	Total
FY 2013	700	1 550	001	0	0.100
External sales	700	1,558	901	3	3,162
Inter-segment sales	4	4	3	(11)	-
Sales	704	1,562	904	(8)	3,162
Cash generated from operations	(150)	257	20	(53)	74
EBITDA	(130)	350	49	(38)	231
Current operating profit (loss)	(222)	218	4	(45)	(45)
Non-cash income/expenses	327	170	74	10	581
Depreciation and amortisation	89	122	50	4	265
Provisions	13	1	(2)	5	17
Impairment losses	337	53	33	-	423
Industrial capital expenditure (intangible assets, property, plant & equipment)	172	346	64	5	587
TOTAL BALANCE SHEET ASSETS (CURRENT AND NON-CURRENT)	1,694	2,671	1,158	437	5,960
TOTAL BALANCE SHEET LIABILITIES (CURRENT & NON-CURRENT, EX SHAREHOLDERS' EQUITY) FY 2012	1,068	1,249	834	(201)	2,950
External sales	893	1,557	994	3	3,447
Inter-segment sales	5	3	3	(11)	
Sales	898	1,560	997	(8)	3,447
Cash generated from operations	45	246	11	(44)	258
EBITDA	53	357	40	(43)	407
Current operating profit (loss)	(38)	240	(5)	(44)	153
Non-cash income/expenses	(00)	106	(3)	(7)	215
Depreciation and amortisation	88	100	47	(7)	213
Provisions	14	8		(12)	8
Impairment losses	14	о 8	(2)	(12)	9
		-			-
Industrial capital expenditure (intangible assets, property, plant & equipment)	146	399	84	12	641
TOTAL BALANCE SHEET ASSETS (CURRENT AND NON-CURRENT)	2,385	2,904	1,182	(162)	6,309
TOTAL BALANCE SHEET LIABILITIES (CURRENT & NON-CURRENT, EX. SHAREHOLDERS' EQUITY)	996	1,294	808	(598)	2,500

### 2.2. By geographic region

(€ million)	France	Europe	North America	Asia	Oceania	Africa	South America	Total
Sales (sales destination)								
FY 2013	414	1,004	642	949	27	76	50	3,162
FY 2012	455	1,143	686	992	29	84	58	3,447
Industrial capital expenditure (intangible assets, property, plant & equipment)								
FY 2013	82	35	20	86	77	286	1	587
FY 2012	104	36	48	118	69	265	1	641
TOTAL BALANCE SHEET ASSETS (CURRENT AND NON-CURRENT)								
FY 2013	2,399	722	273	577	887	1,100	2	5,960
FY 2012	2,502	778	363	869	904	892	1	6,309

# Note 3. Scope of consolidation

At 31 December 2013, the consolidation scope included 66 companies (at 31 December 2012: 68), 61 fully-consolidated companies, five proportionally-consolidated companies, and 2 equity-consolidated companies (as at 31 December 2012: 61 fully-consolidated companies, 5 proportionally-consolidated companies and 2 equity-consolidated companies).

	Country	Consolidation method	Percen	tage (%) of
Company			control	interest
ERAMET	France	Consolidating	-	-
Nickel				
Société Le Nickel-SLN	New Caledonia	Fully consolidated	56	56
Cominc	New Caledonia	Fully consolidated	100	56
Poum	New Caledonia	Fully consolidated	100	56
Weda Bay Minerals Inc.	Canada	Fully consolidated	100	100
Weda Bay Mineral Singapore Pte Ltd	Singapore	Fully consolidated	100	100
Strand Minerals Pte Ltd	Singapore	Fully consolidated	66.6	66.6
Pt Weda Nickel Ltd	Indonesia	Fully consolidated	90	59.94
Eramet Holding Nickel	France	Fully consolidated	100	100
Eurotungstène Poudres	France	Fully consolidated	100	100
Unimin AG	Switzerland	Fully consolidated	100	100
Manganese				
ERAMET Holding Manganese	France	Fully consolidated	100	100
ERAMET Comilog Manganèse	France	Fully consolidated	100	81.86
ERAMET Marietta Inc.	US	Fully consolidated	100	100
ERAMET Norway A/S	Norway	Fully consolidated	100	100
Valdi	France	Fully consolidated	100	100
Eralloys Holding A/S	Norway	Fully consolidated	100	100
DNN Industrier A/S	Norway	Fully consolidated	100	100
Tinfos A/S	Norway	Equity method	33.35	33.35
Comilog SA	Gabon	Fully consolidated	63.71	63.71
Setrag SA	Gabon	Fully consolidated	99.97	63.70

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	Country	Consolidation method	Percentage (%)		
Company			control	interest	
Somivab	Gabon	Fully consolidated	82.98	52.86	
Comilog Holding	France	Fully consolidated	100	63.71	
Comilog International	France	Fully consolidated	100	63.71	
Comilog Lausanne	Switzerland	Fully consolidated	100	63.71	
Port Minéralier d'Owendo SA	Gabon	Fully consolidated	97.24	61.95	
Erachem Comilog SA	Belgium	Fully consolidated	100	63.71	
Comilog US	US	Fully consolidated	100	63.71	
Gulf Chemical & Metallurgical Corp.	US	Fully consolidated	100	63.71	
Bear Metallurgical Corp.	US	Fully consolidated	100	63.71	
Gulf Chemical & Metallurgical Corp. Canada	Canada	Fully consolidated	100	63.71	
Erachem Comilog Inc.	US	Fully consolidated	100	63.71	
Comilog France	France	Fully consolidated	100	63.71	
Comilog Dunkerque	France	Fully consolidated	100	63.71	
Miner Holding BV	The Netherlands	Fully consolidated	100	63.71	
Erachem Mexico SA	Mexico	Fully consolidated	100	63.71	
TiZir Ltd.	United Kingdom	Proportional consolidation	50	50	
TiZir Titanium & Iron A/S	Norway	Proportional consolidation	50	50	
TiZir Mauritius Ltd	Mauritius	Proportional consolidation	50	50	
Grande Côte Opérations SA	Senegal	Proportional consolidation	50	45	
Comilog Asia Ltd	Hong Kong	Fully consolidated	100	92.74	
Comilog Asia Ferro Alloys Ltd	Hong Kong	Fully consolidated	100	92.74	
Guangxi Comilog Ferro Alloys Ltd	China	Fully consolidated	70	64.92	
Guilin Comilog Ferro Alloys Ltd	China	Fully consolidated	100	92.74	
Guangxi Eramet Comilog Chemicals Ltd	China	Fully consolidated	100	92.74	
Comilog Far East Development Ltd	Hong Kong	Fully consolidated	100	92.74	
ERAMET Comilog Shanghai Trading Co. Ltd	China	Fully consolidated	100	92.74	
ERAMET Comilog Shanghai Consultancy Services Co. Ltd	China	Fully consolidated	100	92.74	
Alloys					
Erasteel	France	Fully consolidated	100	100	
Erasteel Champagnole	France	Fully consolidated	100	100	
Erasteel Kloster AB	Sweden	Fully consolidated	100	100	
Erasteel Stubs Ltd	United Kingdom	Fully consolidated	100	100	
Erasteel Inc.	US	Fully consolidated	100	100	
Erasteel Trading Ltd.	China	Fully consolidated	100	100	
HeYe Erasteel Innovative Materials Co Ltd	China	Equity method	49	49	
ERAMET Holding Alliages	France	Fully consolidated	100	100	
ERAMET Alliages	France	Fully consolidated	100	100	
Aubert & Duval	France	Fully consolidated	100	100	
Interforge	France	Fully consolidated	94	94	
UKAD	France		94 50		
	France	Proportional consolidation	00	50	
Holding company and miscellaneous Eras SA	Luxombourg	Fully consolidated	100	100	
	Luxembourg	Fully consolidated			
Metal Securities	France	Fully consolidated	100	100	
Metal Currencies	France	Fully consolidated	100	100	
Eramine	France	Fully consolidated	100	100	
Bolera Minera SA	Argentina	Fully consolidated	82.43	82.43	
Eramine Sud America SA	Argentina	Fully consolidated	100	100	

All companies within the scope of consolidation share the same reporting date of 31 December.

# Note 4. 2012 financial statements restated

The financial statements for the financial year 2012 have been restated for the retroactive application of IAS 19 (revised) – Employee benefits, at 1 January 2013.

The main impacts of the revision of the standard are as follows:

- the corridor method used to stagger actuarial differences has been discontinued, and such differences must be recognised immediately in other comprehensive income;
- the returns on plan assets recognised income is now calculated using discount rates and no longer the expected rate of return;
- unvested past service costs must be recognised immediately and can no longer be staggered.

Additionally, for the sake of homogeneity and in particular when processing accretion expenses for site restoration provisions, the ERAMET group now recognises the accounting expense of net interest in net financial income (Other financial income and expenses) and no longer in current operating profit (loss). As a result, an expense of  $\in$ 7 million for the financial year 2012 was reclassified. Under the old standard IAS 19, this expense would have amounted to  $\in$ 4 million.

Actuarial differences and past service costs that were not provisioned at 31 December 2011 were recognised at 1 January 2012 on a net-of-tax basis in consolidated reserves. The impacts on the consolidated financial statements are as follows:

- increase in employee-related liabilities amounting to €65 million;
- decrease of plan assets by €2 million;
- decrease in deferred tax liability of €23 million (€2 million in assets and €21 million in liabilities);
- decrease in shareholders' equity by €44 million (including €2 million attributable to non-controlling interests and €42 million attributable to equity holders of the parent company).

NOTE 4. 2013 CONSOLIDATED FINANCIAL STATEMENTS

# 4.1. Statement of comprehensive income

(€ million)	FY 2012 Reported	Adjustments for IAS 19 (Revised)	FY 2012 Restated
Sales	3,447	-	3,447
Other income	34	-	34
Cost of sales	(2,823)	-	(2,823)
Administrative and selling expenses	(200)	-	(200)
Research and development expenditure	(51)	-	(51)
EBITDA	407	-	407
Depreciation, amortisation & impairment of non-current assets	(245)	-	(245)
Impairment charges and provisions	(18)	9	(9)
Current operating profit (loss)	144	9	153
Other operating income and expenses	(74)	-	(74)
Operating profit (loss)	70	9	79
Net borrowing cost	8	-	8
Other financial income and expenses	(8)	(7)	(15)
Share in profit of associates	-	-	-
Income tax	(28)	(1)	(29)
Profit (loss) for the period	42	1	43
attributable to non-controlling interests	34	-	34
<ul> <li>attributable to equity holders of the parent</li> </ul>	8	1	9
Basic earnings per share (€)	0.31		0.34
Diluted earnings per share $(\epsilon)$	0.31		0.34
Profit (loss) for the period	42	1	43
Translation adjustments for financial statements of subsidiaries denominated in foreign currency	2	-	2
Change in revaluation reserve for hedging financial instruments	37	-	37
Change in fair value of available-for-sale financial assets	6	-	6
Income tax	(12)	-	(12)
Items recyclable to profit or loss	33	-	33
Actuarial gains and losses on employee benefits	-	(4)	(4)
Income tax	-	5	5
Items not recyclable to profit or loss	-	1	1
Other components of comprehensive income	33	1	34
attributable to non-controlling interests	(4)	(1)	(5)
<ul> <li>attributable to equity holders of the parent</li> </ul>	37	2	39
TOTAL COMPREHENSIVE INCOME	75	2	77
attributable to non-controlling interests	30	(1)	29
<ul> <li>attributable to equity holders of the parent</li> </ul>	45	3	48

# **4.2.** Statement of financial position

#### Assets

(€ million)	31/12/2012 Reported	Adjustments for IAS 19 (Revised)	31/12/2012 Restated
Goodwill	173	-	173
Intangible assets	717	-	717
Property, plant & equipment	2,454	-	2,454
Investments in associates	33	-	33
Other financial assets	100	(12)	88
Deferred tax	29	2	31
Other non-current assets	7	-	7
Non-current assets	3,513	(10)	3,503
Inventories	1,038	-	1,038
Trade receivables and other current assets	690	-	690
Current tax receivables	38	-	38
Derivatives	51	-	51
Other current financial assets	368	-	368
Cash and cash equivalents	621	-	621
Current assets	2,806	-	2,806
TOTAL ASSETS	6,319	(10)	6,309

#### Liabilities

(€ million)	31/12/2012 Reported	Adjustments for IAS 19 (Revised)	31/12/2012 Restated
Share capital	81	-	81
Share premium	373	-	373
Revaluation reserve for available-for-sale assets	5	-	5
Hedging instrument revaluation reserve	4	-	4
Actuarial gains and losses on employee benefits	-	(40)	(40)
Translation adjustments	32	-	32
Other reserves	2,538	1	2,539
Attributable to equity holders of the parent	3,033	(39)	2,994
Attributable to non-controlling interests	818	(3)	815
Shareholders' equity	3,851	(42)	3,809
Employee-related liabilities	131	57	188
Provisions	428	-	428
Deferred tax	380	(25)	355
Borrowings – long-term portion	311	-	311
Other non-current liabilities	28	-	28
Non-current liabilities	1,278	32	1,310
Provisions – short-term portion	30	-	30
Borrowings – short-term portion	230	-	230
Trade payables and other current liabilities	805	-	805
Current tax liabilities	72	-	72
Derivatives	53	-	53
Current liabilities	1,190	-	1,190
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	6,319	(10)	6,309

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NOTE 5. 2013 CONSOLIDATED FINANCIAL STATEMENTS

#### **4.3.** Statement of cash flows

(€ million)	FY 2012 Reported	Adjustments for IAS 19 (Revised)	FY 2012 Restated
Operating activities		<u> </u>	
Profit (loss) for period	42	1	43
Elimination of non-cash and non-operating income and expenses			
Depreciation, amortisation and provisions	266	(2)	264
Financial instruments	(11)	-	(11)
Deferred tax	(41)	1	(40)
Proceeds from asset disposals	2	-	2
Share in profit of associates	-	-	-
CASH GENERATED FROM OPERATIONS	258	-	258

The other components of the statement of cash flows remain unchanged.

The notes to the financial statements given below include restatements for the IAS 19 (revised) standard.

# Note 5. Goodwill

(€ million)	31/12/2013	31/12/2012
Eramet Norway A/S	153	155
Valdi	-	8
Eurotungstène Poudres	6	6
Aubert & Duval	3	3
Other companies	1	1
TOTAL	163	173
Of which impairment losses	(39)	(31)

Following the impairment test carried out on the Valdi cash generating unit (CGU) in the Manganese Division (see Note 9 – Impairment of assets) at 31 December 2013, an impairment loss in the goodwill of the company Valdi was recognized for its total residual value, namely €8 million, for the financial year 2013.

# **Note 6.** Intangible assets

#### 6.1. By category

(€ million)	Gross amount	Depreciation and amortisation	Impairment losses	Net amount 31/12/2013	Net amount 31/12/2012
Mining reserves	361	(71)	-	290	303
Expenses for geology, prospection, and research	415	(20)	(310)	85	327
Software	73	(54)	-	19	11
Other intangible assets	80	(49)	(1)	30	33
Work in progress, down payments	32	(1)	-	31	43
TOTAL	961	(195)	(311)	455	717

#### **6.2.** Change over the period

(€ million)	FY 2013	FY 2012
At beginning of period	717	612
Business combinations	-	44
Other changes in scope	-	-
Capital expenditure for the period	117	96
Disposals for the period	(3)	(3)
Depreciation and amortisation for the period	(20)	(17)
Impairment losses for the period	(323)	-
Translation adjustments and other movements	(33)	(15)
AT PERIOD END	455	717
Gross amount	961	897
Amortisation & depreciation	(195)	(180)
Impairment losses	(311)	-

The mining deposits include Gabon (Manganese Division), New Caledonia and Indonesia (Nickel Division) representing respectively €30 million, €13 million and €206 million (€32 million, €13 million and €215 million at 31 December 2012), and Senegal (Manganese Division) representing €41 million (€43 million at 31 December 2012) after the allocation of the acquisition price in 2012, following the creation of the TiZir Ltd joint venture in October 2011.

Geology, prospecting and research expenses include capitalised costs (geology, exploration, prospecting, technical and economic research expenses) in connection with the Weda Bay project representing €57 million (€300 million at 31 December 2012) after impairment losses of €322 million for the financial year (see Note 9 – Impairment of assets) and in connection with the TiZir project in Senegal representing €19 million (€20 million at 31 December 2012) (Note 8 – Mining projects).

Investments include the expenses incurred for mining projects (geology, exploration, prospecting, and technical and economic research expenses allocated to "Other intangible assets").

The investments for the period ( $\in$ 117 million, compared to  $\in$ 96 million at 31 December 2012) mainly comprise expenditure in Indonesia (Weda Bay project) amounting to  $\in$ 82 million ( $\in$ 63 million in 2012).

The business combinations for the financial year 2012 include goodwill of  $\notin$ 38 million determined during the operation in 2011 which was allocated to mining reserves after the apportionment of the cost of acquisition in 2012.

#### 6.3. Research & development expenditure – expenses during the period

(€ million)	31/12/2013	31/12/2012
Non-capitalised research and development expenditure	47	51
of which geological expenses:		
Nickel	11	12
Manganese	-	-
Percentage of sales	1.5%	1.5%

Ordinary expenses for mining sites already opened or in operation (Nickel and Manganese Divisions) are not capitalised and represent expenses in the financial year in which they are incurred.

# Note 7. Property, plant & equipment

### 7.1. By category

(€ million)	Gross amount	Depreciation and amortisation	Impairment losses	Net amount 31/12/2013	Net amount 31/12/2012
Land and buildings	972	(515)	(9)	448	395
Industrial and mining facilities (1)	3,152	(1,888)	(133)	1,131	1,230
Other Property, plant & equipment	734	(444)	-	290	259
Work in progress, down payments	670	(3)	-	667	570
TOTAL	5,528	(2,850)	(142)	2,536	2,454
(1) of which:					
Finance leased assets	129	(48)	-	81	60
• Dismantling assets – site restoration (Note 19.4)				106	118

# 7.2. Change over the period

(€ million)	FY 2013	FY 2012
At beginning of period	2,454	2,119
Business combinations	-	(10)
Other changes in scope	-	-
Capital expenditure for the period	452	545
Disposals for the period	(19)	(6)
Depreciation and amortisation for the period	(242)	(236)
Impairment losses for the period	(77)	(1)
Translation adjustments and other movements	(32)	43
AT PERIOD END	2,536	2,454
Gross amount	5,528	5,295
Amortisation & depreciation	(2,850)	(2,716)
Impairment losses	(142)	(125)

In 2012, business combinations concerned the consolidation of the Gabonese company Somivab (Manganese Division) and the sale of the Chinese company Erasteel Innovative Materials Ltd (Alloys Division).

## 7.3. Breakdown of main strategic capital expenditure programmes

(€ million)	FY 2013	FY 2012
TiZir project in Senegal – Grande Côte Opérations SA	121	108
CMM plant – Comilog SA	80	80
New Gulin plant – Guilin Comilog Ferro Alloys Ltd	12	16
Manganese production expansion – Comilog SA	5	19
TOTAL	218	223

The main capital expenditure programmes are financed from cash and borrowings. Future finance lease payments are presented in Note 22 – Borrowings.

# **Note 8.** Mining projects

#### 8.1. Weda Bay project in Indonesia

On 2 May 2006, ERAMET acquired Weda Bay Minerals Inc., listed on the Toronto stock exchange, whose subsidiary PT Weda Bay Nickel owns the world-class nickel deposit at Halmahera in Indonesia under a contract of work. Following this acquisition, ERAMET undertook studies to mine that deposit. These studies are aimed at building a mine and a plant using the hydrometallurgical process developed by ERAMET at its research centre.

Further studies were conducted in 2013 to validate certain technical aspects, in particular relating to the hydrometallurgical process and the use of reserves.

The net value of the Weda Bay assets breaks down as follows:

Negotiations will continue concomitantly with the Indonesian government regarding the adjustment of the terms of the contract of work to comply with the new Indonesian mining law, in order to clarify certain regulatory and tax aspects that applied to the project.

At the same time, the nickel market conditions deteriorated clouding the short- and medium-term outlook.

In the present conditions, the project cannot be financed satisfactorily. ERAMET and its partners decided to not make the final investment decision in 2014.

(€ million)	31/12/2013	31/12/2012
Mining reserves	206	215
Expenses for geology, prospection and research	367	300
Property, plant & equipment	13	15
Total assets – before impairment	586	530
Impairment losses (1)	(310)	-
TOTAL ASSETS – AFTER IMPAIRMENT	276	530

(1) \$427 million converted at the closing rate at 31 December 2013.

Capitalised project expenditure mainly consists of the geology, exploration and prospecting costs, and the costs of technical and economic studies.

The project's recoverable value was measured on the basis of studies of the project's cost, its potential markets and nickel price forecasts. An impairment loss of USD427 million (€322 million reported in the income statement at the average EUR/USD exchange rate for 2013) was recognised for the financial year 2013 (see Note 9 – Impairment of assets and Note 27 – Other operating income and expenses) taking into account notably the change in the project schedule and the conditions of the Nickel market.

ERAMET's partners in the project are the Mitsubishi Corporation and Pacific Metals Co Ltd groups, respectively holding 30% and 3.4% of the Strand Minerals Pte Ltd holding company and the Antam Pt Group which holds 10% of the Weda Bay Nickel Pt company that owns the deposit. Pt Antam has several purchase options allowing it to increase its interest, the terms and conditions of exercise of which are given in Note 32 – Other commitments. ERAMET also granted put options when Mitsubishi Corporation acquired an interest in Strand Minerals Pte Ltd. These options can be exercised on the basis of the final investment decision, under certain conditions detailed in Note 19.5 – Other contingencies and losses.

#### 8.2. TiZir project in Senegal and Norway

On 27 July 2011, ERAMET 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 and the Grande Côte Opérations SA mineral sands project in Senegal. The final agreement was signed on 25 October 2011. The joint venture company and its subsidiaries are consolidated proportionally to 50% as from 1 October 2011.

The project is scheduled to go into production in the first half of 2014.

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#### NOTE 9. 2013 CONSOLIDATED FINANCIAL STATEMENTS

The net value of the project's assets breaks down as follows:

(€ million)	31/12/2013	31/12/2012
Mining reserves	41	42
Expenses for geology, prospection and research	19	20
Property, plant & equipment – Senegal	250	138
Intangible assets – Norway	1	1
Property, plant & equipment – Norway	15	20
TOTAL ASSETS	326	221

The acquisition price allocation was established by independent experts and recognised as intangible assets under mining reserves. It was limited to the contributions by Mineral Deposits Ltd (MDL) owing to the application of interpretation SIC 13 – Jointly-controlled entities – Non-monetary contributions by venturers.

# **Note 9.** Impairment of assets

#### 9.1. Estimates and judgements

At 31 December 2013, the ERAMET Group is broken down into 18 cash generating units (CGUs) corresponding to the different production sites of the 3 Divisions:

- 3 CGUs in the Nickel Division;
- 13 CGUs in the Manganese Division;

• 2 CGUs in the Alloys Division.

All assets, including mining assets and goodwill, are allocated to a cash-generating unit (CGU) (Note 1.10). Goodwill included in the net book value of cash-generating units (CGU), tested on 31 December 2013 are as follows:

		31/12/2013				31/12/2012			
(€ million)	Net a	Net amounts		Of which: impairment		Net amounts		Of which: impairment	
Cash generating units									
Nickel Division		6		-		6		-	
<ul> <li>"Powders" business</li> </ul>	6		-		6		-		
Manganese Division		153		(22)		163		(14)	
"Recycling" business	-		(10)		8		(2)		
<ul> <li>Port Minéralier d'Owendo SA</li> </ul>	-		(10)		-		(10)		
Erachem Mexico SA	-		(2)		-		(2)		
Norwegian business (incl. Tinfos)	153		-		155		-		
Alloys Division		4		(17)		4		(17)	
High-speed steel business	-		(9)		-		(9)		
Aubert & Duval	4		(8)		4		(8)		
TOTAL		163		(39)		173		(31)	

The change in the net value of goodwill stems mainly from translation adjustments and the allocation to intangible assets or to property, plant and equipment after the acquisition price was allocated (Note 5).

#### Indication of impairment loss

The existence of events calling for impairment loss testing is determined following the opinion of the Group's general management, based on several criteria. Impairment loss indicators correspond mainly to the following changes and variations:

- business (economic environment, markets);
- interest rate;
- technological level;
- asset obsolescence and performance.

An impairment loss test is carried out on the cash-generating units (CGU) or on the individual assets concerned when these indicators show an adverse change.

The data and assumptions used to carry out impairment tests on non-current assets in cash generating units (CGUs) are as follows.

#### **Recoverable value**

The recoverable value of a cash-generating unit (CGU) or of an individual asset is the higher of the fair value less the costs of sale and its value in use. The value in use, determined using the method of discounted future cash flows generated from the use of the assets, is the measurement basis preferred by the Group.

#### **Cash flows**

The cash flows used for measuring the value in use result from the operational plan prepared by management, plus a terminal value. The terminal value is the capitalisation to infinity of the cash flows in the last year. The cash flows consist of the operating cash flow adjusted for changes in working capital requirement and investments. The growth rates used are the same as those used in budgets and the growth rates to infinity used for the terminal values are generally between 0% and 2%, depending on the CGU.

#### **Discount rate**

The discount rate used to calculate the value in use is the weighted average cost of capital, which is:

- 10.5% for the mining business (against 11% in 2012);
- 11% for the Weda Bay project in Indonesia (against 11.5% in 2012);
- 9.5% for metallurgical activities (compared to 10% in 2012).

The gearing applied is the average gearing for the segment. Country risk was factored in for the Group's mining activity in Gabon, New Caledonia and Indonesia in the same proportion.

#### 9.2. Annual test for impairment loss

The items tested consist of goodwill, intangible assets and property, plant and equipment of the cash-generating units (CGU) or of the individual assets concerned.

Impairment losses and changes in these losses stem mainly from the following factors:

				FY 2013				FY 2012
	Total	Goodwill	Intangibles	PP&E	Total	Goodwill	Intangibles	PP&E
(€ million)		Note 5	Note 6	Note 7		Note 5	Note 6	Note 7
At beginning of period	(156)	(31)	-	(125)	(158)	(31)	-	(127)
Impairment losses for the period	(408)	(8)	(323)	(77)	(2)	-	-	(2)
Reversals for the period	5	-	-	5	-	-	-	-
Disposals for the period	47	-	-	47	-	-	-	-
<ul> <li>Translation adjustments and other movements</li> </ul>	20	-	12	8	4	-	-	4
AT PERIOD END	(492)	(39)	(311)	(142)	(156)	(31)	-	(125)
Allocated:								
<ul> <li>Ni – Weda Bay project in Indonesia</li> </ul>	(310)	-	(310)	-	-	-	-	-
<ul> <li>Mn – "Recycling" business</li> </ul>	(54)	(10)	(1)	(43)	(49)	(2)	-	(47)
<ul> <li>Mn – Special products business</li> </ul>	(25)	-	-	(25)	(26)	-	-	(26)
Mn – Erachem Comilog SPRL	(6)	-	-	(6)	(8)	-	-	(8)
Mn – Guangxi Comilog Ferro Alloys Ltd	-	-	-	-	(4)	-	-	(4)
Alloys – High-speed steel business	(74)	(9)	-	(65)	(44)	(9)	-	(35)
Other CGU	(20)	(20)	-	-	(20)	(20)	-	-
Cash generating units (CGU)	(489)	(39)	(311)	(139)	(151)	(31)	-	(120)
Individual assets	(3)	-	-	(3)	(5)	-	-	(5)

An impairment loss of €322 million was recognised in 2013, at the average EUR/USD exchange rate for the period, on the intangible assets of the Weda Bay Nickel project following the deferral of the final investment decision (see Note 8 – Mining projects).

The impairment losses in the Manganese Division mainly include the "Recycling" business for which impairment was recognised since the financial year 2008 and the "Special products" business in the United States for which impairment was recognised since the financial year 2003. An additional impairment loss of €39 million was recognised in the financial year 2013 on the "Recycling" business in the United States owing to the decline in molybdenum and vanadium prices that led to restricted production volumes.

An impairment loss of €14 million (including €8 million for the residual value of goodwill) was recognised for Valdi (part of the "Recycling" business of that Division).

At the same time, the Canadian assets of the company GCMC, for which impairment losses were recognised earlier, were sold during the financial year with a reversal of the impairment loss in the year.

Impairment losses in the Alloys Division relate to Erasteel's highspeed steel business. An additional impairment loss of €33 million was recognised for the financial year 2013 following the sharp decline in business owing to lower demand for conventional steel and stiffer competition.

#### **9.3.** Sensitivity

Sensitivity is determined by reference to changes in future cash flows and discount rates.

The Group's cash projections for its mining and metallurgical business are highly dependent on the sale price assumptions,

# **Note 10**. Investments in associates

notably that of ores (nickel, manganese, zircon, etc.), on the euro-dollar parity, and the world demand for the products sold by the Group.

The cash-generating units (CGU) concerned are as follows:

- cash-generating units (CGU) involving sizeable goodwill;
- cash-generating units (CGU) whose test result is negative or positive to a non-significant extent.

In the Weda Bay project cash-generating unit (CGU), a change in the main assumptions (discounting rate, price of Nickel, inflation rate) could have a material impact on the value in use.

In the case of the Norway business CGU, represented by ERAMET Norway A/S in the Manganese Division, the various scenarios of price sensitivity, business level and discount rate do not call for impairment.

As for the SLN-ERAMET Nickel CGU, the value in use is extremely sensitive to changes in Nickel prices. The main assumptions made for the impairment test are based on the best assessment of the Nickel market developments. An adverse trend in the long-term price forecasts for Nickel could bring the recoverable value in line with the book value. However, impairment would not be recognised for an increase of 0.5% in the discount rate, as also a 0.5% decrease in long-term growth rate in like operating conditions.

For the China CGU of the Manganese Division, a 1% increase in the discount rate and a decrease in the projected gross margin would bring the recoverable value in line with the book value.

For the "Recycling" business CGU, a 1% increase in the discount rate or a 10% fall in business or a 5% decrease in prices would call for additional impairment.

(€ million) Share of shareholders' equ							
Companies	Country	% interest	Share of profit (loss) 2013	31/12/2013	31/12/2012		
Tinfos A/S	Norway	33.35%	1	24	24		
HeYe Erasteel Innovative Materials Ltd	China	49.00%	-	8	9		
TOTAL			1	32	33		

# **Note 11.** Other non-current financial assets

# **11.1.** By category

(€ million)	Gross amount	Impairment losses	Net amount 31/12/2013	Net amount 31/12/2012
Deposits and guarantees	51	(13)	38	26
Shareholder Ioan – TiZir	18	-	18	-
Other non-current financial assets	20	(6)	14	13
Total excluding non-consolidated investments	89	(19)	70	39
Non-consolidated investments – Note 12	87	(38)	49	49
TOTAL	176	(57)	119	88

The other non-current financial assets relate mainly to loans or current accounts granted to non-consolidated companies.

Non-consolidated investments are detailed in Note 12 - Non-consolidated subsidiaries.

The change in deposits and guarantees mainly reflects the cash paid for the option on the research project in South Africa for the Manganese Division, amounting to  $\notin$ 16 million.

The shareholders' loan to TiZir accounts for 50% of the loan amount granted by ERAMET SA to this company, at 31 December 2013, amounting to USD50 million in all, *i.e.* €36 million (USD45 million as per the agreement with the partner MDL – see Note 31 and USD5 million in additional financing).

# **11.2.** By currency

(€ million)	31/12/2013	31/12/2012
Euro	19	23
US dollar	42	8
Pacific franc	7	6
Other currencies	2	2
TOTAL	70	39

# **11.3.** By interest rate type

(€ million)	31/12/2013	31/12/2012
Interest-free	37	26
Fixed interest rates	13	1
Floating rates	20	12
TOTAL	70	39

Interest-free items mainly relate to deposits and guarantees and certain loans to employees.

# Note 12. Non-consolidated subsidiaries

# **12.1.** By shareholding

(€ million)	Country	% interest	Gross amount	Impairment losses	Net amount 31/12/2013	Net amount 31/12/2012
Companies						
Main controlled companies:						
Brown Europe	France	100%	8	-	8	8
Metallied	Spain	51%	1	(1)	-	-
Aubert & Duval USA Inc. (formerly Htm Inc.)	US	100%	3	(1)	2	2
Erasteel GmbH	Germany	100%	3	(1)	2	2
Eramet Alloys UK Ltd	Great Britain	100%	4	-	4	4
Aubert & Duval Mold and Die Technology	China	85%	3	(1)	2	2
Aubert & Duval Special Steel GmbH	Germany	100%	3	-	3	3
La Petite-Faye	New Caledonia	100%	2	-	2	2
Eramet Research	France	100%	1	-	1	1
Eramet Ingénerie	France	100%	1	-	1	1
Maboumine	Gabon	76.14%	26	(26)	-	-
Main non-controlled companies:						
HeYe Special Steel Ltd	China	10%	14	-	14	14
Cooltech	France	10%	2	(2)	-	-
• Exeltium	France	-	3	-	3	3
Other companies			13	(6)	7	7
TOTAL			87	(38)	49	49

Non-consolidated subsidiaries are mainly controlled companies and are recognised in the balance sheet at their acquisition cost or at their value at the date of their removal from the consolidation scope less any impairment provision.

Investments in the controlled companies are not consolidated since they have no material impact on the Group financial statements.

# **12.2.** Simplified financial statements for the main non-consolidated companies

Simplified financial statements (corporate data) for the main controlled but non-consolidated companies at 31 December 2012 are set out below:

(€ million) (basis: financial statements as at 31 December 2012)	Aubert & Duval Special Steel GmbH	Erasteel GmbH	Aubert & Duval Mold & Die Technology	Forges de Montplaisir	Brown Europe	Ades	Eramet Ingenierie	Eramet Research
Sales	21	16	5	4	16	11	9	31
Current operating profit (loss)	(4)	-	-	-	1	-	-	2
Profit (loss) for period	-	-	-	-	2	-	-	7
Non-current assets	1	1	2	2	6	-	-	17
Working capital requirement	6	2	3	1	8	4	-	4
Net equity	-	2	3	3	17	2	5	19
Provisions	1	-	-	-	-	-	-	1
Net borrowings	6	1	2	-	(3)	2	(5)	1

These companies are mainly sales and research & development entities, the services of which are wholly for the ERAMET Group, and the industrial subsidiaries of ERAMET Holding Alliages (shaping, wire-drawing and drawing of metallurgical products).

# Note 13. Inventories

# **13.1.** By category

(€ million)	Net amount 31/12/2013	Net amount 31/12/2012
Raw materials	316	325
Merchandise and finished products	339	398
Work in progress and semi-finished products	290	282
Consumables and spare parts	44	33
TOTAL	989	1,038
Of which: impairment losses	(151)	(104)

Impairment provisions mainly relate to raw materials and merchandise and finished products. Inventories pledged to secure liabilities appear in Note 31 – Off-balance sheet commitments.

# **13.2.** Changes over the period

(€ million)	FY 2013	FY 2012
At beginning of period	1,038	1,093
Business combinations	-	4
Other changes in scope	-	-
Changes in working capital requirement	22	(63)
Impairment losses for the period	(49)	(1)
Translation adjustments and other movements	(22)	5
AT PERIOD END	989	1,038
Breakdown of impairment losses:		
At beginning of period	(104)	(103)
Impairment losses	(94)	(54)
Reversals of impairment, used	45	53
Reversals of impairment, unused	-	-
Translation adjustments and other movements	2	-
At period end	(151)	(104)

In 2013, the Nickel Division and the Alloys Division increased their inventories whereas the Manganese Division reduced its ore inventory. The Group's gross inventories rose by €22 million between 2012 and 2013. Large provisions for impairment losses were recognised in the Nickel Division in particular.

# **Note 14.** Trade and other receivables

## 14.1. By category

(€ million)	Gross amount	Impairment losses	Net amount 31/12/2013	Net amount 31/12/2012
Trade receivables	390	(11)	379	433
Payroll and tax receivables	103	(1)	102	93
Other operating receivables	144	(79)	65	124
Receivables on non-current assets	18	-	18	26
Prepaid expenses	21	-	21	21
TOTAL	676	(91)	585	697
Non-current assets	5	-	5	7
Current assets	671	(91)	580	690

# 14.2. Changes over the period

(€ million)	FY 2013	FY 2012
At beginning of period	697	669
Business combinations	-	1
Other changes in scope	1	-
Changes in working capital requirement	(67)	56
Impairment losses for the period	(37)	(18)
Translation adjustments and other movements	(9)	(11)
AT PERIOD END	585	697
Breakdown of impairment losses on receivables:		
At beginning of period	(54)	(62)
Impairment losses	(40)	(21)
Reversals of impairment, used	3	3
Reversals of impairment, unused	-	-
Business combinations	-	-
Translation adjustments and other movements	-	26
At period end	(91)	(54)

The bulk of trade and other receivables are due in less than one year. Other non-current receivables of  $\in$ 5 million compared to  $\in$ 7 million at 31 December 2012, relate to a Setrag SA receivable vis-à-vis the Gabonese State in connection with the concession agreement. In 2013, trade receivables decreased by  $\in$ 37 million in the Manganese Division owing to decreased collection times and the slower pace of billing in December 2013. It decreased by  $\in$ 12 million in the Nickel Division owing to the fall in sales. At the Group level, trade receivables decreased by  $\in$ 54 million.

## **14.3.** Securitisation of trade receivables

In 2012, the Group's wholly-owned subsidiary Aubert & Duval renewed the debt securitisation agreement it had concluded on 5 July 2007 with a bank with ceilings of €90 million and USD50 million. This contract provided for the securitisation during a five-year period of receivables from major customers, located primarily in Europe and North America.

The receivables thereby assigned were derecognised for the following amounts:

(€ million)	31/12/2013	31/12/2012
Trade receivables – Invoices assigned	(89)	(99)
Trade receivables – Invoices reconsolidated	7	8
Other operating receivables – Security deposit	10	11

The reconsolidated trade receivables offset by financial liabilities relate to risks of trade disputes representing 8% of assigned receivables.

The security deposit is used to cover the commitments given by Aubert & Duval to the finance company and is returned upon the settlement of the operation; it comprises the reserves that serve to cover credit, late payment and dilution risks.

# Note 15. Current financial assets and cash and cash equivalents

## **15.1.** Other current financial assets

Other current financial assets consisted of bonds issued by some twenty listed European companies.

The change in fair value of the other current financial assets recognised in equity was -€5 million for the financial year 2013 (+€5 million for 2012).

### **15.2.** Cash and cash equivalents

### 15.2.1. By category

(€ million)	Net amount 31/12/2013	Net amount 31/12/2012
Cash	63	70
Cash equivalents	679	551
TOTAL	742	621

### 15.2.2. By currency

(€ million)	31/12/2013	31/12/2012
Euro	695	558
US dollar	18	39
Yuan Ren Min Bi (China)	9	17
Norwegian krone	12	3
Other currencies	8	4
TOTAL	742	621

### 15.2.3. By interest rate

(€ million)	31/12/2013	31/12/2012
Interest-free	31	29
Fixed interest rates	270	271
Floating rates	441	321
TOTAL	742	621

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

Cash includes cash in hand and at bank. Cash equivalents mostly comprise the following items managed by Metal Securities:

- money-market securities totalling €359 million (compared with €217 million at 31 December 2012) bearing interest based on the EONIA index rate (Euro OverNight Index Average);
- **Note 16.** Shareholders' equity

## **16.1.** Changes in share capital

The share capital of €80,956,814.90 is composed of 26,543,218 fully paid-up shares with a €3.05 par value each, broken down as follows:

		FY 2	013		FY 2012					
	Ca	apital	Votir	Voting rights		apital	Voting rights			
Breakdown	%	No. of shares	%	No. of shares	%	No. of shares	%	No. of shares		
Registered shares										
Sorame and Compagnie d'Études Industrielles du Rouvray (CEIR)	37.06	9,835,834	46.18	15,342,929	37.06	9,835,834	46.20	15,342,929		
FSI Equation (BPIfrance subsidiary)	25.66	6,810,317	20.50	6,810,317	25.66	6,810,317	20.51	6,810,317		
S.T.C.P.I.	4.03	1,070,586	6.44	2,141,172	4.03	1,070,586	6.45	2,141,172		
Eramet SA	1.07	284,861	-	-	1.02	270,499	-	-		
Eramet SA share fund	0.20	52,373	0.26	86,227	0.20	52,373	0.25	83,511		
Other	1.52	404,015	2.28	757,126	1.49	394,652	2.17	721,391		
Total registered shares	69.54	18,457,986	75.66	25,137,771	69.45	18,434,261	75.58	25,099,320		
Other bearer shares	30.46	8,085,232	24.34	8,085,232	30.55	8,108,957	24.42	8,108,957		
TOTAL NUMBER OF SHARES	100.00	26,543,218	100.00	33,223,003	100.00	26,543,218	100.00	33,208,277		

Pursuant to a shareholders' agreement signed on 16 March 2012, which entered into force on 16 May 2012 and will expire on 31 December 2016, subject of the AMF decision and notification No. 212C0647, the Company, as of 16 May 2012, is under the majority control of a declared concert party of shareholders comprising:

- a concert sub-group comprised of SORAME and CEIR, companies controlled by the Duval family, pursuant to a simultaneous shareholders' agreement of 19 July 1999, that came into effect on 21 July 1999, and was amended by a rider on 13 July 2009;
- Banque Publique d'Investissement (Bpifrance), via its subsidiary FSI Equation.

The provisions of the above shareholders' agreement and of the concert sub-group can be found in the main extracts of the texts of the AMF decision and notification No. 212C0647 and No. 209C1013 (amendment of 13 July 2009).

Since 1 January 2002, registered shares meeting the required conditions have qualified for double voting rights.

- negotiable debt securities totalling €203 million (compared with €292 million at 31 December 2012) bearing interest based on the EONIA index rate;
- interest-bearing bank accounts totalling €103 million.

The change from one period to the next is analysed *via* a cash flow statement drawn up using the indirect method.

#### **Dividends** paid

(€ million)	FY 2013	FY 2012
Net dividends (€)	1.30	2.25
Total return <i>(€)</i>	1.30	2.25
TOTAL NET DISTRIBUTION	34	59

The dividends paid during the first half of 2013 in respect of the 2012 financial year amounted to  $\notin$ 34 million. This represented a net dividend per share of  $\notin$ 1.30 (dividends paid in 2012 in respect of the 2011 financial year amounted to  $\notin$ 59 million, namely  $\notin$ 2.25 per share).

The ERAMET SA parent company's distributable reserves amounted to  $\in$ 1,656 million prior to the appropriation of 2013 earnings ( $\in$ 1,369 million at 31 December 2012).

### **Treasury shares**

At 31 December 2013, ERAMET held 284,861 treasury shares (270,499 shares at 31 December 2012); these included 106,952 shares (62,554 shares at 31 December 2012) purchased under the liquidity contract signed with Exane BNP Paribas, and 177,909 shares (207,945 shares at 31 December 2012) purchased by Exane BNP Paribas after it was instructed to buy back 250,000 shares. These transactions were fully recognised in shareholders' equity.

The change in treasury shares in the financial year 2013 stems from movements in connection with the liquidity contract relating to 44,398 shares, the 37,747 shares that were purchased following the share buyback instruction and the vesting of 67,783 bonus shares allocated to employees (Note 16.2.2). The total amount of buybacks was charged to shareholders' equity.

The table below summarises the treasury share transactions:

		Price support	Grants to employees	Other purposes	Total
Position at 31 December 2011		83,596	175,950	-	259,546
As a percentage of share capital	26,519,116	0.32%	0.66%	-	0.98%
Allocated to stock options/bonus shares:					
<ul> <li>grants/bonus shares – 2010 plans</li> </ul>		-	(9,526)	-	(9,526)
• grants/bonus shares – 2011 & 2012 plans		-	(732)	-	(732)
Purchases		181,098	42,253	-	223,351
Sales		(202,140)	-	-	(202,140)
Position at 31 December 2012		62,554	207,945	-	270,499
As a percentage of share capital	26,543,218	0.24%	0.78%	-	1.02%
Allocated to stock options/bonus shares:					
<ul> <li>grants/bonus shares – 2009 plans</li> </ul>		-	(38,495)	-	(38,495)
<ul> <li>grants/bonus shares – 2010 plans</li> </ul>		-	(13,097)	-	(13,097)
• grants/bonus shares – 2011 & 2012 plans		-	(16,191)	-	(16,191)
Purchases		235,693	37,747	-	273,440
Sales		(191,295)	-	-	(191,295)
POSITION AT 31 DECEMBER 2013		106,952	177,909	-	284,861
As a percentage of share capital	26,543,218	0.40%	0.67%	-	1.07%

#### NOTE 16. 2013 CONSOLIDATED FINANCIAL STATEMENTS

### 16.2. Bonus share plan

			At out	set	As at 31 Dece	mber 2012		Movement	ts in 2013		As at 31 Dece	mber 2013	
(1)	Date of the Shareholders' Meeting	Date of the Board meeting	Number of beneficiaries	Number of shares	Number of beneficiaries	Number of shares	Granted at outset	Vested	Lapsed	Expired	Number of beneficiaries	Number of shares	Expiry of plans
1	13/05/2009	29/07/2009	14,677	73,385	6,928	34,640	-	(34,640)	-	-	-	-	29/07/2013
2	20/05/2010	20/05/2010	14,412	28,824	8,486	16,972	-	-	(1,608)	-	7,682	15,364	20/05/2014
3	20/05/2010	20/05/2010	162	65,008	156	58,413	-	(13,097)	(150)	(40,714)	53	4,452	20/05/2015
4	20/05/2010	16/02/2011	14,292	28,584	13,453	26,906	-	(9,548)	(1,964)	-	7,697	15,394	16/02/2015
5	20/05/2010	16/02/2011	205	71,665	196	64,583	-	-	(240)	(10,265)	193	54,078	16/02/2016
6	20/05/2010	15/02/2012	14,210	28,420	13,669	27,338	-	(2,118)	-	-	12,610	25,220	15/02/2016
7	20/05/2010	15/02/2012	201	89,885	198	89,325	-	-	(6,600)	(12,564)	187	70,161	15/02/2017
8	20/05/2010	21/03/2013	14,353	28,706	-	-	28,706	-	(3,404)	-	12,651	25,302	21/03/2017
9	20/05/2010	21/03/2013	209	145,040	-	-	145,040	-	(1,650)	-	204	143,390	21/03/2018
то	TAL		-	559,517	-	318,177	173,746	(59,403)	(15,616)	(63,543)	-	353,361	

(1) Final vesting date: 1 = 29/07/2011 France & 29/07/2013 Worldwide, 2 = 20/05/2012 & 20/05/2014, 3 = 20/05/2013 & 20/05/2015, 4 = 16/02/2013 & 16/02/2015, 5 = 16/02/2014 & 16/02/2016, 6 = 15/02/2014 & 15/02/2016; 7 = 15/02/2015 & 15/02/2017; 8 = 21/03/2015 & 21/03/2017 and 9 = 21/03/2016 & 21/03/2018.
 The shares cannot be sold prior to: 1 = 29/07/2013, 2 = 20/05/2014, 3 = 20/05/2015, 4 = 16/02/2015, 5 = 16/02/2016, 6 = 15/02/2016; 7 = 15/02/2017; 8 = 21/03/2017 and 9 = 21/03/2016; 7 = 15/02/2017; 8 = 21/03/2017 and 9 = 21/03/2018.

## 16.3. Share-based payments

Share-based payments relates only to plans for bonus share awards to employees. They represented an expense of  $\in$ 8 million ( $\in$ 15 million at 31 December 2012) recognised in income under current operating profit (loss).

The applicable rules are common to all plans:

- the rights vesting or grant date is the date of the decision of the Board of Directors;
- the exercise period follows a lock-in period of 2 years for French employees and of 4 years for foreign employees, as from the date of grant.

All of the bonus share plans (plans 1, 2, 4, 6 and 8, Note 16.2) are not subject to performance conditions and their fair value is measured using the Black & Scholes model.

Bonus share plans were established on 20 May 2010 (plan No. 3, Note 16.2), on 16 February 2011 (plan No. 5, Note 16.2), on 15 February 2012 (plan No. 7, Note 16.2) and on 21 March 2013 (plan No. 9, Note 16.2), with two performance conditions attached to the shares – one intrinsic condition based on ERAMET's financial performance and one external condition based on the ERAMET stock performance. The fair value of these plans was measured using the Monte Carlo model.

They are apportioned on a straight-line basis over the vesting period of the plan under personnel costs and offset by an increase in shareholders' equity.

The assumptions made to measure the plans are based on:

- expected volatility determined on the basis of an observation of the stock's historic performance;
- a risk-free zero coupon rate over the term of the plan;
- a future payout ratio based on the average of the past five years.

The results of each plan based on the above assumptions are shown in the table below:

									Account	ting expense	s of plans
(€ million)		Number of shares	Exercise price (€)	Maturity (years) <sup>(1)</sup>	Expected volatility	Risk- free rate	Average dividend rate	Fair value of the option (€) <sup>(2)</sup>	Total duration of the plan	FY 2013	FY 2012
Plan No. 1 –	France	24,430	free	2 + 2	-	2.50%	2.35%	151.48	3.5	-	-
Note 16.2.	World	46,115	free	4 + 0	-	2.50%	2.35%	145.00	5.5	0.2	1.6
Plan No. 2 –	France	9,930	free	2 + 2	-	0.79%	2.50%	174.88	1.6	-	0.3
Note 16.2.	World	18,886	free	4 + 0	-	0.79%	2.50%	180.02	3.3	0.8	0.8
Plan No. 3 –	France	48,230	free	3 + 2	-	0.79%	2.50%	187.05/113.02	5.0	(0.9)	2.3
Note 16.2.	World	16,778	free	4 + 0	-	0.79%	2.50%	194.86/117.74	1.7	-	0.6
Plan No. 4 –	France	9,870	free	2 + 2	-	1.99%	2.00%	235.09	2.1	-	1.1
Note 16.2.	World	18,744	free	4 + 0	-	2.35%	2.00%	235.93	4.2	1.1	1.1
Plan No. 5 –	France	53,650	free	3 + 2	-	1.99%	2.00%	249.87/151.28	8.5	1.8	3.4
Note 16.2.	World	18,015	free	4 + 0	-	2.35%	2.00%	255.38/154.62	2.6	0.4	0.8
Plan No. 6 –	France	10,248	free	2 + 2	-	0.90%	2.00%	100.21	1.0	0.5	0.4
Note 14.2.2.	World	18,388	free	4 + 0	-	1.33%	2.00%	109.80	1.9	0.5	0.4
Plan No. 7 –	France	65,930	free	3 + 2	-	0.90%	2.00%	109.38/72.24	4.7	1.3	1.6
Note 16.2.	World	23,955	free	4 + 0	-	1.33%	2.00%	118.85/78.49	1.8	0.3	0.5
Plan No. 8 –	France	10,824	free	2 + 2	-	0.37%	1.80%	66.25	0.7	0.3	-
Note 16.2.	World	17,882	free	4 + 0	-	0.63%	1.80%	74.83	1.3	0.2	-
Plan No. 9 –	France	111,225	free	3 + 2	-	0.37%	1.80%	71.68/30.73	6.1	1.6	-
Note 16.2.	World	33,815	free	4 + 0	-	0.63%	1.80%	81.00/34.72	2.0	0.4	-
TOTAL									57.5	8.5	14.9

(1) Maturity = vesting period + lock-in period.

(2) Bonus share plans with two performance conditions attached to the shares have two fair values: (i) the first based on the intrinsic condition and (ii) the second based on the external condition.

# **Note 17.** Non-controlling interests

## 17.1. By category

		31/12/	2013	31/12/2012
(€ million)	% of non-controlling interests	Profit (loss)	Shareholders' equity	Shareholders' equity
Société Le Nickel-SLN	44.00%	(58)	308	498
Comilog SA	36.29%	36	232	266
Strand Minerals Inc. (1)	33.40%	(115)	(76)	36
Pt Weda Nickel Ltd	10.00%	-	14	14
Guangxi Comilog Ferro Alloys Ltd	30.00%	-	-	-
Interforge	6.00%	-	2	2
Other companies		-	(2)	(1)
TOTAL		(137)	478	815

(1) In the event of the Group's acquiring 33.4% of minority interest in Strands Minerals Inc. or of Mitsubishi's exercising the put options (see Note 19.5), in compliance with IFRS3 (Revised), the minority equity amount would then be reclassified as shareholders' equity attributable to the Group.

The negative earnings of -€115 million from the minority interest in Strand Minerals Inc. in 2013 is due to the impairment losses of €322 million recognised on the Weda Bay project in Indonesia (see Note 8.1).

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## 17.2. Changes over the period

(€ million)	FY 2013	FY 2012
At beginning of period	815	1,041
Business combinations	-	-
Other changes in scope	-	-
Dividends paid	(187)	(260)
Capital increase	-	1
Profit (loss) for the period	(137)	34
Change in revaluation reserve for hedging financial instruments	1	(2)
Change in net defined benefit plan liabilities	-	(1)
Changes of percentage interests in subsidiaries	-	1
Translation adjustments and other movements	(14)	1
AT PERIOD END	478	815

# Note 18. Employee-related liabilities

ERAMET Group companies offer their employees various long-term benefits in accordance with the rules and practices in force in the countries where they operate. An actuarial appraisal of the Group companies defined benefits plan liabilities was carried out using the standard actuarial framework (assumptions and methods) defined by the Group. This appraisal of liabilities is performed each year on a multi-annual basis (two or three years, except for non-recurring events requiring a new appraisal on a case-by-case basis).

The Group's main liabilities in respect of employee benefits are as follows:

### France

- Retirement packages providing for the payment of a lump sum determined on the basis of length of service and final salary.
- Healthcare for employees and pensioners at the Sandouville site (plan closed since 15 September 2009).
- Long-service bonuses: payment of a lump sum varying depending on the site after 20, 30, 35 and 40 years' service.
- Supplemental pension plan for certain senior managers.

# **United States**

- Pension plans providing for the payment of a pension, the amount of which depends on length of service at the time of retirement (at age 62 or 65, depending on the plan). Possibility of early retirement and eligibility for disability benefits based on length of service and the plan in question. All the pension plans are closed.
- Healthcare for pensioners of certain sites, where a part of the plan is closed.
- Life insurance plan for employees of certain sites.

## Norway

- Long-service bonuses: plan open to new entrants, with the payment of a lump sum or a gift to all employees after 25, 30, 40 and 50 years' seniority and upon retirement.
- Retirement package: five plans of which four are closed to new entrants, with the payment of life-long or temporary annuity when the employee retires, or as from their 77th year for one of the plans, based on the final salary and the length of service at the time of retirement.
- Early retirement plan: two open plans and three closed plans, defined benefit plans that cover employees between 62 and 67 years of age, following agreements between the employer and the employees with retirement and disability benefits up to the retirement age.
- Supplemental pension plan: 6 defined benefit plans and one plan covering 4 individual promises with a number of individual agreements such as benefits for senior managers and former employees.

# New Caledonia

- Retirement packages providing for the payment of a lump sum determined on the basis of length of service and final salary.
- Loyalty bonuses paid after ten years' seniority and then every five years, calculated as a percentage of the basic salary.
- Long-service bonuses: lump-sum payment after 20, 30, 35 and 40 years of service (reduced to 15 years, 22 years and 6 months, 26 years and 3 months, and 30 years if the employee's work location is outside mainland France).
- Allocation of flight tickets whose number, value and frequency vary according to occupational category.

## Main actuarial assumptions and methods

The Group's liabilities are appraised by independent actuaries. The actuarial assumptions used (employee turnover, mortality rate, retirement age, salary trends, etc.) vary according to the prevailing demographic and economic conditions in the countries in which the plan is in force.

In the Euro zone and in the United States, the discount rates were determined on the basis of AA10+ corporate bonds.

In Norway, since 2012, the discount rate is calculated on the basis of covered bonds (such as mortgage-backed bonds).

In New Caledonia where the private bond market is not sufficiently liquid as also that of government bonds, the approach for determining the rate uses a method to replace the government bond yield, namely the expected long-term return on consumer price inflation plus the expected long-term return on GDP growth on the multiplicative basis.

The following main actuarial assumptions are used for measurement:

		Rates				
As at 31 December 2013	Discount	Inflation	Increase in salary			
Euro zone	3.30%	2.00%	3.00-3.75%			
Norway	4.00%	1.80%	3,80%			
US	4.35%-4.70%	2.20%	3.00%-3.50%			
New Caledonia	3.95%	1.70%	3,00%			

	Rates						
As at 31 December 2012	Discount	Inflation	Increase in salary				
Euro zone	3.00%	2.00%	3.00%-3.75%				
Norway	4.00%	2.10%	3,60%				
US	3.45%-3.75%	2.30%	3.00%-3.50%				
New Caledonia	4.05%	1.80%	3,00%				

The Group classifies its employee-related liabilities into three categories: pension plans, retirement packages and other benefits. The latter comprise long-service bonuses and *ex gratia* payments, medical expenses plans, and healthcare and life insurance plans.

The table below shows the components of the expense recognised in income in each of these categories:

	Pensior	n plans	Retirement	t package	Other b	enefits	Total em related lia	
(€ million)	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012
Service cost (1)	7	2	6	3	2	4	15	9
Net interest expense	3	3	2	3	2	2	7	8
Actuarial differences for long-term benefits	-	2	-	-	-	-	-	2
TOTAL	10	7	8	6	4	6	22	19

(1) Including the impact of plan changes and curtailments.

The net interest expense includes the expected return on plan assets that amounted to €8 million for the financial year 2013 (€9 million for the financial year 2012).

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The actuarial difference amounts recognised in other comprehensive income (OCI) are as follows:

	Pensio	n plans	Retiremen	t package	Other b	enefits	Total em related l	
(€ million)	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012
Actuarial differences on the liabilities	-	10	6	1	(8)	-	(2)	11
• experience	3	5	8	(5)	(1)	(1)	10	(1)
demographic assumptions	10	-	1	-	(7)	-	4	-
<ul> <li>financial assumptions</li> </ul>	(13)	5	(3)	6	-	1	(16)	12
Actuarial differences on plan assets	(5)	(8)	1	-	-	-	(4)	(8)
Change in non-recoverable surplus	(1)	1	(1)	-	-	-	(2)	1
TOTAL	(6)	3	6	1	(8)	-	(8)	4

The table below shows the changes in the obligation towards employee benefits and in the fair value of retirement plan assets:

	Pen	sion plans	Retirement package Other benefits					employee- l liabilities
(€ million)	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012	FY 2013	FY 2012
Change in the obligation								
Obligation at beginning of period	262	252	103	100	53	51	418	403
<ul> <li>Expenses recognised</li> </ul>	16	14	10	8	4	6	30	28
<ul> <li>Actuarial differences in OCI</li> </ul>	-	10	6	1	(8)	-	(2)	11
<ul> <li>Contributions and benefits paid</li> </ul>	(13)	(16)	(14)	(6)	(3)	(4)	(30)	(26)
<ul> <li>Impact of currency fluctuations and other movements</li> </ul>	(11)	2	(4)	-	-	-	(15)	2
Present value of the obligation at period end – (I)	254	262	101	103	46	53	401	418
Change in plan assets								
Fair value at beginning of period	183	163	49	47	-	-	232	210
Return reported	6	7	2	2	-	-	8	9
<ul> <li>Actuarial differences in OCI</li> </ul>	5	8	(1)	-	-	-	4	8
<ul> <li>Contributions paid by the Group and plan members</li> </ul>	8	18	1	1	-	-	9	19
Benefits paid	(11)	(13)	(13)	(2)	-	-	(24)	(15)
<ul> <li>Impact of currency fluctuations and other movements</li> </ul>	(7)	-	(4)	1	-	-	(11)	1
Fair value of plan assets at period end – (II)	184	183	34	49	-	-	218	232
Financial position (Surplus)/Deficit – (III) = (I) – (II)	70	79	67	54	46	53	183	186
Non-recoverable surplus	-	1	-	1	-	-	-	2
NET LIABILITIES ON THE BALANCE SHEET	70	80	67	55	46	53	183	188

Liabilities for which there are no covering assets amounted to €108 million at 31 December 2012 (€93 million at 31 December 2012).

	31 C	ecember 20 <sup>°</sup>	13	31 December 2012				
(€ million)	Present value of obligations	Fair value of plan assets	Net liabilities in the balance sheet	Present value of obligations	Fair value of plan assets	Financial position (surplus)/ deficit	Non- recoverable surplus	Net liabilities in the balance sheet
France	147	(63)	84	139	(62)	77	-	77
US	120	(97)	23	147	(96)	51	-	51
Norway	59	(38)	21	69	(56)	13	2	15
New Caledonia	38	(10)	28	34	(10)	24	-	24
Other countries – Europe	14	(10)	4	14	(8)	6	-	6
Other countries – Rest of the world	23	-	23	15	-	15	-	15
TOTAL	401	(218)	183	418	(232)	186	2	188

The table below shows the breakdown of obligations towards employee benefits and plan assets between the main countries:

The pension fund asset allocation policy depends on country-specific practices. The pension funds are invested as follows:

(€ million)				FY 2013				FY 2012
Equities		48		22%		52		22%
• Europe	9		4%		11		5%	
• US	39		18%		41		18%	
New Caledonia	-		0%		-		0%	
Bonds		82		38%		93		40%
• Europe	25		11%		39		17%	
• US	57		26%		54		23%	
New Caledonia	-		0%		-		0%	
Other investments		88		40%		87		38%
• Europe	77		35%		79		34%	
• US	1		0%		1		0%	
New Caledonia	10		5%		7		3%	
TOTAL		218		100%		232		100%

An increase by 0.25 percentage point of any of the actuarial assumptions below would have the following impact, all other actuarial assumptions remaining unchanged:

(€ million)	Value of obligations at 31 December 2013
Increase (decrease)	
Discount rate	(10)
Inflation rate	7
Salary growth rate	4

The contributions for employee-related liabilities are estimated at  $\epsilon$ 7 million for the financial year 2014, compared to the actual contributions of  $\epsilon$ 9 million in the financial year 2013. Benefits payments towards employee-related liabilities are estimated at  $\epsilon$ 19 million for the financial year 2014, compared to the actual benefits payments of  $\epsilon$ 18 million in the financial year 2013. The total duration was 11.5 years at 31 December 2013 (11.8 years at 31 December 2012).

# Note 19. Provisions

## **19.1.** By category

(€ million)	31/12/2013	31/12/2012
Personnel	18	14
Environmental contingencies and site restoration	351	355
Other contingencies and losses	102	89
TOTAL	471	458
Long-term portion	439	428
Short-term portion	32	30

# **19.2.** Changes over the period

(€ million)		FY 2013		FY 2012
At beginning of period		458		408
Business combinations		-		-
Other changes in scope		-		-
Provisions (reversals) for the period		26		18
provisions for the period	44		39	
(reversals) for the period, used	(30)		(32)	
• (reversals) for the period, unused	-		-	
accretion expenses	12		11	
Dismantling assets		(9)		34
Translation adjustments and other movements		(4)		(2)
AT PERIOD END		471		458

## **19.3.** Personnel

(€ million)	31/12/2013	31/12/2012
Erachem Comilog SA redundancy plan	4	5
Aubert & Duval redundancy plan	7	4
Other restructuring and redundancy plans – Manganese Division	4	3
Restructuring and redundancy plans	15	12
Other payroll contingencies and losses	3	2
TOTAL	18	14

### **Restructuring and redundancy plans**

All restructuring and redundancy costs are fully provisioned whenever the IFRS criteria are satisfied.

### Other payroll contingencies and losses

These provisions relate primarily to disputes with employees and social security bodies.

## **19.4.** Environmental contingencies and site restoration

(€ million)	31/12/2013	31/12/2012
Environmental contingencies	29	30
Site restoration (1)	322	325
TOTAL	351	355
(1) Of which provisions offsetting a dismantling asset	292	251
Long-term portion	340	344
Short-term portion	11	11

### **Environmental contingencies**

The provision of  $\notin$ 29 million at 31 December 2013 ( $\notin$ 30 million at 31 December 2012) concerns mainly the Manganese Division ( $\notin$ 19 million compared to  $\notin$ 18 million at 31 December 2012).

As of 2009, TCEQ (Texas Commission for Environment Quality) accused the American company GCMC (Gulf Chemical & Metallurgical Corp.), a subsidiary of the Group, of various operating

permit breaches. A preliminary agreement to avoid criminal prosecution was signed in 2011 with the Texas State authorities. In July 2013, a second agreement was signed with the same authorities to close the tort claim for USD6 million (€5 million), which was fully provisioned at 31 December 2012. An initial payment of USD3 million was made in 2013, with the payment of the balance staggered over 2 years.

### Site restoration

(€ million)		FY 2013		FY 2012
At beginning of period		325		277
Business combinations		-		-
Other changes in scope		-		-
Provisions (reversals) for the period		8		15
provisions for the period	2		16	
(reversals) for the period, used	(6)		(12)	
• (reversals) for the period, unused	-		-	
accretion expenses	12		11	
Dismantling assets		(9)		34
Translation adjustments and other movements		(2)		(1)
AT PERIOD END		322		325

The restoration of mining sites currently in operation concerns the companies Le Nickel-SLN in New Caledonia (Nickel Division), amounting to  $\in$ 239 million (unchanged from 31 December 2012), Comilog SA in Gabon (Manganese Division) representing  $\in$ 37 million (31 December 2012:  $\in$ 34 million) and ERAMET Marietta Inc. in the United States for  $\in$ 21 million (31 December 2012:  $\in$ 24 million). Site reconditioning costs are discounted over the period remaining until the scheduled mine closure date, such period not extending beyond 2040 in New Caledonia, 2032 in Gabon and 2074 in the United States.

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These provisions are discounted based on the following actuarial assumptions:

	As at 31 D	ecember 2013	As at 31 December 20	
	Discount rate	Inflation rate	Discount rate	Inflation rate
US	4.35%	2.20%	5.00%	3.00%
New Caledonia	3.95%	1.50%	4.05%	1.50%
Gabon	6.50%	2.50%	5.35%	3.00%

An increase or decrease by 0.25% in the discount rate would result in a €11 million decrease and a €11 million increase in provisions. The Group has no decommissioning fund as defined by IFRIC 5.

## **19.5.** Other contingencies and losses

(€ million)		FY 2013		FY 2012
At beginning of period		89		82
Business combinations		-		-
Other changes in scope		-		-
Provisions (reversals) for the period		14		8
provisions for the period	28		14	
• (reversals) for the period, used	(14)		(6)	
• (reversals) for the period, unused	-		-	
accretion expenses	-		-	
Translation adjustments and other movements		(1)		(1)
AT PERIOD END		102		89

The other provisions for contingencies and losses include, in particular, €44 million (USD60 million) for financial risks associated with the put options granted by ERAMET to Mitsubishi Corporation in connection with the disposal of 33.4% of the shares in Strand Minerals Pte Ltd. In parallel with the sale agreements, ERAMET granted Mitsubishi Corporation put options in respect of the shares acquired. These options may be exercised under certain conditions, which are mainly linked to the success of the mining project. These options may be exercised during specific windows. In particular, the deadline for one of these options was deferred from end-September 2013 to end-March 2014. The exercise price of these options is an agreed price that varies in line with the circumstances set down in the contracts (between USD118 million and USD58 million) plus the proceeds from the resale of the receivable owed by Strand Minerals Pte Ltd. In addition, Mitsubishi Corporation has an open-ended option to sell its interest to ERAMET at fair value in the event of a change in control at ERAMET. In return, ERAMET has an open-ended option to buy Mitsubishi Corporation's interest in Strand Minerals Pte Ltd at fair value in the event of a change in control at Mitsubishi Corporation.

The other provisions split across the three divisions also cover miscellaneous contingencies, including:

- the €5 million cost of closing the Boulogne-sur-Mer plant (unchanged from end-2012);
- €7 million in commercial contingencies/disputes (€8 million at end-2012);
- various supplier lawsuits in New Caledonia amounting to €3 million (unchanged from end-2012);
- provisions for tax contingencies of €22 million (€7 million at 31 December 2012).

## **19.6.** Ongoing disputes

To the best of the Company's knowledge, there are no other extraordinary situations (except the Carlo Tassara France proceedings described in Note 36 – Additional information) or disputes likely to have a material impact on the financial position, results or assets of the Company or Group.

# Note 20. Contingent liabilities

Four NGOs (non-governmental organisations), an inhabitants' protest group (collectif d'habitants) and a former député (Member of Parliament) filed a number of applications in February and March 2011 with the Libreville Court of First Instance, instituting various civil proceedings in Gabon, seeking damages from Comilog SA and ERAMET for alleged environmental harm caused as a result of the operation of the Moanda mining site. On 13 November 2012, the Libreville Court of First Instance, in response to the demand of Comilog SA and the other defendants, declined territorial competence. The appeal filed by the applicants against this ruling was declared inadmissible by the Libreville Court of Appeal on 16 May 2013. The applicants appealed to the Cour de cassation against the Libreville Court of Appeal decision on September 2013. At present, the pleas put forward by the applicants do not support their claims. In this connection, it should be recalled that all the ERAMET Group subsidiaries are compliant with the applicable environmental standards, including those in Gabon, and that it conducts all actions of environmental relevance in accordance with the Group Charter described in the 2013 Registration Document.

Comilog SA is undergoing a tax audit for 2007 to 2010. Two tax assessment notices were received in 2011 and 2012 with respect to these four financial years. Following the company's responses in 2012, a notice was received on 24 January 2013 followed by a collection notice on 5 February 2013. Disputing virtually all of the assessments, the company filed a claim with the Gabon tax authority on 20 February 2013 and received a second collection notice on 23 April 2013. Discussions continued through the year and at this stage in the proceedings, no indication can be given as to the outcome of this tax audit.

The Administrative Court of Appeals of Lyon issued an order on 7 May 2013 revoking the Labour Minister's decision to refuse the inclusion of Aubert & Duval's Ancizes site in the list of sites whose employees are entitled to the early retirement system for asbestos workers for the period prior to 2005.

Aubert & Duval filed an appeal against this order with the Council of State. Aubert & Duval also requested the Council of State to grant a stay of execution of the order as it has called upon the Labour Minister to classify the Ancizes site. That stay request was notably called for owing to the operational risk of disruption and loss of know-how for the company that would be caused by the early retirement of several very highly-qualified employees under the regulatory framework in force.

On 1 August 2013, the Council of State issued a stay of execution of the order for the period after 1992 and rejected the appeal for the period prior to 1993. The classification of the Ancizes site was ordered for the period prior to 1993 through a joint ministerial decision of November 2013. The Council of State will rule in the coming months on Aubert & Duval's appeal for the period after 1992.

# Note 21. Deferred tax

## **21.1.** By category

(€ million)	31/12/2013	31/12/2012
Difference between tax and consolidated amounts of non-current assets	140	147
Restatement of tax entries	203	244
Other timing differences	192	199
Hedging instruments	12	14
Elimination of gains (losses) on internal disposals	11	15
Planned intra-Group dividend payments	6	11
Deferred tax liabilities before netting	564	630
Deferred tax netting by tax entity	(285)	(275)
Deferred tax liabilities	279	355
Timing differences	165	169
Tax loss carry-forwards <sup>(1)</sup>	154	91
Elimination of gains (losses) on internal disposals	30	30
Hedging instruments	9	12
Difference between tax and consolidated amounts of non-current assets	4	4
Deferred tax assets before netting	362	306
Deferred tax netting by tax entity	(285)	(275)
Deferred tax assets	77	31
NET DEFERRED TAX – LIABILITIES/(ASSETS)	202	324
(1) Unrecognised deferred tax assets Capitalised deferred tax assets	135 154	84 91

The decrease in 2013 in deferred tax relating to the restatement of tax-related entries is due to the statutory provisions recorded in Gabon, New Caledonia and France.

Other temporary differences recognised at 31 December 2013, representing €27 million in net liabilities (€192 million in liabilities

and €165 million in assets) mainly relate to inventory measurement (net liability: €8 million), finance leases (net liability: €6 million), reinsurance underwriting provisions (net liability: €9 million), unrealised gains on UCITS (net liability: €1 million), and employee benefits (net asset: €50 million).

# **21.2.** Changes over the period

(€ million)	Liabilities	Assets	Net FY 2013	Net FY 2012
At 1 January	355	31	324	358
Business combinations	-	-	-	-
Other changes in scope	-	-	-	-
Deferred tax offset in shareholders' equity	-	(7)	7	7
Deferred tax on profit (loss) for the period	(64)	80	(144)	(40)
Deferred tax netting by tax entity	(10)	(10)	-	-
Translation adjustments and other movements	(2)	(17)	15	(1)
AT PERIOD END	279	77	202	324

Pursuant to IAS 12, deferred tax assets and liabilities have been presented separately in the balance sheet after offsetting within each tax entity, with aging being restated accordingly. Except for tax consolidation in France (Note 21.3) and the United States (Note 21.4), every company is an independent tax entity.

# **21.3.** Tax consolidation in France

Tax losses of €137 million mainly arose during the 2009, 2010 and 2013 financial years, with deferred tax of €34 million being partially capitalised (after the €13 million limit). No tax losses arising in earlier financial years remained outstanding. In addition, the net position of deferred tax arising from tax consolidation in France after the limit is null (€110 million in liabilities and in assets) compared to the €71 million liability (€171 million in liabilities and €100 million in assets) at 31 December 2012.

# Note 22. Borrowings

## **22.1.** By category

#### (€ million) 31/12/2013 31/12/2012 Bank loans (1) 1,004 398 Bank overdrafts and creditor banks 35 28 Finance lease liabilities 51 31 Other borrowings and financial liabilities 39 84 TOTAL 1,129 541 Long-term portion 799 311 • Short-term portion 330 230 (1) Of which issued commercial paper 148 35

## 22.2. Bank loans

(€ million)	Nominal	Interest rate	Maturity	31/12/2013	31/12/2012
Bond issue – ERAMET	€400 m	4.5%	2020	395	-
ICBC/BNP Paribas/BGFI – Comilog SA borrowings	\$208 m <sup>(1)</sup>	6-M LIBOR + 4.3% 6-M LIBOR + 2.1%	2018 2022	137	108
Norsk Tillitsmann Ioan – TiZir Ltd	\$75 m	9,0%	2017	56	56
Issued commercial paper – ERAMET	€148 m	0.45% to 0.81%	1 year max.	148	35
Repos – Metal Securities	€64 m	3-M Euribor + 0.4%	Feb. 2014	64	63
Deutsche Bank (Schuldschein) Ioan – ERAMET	€60 m	6-M Euribor + 2%	2020	58	-
Other bank loans				146	136
TOTAL				1,004	398

(1) Nominal of \$217 million following the last drawdown in 2014.

ERAMET has had a commercial paper programme since 2005. Certain borrowings are subject to financial ratios or covenants are given in Note 24.3.4 – Liquidity risks.

The Group diversified its funding sources in the financial year 2013; the increased bank borrowings are mainly due to:

- €400 million in a 7-year bond issue to institutional investors. It has an annual bond coupon of 4.5%; this issue is unlisted;
- 7-year Schuldschein for international investors amounting to €60 million;
- Increase in commercial paper raised, amounting to €113 million in the financial year 2013.

# **21.4.** Tax consolidation in the United States

The tax consolidation in the United States reported a net-of-tax liability of  $\in$ 3 million ( $\in$ 21 million in liabilities and  $\in$ 18 million in assets) compared to a net liability of  $\in$ 5 million ( $\in$ 20 million in liabilities and  $\in$ 15 million in assets) at 31 December 2012. The tax loss carryforwards were generated in 2009, in 2011 and in 2012 amounting to  $\in$ 47 million, and represent a deferred tax asset of  $\in$ 16 million, of which only  $\in$ 4 million was recognised.

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## **22.3.** Changes over the period

(€ million)	FY 2013	FY 2012
At beginning of period	541	231
Business combinations	-	-
Other changes in scope	-	-
Proceeds from borrowings	1,047	319
Repayment of borrowings	(445)	(5)
Change in bank overdrafts	7	-
Translation adjustments and other movements	(21)	(4)
AT PERIOD END	1,129	541

# **22.4.** By currency

(€ million)	31/12/2013	31/12/2012
Euro	812	186
US dollar	240	238
CFA franc	29	22
British pound	3	2
Norwegian krone	13	60
Other currencies	32	33
TOTAL	1,129	541

# **22.5.** By maturity

(€ million)	31/12/2013	31/12/2012
Less than one year	330	230
One to five years	261	231
Over five years	538	80
TOTAL	1,129	541

ERAMET enjoys confirmed medium and long-term credit facilities (with maturities ranging from one to five years). The unused amounts of these credit facilities on the reporting date would allow the Group to refinance its short-term debt on a longer-term basis.

(€ million)	31/12/2013	31/12/2012
Unused confirmed credit facilities (1)	981	800
Unissued commercial paper	252	365
Repos (2)	-	76

(1) Bank covenants relating to these credit facilities are wholly satisfied. The covenants relate to the ratio of the Group's net debt to shareholders' equity. The confirmed credit facility was renewed and increased to €981 million on 18 January 2013 with a maturity extended by 1 year, until January 2018. At 31 December 2013, this syndicated credit facility is not drawn.

(2) The repo programme (Note 24.3.4 – Liquidity risks) was not renewed by the Group at 31 December 2013.

# **22.6.** By interest rate

(€ million)	31/12	/2013	31/1	2/2012
Interest-free		15		21
Fixed interest rates		522		266
• under 5%	412		81	
• 5%-10%	110		185	
• over 10%	-		-	
Floating rates		592		254
• under 5%	582		252	
• 5%-10%	10		2	
• over 10%	-		-	
TOTAL		1,129		541

# **22.7.** Finance lease liabilities

	31/12/2	31/12/2013		31/12/2012	
(€ million)	Nominal value	Discount value	Nominal value	Discount value	
Less than one year	10	9	6	5	
One to five years	35	32	22	22	
Over five years	10	10	4	4	
Total before interest expense	55	51	32	31	
Interest expense	-	4	-	1	
TOTAL	55	55	32	32	

# **22.8.** Net cash or debt position

## 22.8.1. By category

(€ million)	31/12/2013	31/12/2012
Borrowings and financial liabilities	(1,129)	(541)
Bonds – Other current financial assets	169	368
Cash equivalents	679	551
Cash	63	70
TOTAL	(218)	448

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# 22.8.2. Statement of net cash flows and net debt

(€ million)	FY 2013	FY 2012
Operating activities		
EBITDA	231	407
Impact on cash flow of items under EBITDA	(157)	(149)
Cash generated from operations	74	258
Net change in current operating assets and liabilities	87	(41)
Net cash generated by operating activities	161	217
Investing activities		
Industrial capital expenditure	(587)	(641)
Net financial disposals (investments)	(8)	(19)
Proceeds from non-current asset disposals	22	4
Changes in receivables and payables on non-current assets	12	7
(Proceeds from)/repayment of borrowings	(33)	13
Net cash used in investing activities	(594)	(636)
Cash flows from financing activities		
Dividends paid (1)	(221)	(319)
Dividends paid/to be paid to non-controlling interests in consolidated companies	(31)	32
Share capital increases	-	2
Net cash used in financing activities	(252)	(285)
Exchange-rate impact	19	(1)
INCREASE (DECREASE) IN NET CASH OR DEBT POSITION	(666)	(705)
Opening net cash (debt) position	448	1,153
Closing net cash (debt) position	(218)	448
(1) Of which:		
- Dividends paid to ERAMET SA shareholders	(34)	(59)
<ul> <li>Dividends paid to non-controlling interests in consolidated companies</li> </ul>	(187)	(260)

# **Note 23.** Trade and other payables

# **23.1.** By category

(€ million)	31/12/2013	31/12/2012
Trade payables	421	400
Tax and payroll liabilities	223	219
Other operating liabilities	37	104
Payables on non-current assets	72	63
Payables to associates – dividends	-	32
Unearned income	20	15
TOTAL	773	833
Non-current liabilities	27	28
Current liabilities	746	805

Most of the trade and other payables are due in less than one year.

The €27 million in debts (€28 million at 31 December 2012) recognised under non-current liabilities relate to:

 Setrag SA's 25-year debt to the Gabonese State for the purchase of own property and a portion of the spare parts

## **23.2.** Changes over the period

inventory for a total of  $\in$ 5 million ( $\in$ 6 million at 31 December 2012);

the €29 million debt (€21 million) recognised following the sale of 33.4% of Strand Minerals Pte Ltd shares to Mitsubishi Corporation, in connection with mining project expenditure in Indonesia (Note 8 – Impairment of assets).

(€ million)	FY 2013	FY 2012
At 1 January	833	870
Business combinations	-	6
Other changes in scope	1	-
Changes in working capital requirement	(51)	(14)
Translation adjustments and other movements	(10)	(29)
AT PERIOD END	773	833

Foreign-currency denominated debt is translated at the closing rate.

# **Note 24.** Risk management and derivatives

## 24.1. Financial instruments included in the statement of financial position

			Breakdow	n by type of	instrument	
(€ million)	31/12/2013	Statement of financial position	Fair value through P&L	Assets available for sale	Loans and receivables	Liabilities at amortised cost
Non-consolidated subsidiaries	49	-	49	-	-	-
Other non-current financial assets	70	-	-	70	-	-
Other non-current assets	5	-	-	5	-	-
Trade receivables	379	-	-	379	-	-
Other current assets	249	-	-	249	-	-
Derivatives	45	-	-	-	-	45
Other current financial assets	169	-	169	-	-	-
Cash and cash equivalents	742	742	-	-	-	-
ASSETS	1,708	742	218	703	-	45
Borrowings – long-term portion	811	-	-	-	811	-
Other non-current liabilities	27	-	-	27	-	-
Borrowings – short-term portion	318	35	-	-	283	-
Trade payables	421	-	-	421	-	-
Other current liabilities	405	-	-	405	-	-
Derivatives	35	-	-	-	-	35
LIABILITIES	2,017	35	-	853	1,094	35

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	31/12/2012		Breakdo	wn by type of	instrument	
(€ million)	Statement of financial position	Fair value through P&L	Assets available for sale	Loans and receivables	Liabilities at amortised cost	Derivatives
Non-consolidated subsidiaries	49	-	49	-	-	-
Other non-current financial assets	39	-	-	39	-	-
Other non-current assets	7	-	-	7	-	-
Trade receivables	433	-	-	433	-	-
Other current assets	295	-	-	295	-	-
Derivatives	51	-	-	-	-	51
Other current financial assets	368	-	368	-	-	-
Cash and cash equivalents	621	621	-	-	-	-
ASSETS	1,863	621	417	774		51
Borrowings – long-term portion	311	-	-	-	311	-
Other non-current liabilities	28	-	-	28	-	-
Borrowings – short-term portion	230	28	-	-	202	-
Trade payables	400	-	-	400	-	-
Other current liabilities	477	-	-	477	-	-
Derivatives	53	-	-	-	-	53
LIABILITIES	1,499	28	-	905	513	53

No reclassification among categories of financial instruments was carried out during the period. Investments in associates and other current financial assets are recognised in the balance sheet at fair value (Note 1.11.1). Other financial assets are measured at amortised cost calculated using the effective interest rate (EIR) (Note 1.11.2).

may, as appropriate, be interest-rate hedged and the portion linked to interest-rate changes is re-measured; their fair value is close to their value shown in the balance sheet, owing to their small amount and the hedges (Notes 22 and 24.3.2).

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 (Notes 14 and 23).

Borrowings are recognised at amortised cost calculated using the effective interest rate or EIR (Note 1.14). Securities and borrowings

Fair value of financial instruments broken down by fair-value category:

	31/12/2013	Breakdown by fair value category			
(€ million)	Value in the balance sheet	Level 1	Level 2	Level 3	
Available-for-sale assets	169	169	-	-	
Cash and cash equivalents	742	742	-	-	
Derivatives	45	-	45	-	
ASSETS	956	911	45	-	
Borrowings	1,129	35	1,094	-	
Derivatives	35	-	35	-	
LIABILITIES	1,164	35	1,129	-	

	31/12/2012	Break	Breakdown by fair value category			
(€ million)	Value in the balance sheet	Level 1	Level 2	Level 3		
Available-for-sale assets	368	368	-	-		
Cash and cash equivalents	621	621	-	-		
Derivatives	51	-	51	-		
ASSETS	1,040	989	51	-		
Borrowings	541	28	513	-		
Derivatives	53	-	53	-		
LIABILITIES	594	28	566	-		

## 24.2. Impact of financial instruments on income

(€ million)	FY 2013 Impact on profit (loss)	Financial income and (expenses)	Fair value	Translation adjustments	Profit (loss) on disposal	Net impairment
Investment securities	(3)	2	-	-	-	(5)
Other financial assets	-	(3)	-	-	-	3
Derivatives	11		11	-	-	-
Cash/net financial liabilities	(7)	(10)	3	1	(1)	-
TOTAL	1	(11)	14	1	(1)	(2)

(€ million)	FY 2012 Impact on profit (loss)	Financial income and (expenses)	Fair value	Translation adjustments	Profit (loss) on disposal	Net impairment
Investment securities	4	7	-	-	-	(3)
Other financial assets	(5)	(5)	-	(1)	-	1
Derivatives	(48)	-	(48)	-	-	-
Cash/net financial liabilities	6	(2)	-	(1)	9	-
TOTAL	(43)		(48)	(2)	9	(2)

The financial revenue from investments in associates consists of dividends. The gains or losses on currency and commodity hedges are for the most part recognised in current operating profit (loss)

(Note 1.24). The portion that is not eligible for hedging pursuant to IAS 39 is recognised in Other financial income and expenses (Notes 1.25 and 28.2).

### Breakdown of hedges - assets

(€ million)	31/12/2013	31/12/2012
Financial instrument assets <sup>(3)</sup>	9	10
Financial instruments – currency hedges	32	36
Financial instruments – interest-rate hedges	-	-
Financial instruments – commodity hedges	4	5
TOTAL	45	51

(€ million)	FY 2013	FY 2012
At beginning of period	51	46
Business combinations	-	-
Changes in hedging instruments for the period – shareholders' equity $^{\scriptscriptstyle(1)}$	(4)	(6)
Changes in hedging instruments for the period – financial income/loss <sup>(2)</sup>	(1)	6
Changes in financial instrument assets (3)	(1)	5
AT PERIOD END	45	51

(1) The impact corresponds to the effective portion of the change in fair value of derivatives used to hedge foreign currencies, interest rates and commodities.

(2) The impact corresponds to the ineffective portion of the change in fair value of derivatives used to hedge foreign currencies, interest rates and commodities.

(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".

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#### Breakdown of hedges - liabilities

(€ million)	31/12/2013	31/12/2012
Financial instrument liabilities (3)	4	16
Financial instruments – currency hedges	21	19
Financial instruments – interest-rate hedges	3	13
Financial instruments – commodity hedges	7	5
TOTAL	35	53

(€ million)	FY 2013	FY 2012
At beginning of period	53	101
Business combinations	-	-
Changes in hedging instruments for the period – shareholders' equity (1)	(9)	(43)
Changes in hedging instruments for the period – financial income/loss <sup>(2)</sup>	3	(5)
Changes in financial instrument assets (3)	(12)	-
AT PERIOD END	35	53

(1) The impact corresponds to the effective portion of the change in fair value of derivatives used to hedge foreign currencies, interest rates and commodities.

(2) The impact corresponds to the ineffective portion of the change in fair value of derivatives used to hedge foreign currencies, interest rates and commodities.

(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".

### 24.3. Risk management

The Group uses derivative financial instruments to control its exposure to foreign currency, interest-rate and commodity risks. The Executive Committee delegated management of the main risks to the ERAMET Group Finance Department. This management is carried out directly by ERAMET or *via* companies such as Metal Currencies, created specifically to manage the Group's foreign currency risk (Notes 1.5 and 3).

### 24.3.1. Foreign currency risks

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

- transactional foreign currency risks where a company has income in a currency other than its functional currency that is not offset by purchases in that currency;
- foreign currency risks to the balance sheet related to the changes in net assets of subsidiaries measured in currencies other than the euro.

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

#### Transactional risks

Currency hedging primarily involves the US dollar but also includes the Norwegian Krone, the pound sterling, the Swedish Krona and the Japanese yen. These hedges are designed to protect the 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  $\notin$ 2 million or the equivalent thereof per currency, unless exemptions apply. The Group uses various instruments to hedge its foreign currency exposure: forwards/futures and options.

#### **Balance sheet risks**

The ERAMET Group partially manages foreign currency risks to the balance sheet, primarily related to the U.S. dollar, by issuing financial liabilities denominated in the same currency as the net assets in question, or *via* currency swaps.

ERAMET also uses a foreign currency swap, with a nominal amount of USD232 million, to hedge the foreign currency risk on the conversion of the net assets of Weda Bay Minerals Inc., denominated in US dollars. The breakdown of the hedging portfolio by currency is shown below:

### As at 31 December 2013

	2013 sales			2014 sales			2015 sales and beyond		
(foreign currency unit million)	Amount	Currency	Rate	Amount	Currency	Rate	Amount	Currency	Rate
Commercial hedges									
EUR/USD	243	USD	1.37	371	USD	1.30	81	USD	1,31
EUR/NOK	11	EUR	8.44	111	EUR	8.02	380	NOK	8.45-8.56
EUR/GBP	1	GBP	1.03	3	EUR	0.85	-	-	-
GBP/USD	1	USD	1.62	-	-	-	-	-	-
GBP/SEK	1	GBP	11.37	-	-	-	-	-	-
JPY/SEK	51	JPY	0.11	-	-	-	-	-	-
USD/MXN	-	-	-	3	USD	13.30	-	-	-
USD/SEK	8	USD	6.54	-	-	-	-	-	-
EUR/JPY	47	JPY	86.19	25	JPY	141.25	-	-	-
Other hedges									
EUR/USD	515	USD	1.37						
EUR/NOK	(152)	NOK	8.57						
USD/CNY	178	CNY	6.31						

#### As at 31 December 2012

		2012 sales			2013 sales			sales and be	yond
(foreign currency unit million)	Amount	Currency	Rate	Amount	Currency	Rate	Amount	Currency	Rate
Commercial hedges									
EUR/USD	224	USD	1.32	522	USD	1.31	84	USD	1.26-1.30
EUR/NOK	3	EUR	7.35	73	EUR	7.58	-	-	-
EUR/GBP	(2)	GBP	0.81	(6)	GBP	0.84	-	-	-
GBP/USD	-	USD	1.63	2	USD	1.59	-	-	-
GBP/SEK	-	GBP	12.49	1	GBP	10.69	-	-	-
JPY/SEK	71	JPY	0.10	150	JPY	0.08	-	-	-
EUR/SEK	(12)	EUR	8.55	-	-	-	-	-	-
USD/SEK	10	USD	6.65	9	USD	6.63	-	-	-
EUR/JPY	139	JPY	100.50	100	JPY	106.10	-	-	-
Other hedges									
EUR/USD	415	USD	1.33						
EUR/SEK	(20)	EUR	10.15						
EUR/NOK	(452)	NOK	8.05						
EUR/GBP	5	GBP	0.81						
USD/CNY	(372)	CNY	6.41						
USD/MXN	9	USD	14.67						

At 31 December 2013, the fair value of currency hedges covering transactional risks represented a  $\in$ 11 million net asset (31 December 2012: a  $\in$ 17 million net asset).

Foreign currency-denominated sales and purchases (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, receivables, payables and bank account balances are restated at the hedging rate indicated by the Group's Treasury Department. Any differences between:

 the monthly exchange rate applied to recognise sales and receipts/purchases and payments; and the contractual settlement rate for hedges

are recognised by each company under current operating profit (loss) on sales (under "Translation adjustments on sales" – Note 25.2) or purchases (under "Cost of goods sold").

A plus or minus 10 figure change in the dollar rates would have a pre-tax impact on the hedges charged to shareholders' equity of around  $+ \in 18$  million were rates to rise and approximately  $- \le 24$  million were rates to fall.

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

#### As at 31 December 2013

	FY 2013						
(foreign currency unit million)	Forward/future sales	Forward/future purchases	Call options (1)	Put options <sup>(1)</sup>			
Currency against EUR							
• USD (1)	963	100	380	347			
• JPY	192	120	-	-			
• GBP	11	10	3	5			
• NOK	19	396	401	626			
Currency against NOK							
• EUR	51	-	120	105			
Currency against SEK							
• JPY	241	190	-	-			
• GBP	1	1	-	-			
• USD	8	-	-	-			
Currency against USD							
• CNY	-	30	148	246			
Currency against GBP							
• USD	2	1	-	-			
Currency against MXN							
• USD	1	-	4	2			

(1) Not including USD303 million in exotic call options and USD40 million in exotic put options.

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#### As at 31 December 2012

	FY 2012					
(foreign currency unit million)	Forward/future sales	Forward/future purchases	Call options	Put options		
Currency against EUR						
• USD <sup>(1)</sup>	1,024	142	419	323		
• JPY	261	22	-	-		
• GBP	5	6	3	4		
• NOK	136	589	-	-		
Currency against NOK						
• EUR <sup>(2)</sup>	43	-	58	33		
Currency against SEK						
• JPY	257	36	-	-		
• GBP	2	1	-	-		
• USD	16	1	6	4		
• EUR	-	32	-	-		
Currency against USD						
• CNY	-	33	340	599		
Currency against GBP						
• USD	2	-	-	-		
Currency against MXN						
• USD	9	-	-	-		

(1) Not including USD85 million in exotic call options and USD70 million in exotic put options.

(2) Not including USD10 million in exotic call options and USD7 million in exotic put options.

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

	Currency hedges						
	FY 2	013	FY 20	FY 2012			
(€ million)	Transactional risks	Balance sheet risks	Transactional risks	Balance sheet risks			
At beginning of period	11	32	(55)	28			
Change in unexpired hedging portion (1)	15	-	16	-			
Change in ineffective portion via income <sup>(2)</sup>	(4)	-	11	-			
Change in effective portion via income (3)	(6)	-	39	-			
Translation adjustments and other movements	-	(61)	-	4			
At period end	16	(29)	11	32			
Changes recognised in shareholders' equity:							
• fair value reserve	-	-	-	-			
hedging reserve	9	-	55	-			
translation adjustments	-	(61)	-	4			
TOTAL	9	(61)	55	4			
Changes recognised via income:							
current operating profit	6	-	(39)	-			
net financial income	(4)	-	11	-			
TOTAL	2	-	(28)				

(1) The impact corresponds to the change in fair value of the new currency instruments hedging future flows, and the currency instruments hedging future flows that were contracted during the financial year and were still outstanding at the year-end.

(2) The impact corresponds to the change in fair value of currency hedging instruments settled during the financial year (including option premiums).

(3) The impact on net financial income corresponds to the fair value of currency instruments ineligible as hedges.

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#### 24.3.2. Interest rate risks

The Group looks at 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.

At 31 December 2013, as in 2012, the Group had no interest rate hedges in place on its gross debt.

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 classified among "Other current financial assets" (Note 15.1) and are hedged using interest rate futures (fixed rates against floating rates). Other cash surpluses generated by Metal Securities are primarily invested in variable-rate instruments linked to the EONIA (Euro OverNight Index Average) rate (Note 15.2).

The pre-tax impact on shareholders' equity and earnings of financial instruments hedging interest rate risks is shown below:

	Interest rate h	edges
(€ million)	FY 2013	FY 2012
At beginning of period	(13)	(10)
Change in unexpired hedging portion (1)	19	3
Change in ineffective portion via income (2)	-	-
Change in effective portion via income (3)	(9)	(6)
Translation adjustments and other movements	-	-
At period end	(3)	(13)
Changes recognised in shareholders' equity:		
fair value reserve	-	-
hedging reserve	10	(3)
translation adjustments	-	-
TOTAL	10	(3)
Changes recognised via income:		
current operating profit	-	-
net financial income	9	6
TOTAL	9	6

(1) The impact corresponds to the change in fair value of the new interest-rate instruments hedging future flows, and the interest-rate instruments hedging future flows that were contracted during the financial year and were still outstanding at the year-end.

(2) The impact corresponds to the change in fair value of currency hedging instruments settled during the financial year (including option premiums).

(3) The impact on net financial income corresponds to the fair value of interest-rate instruments ineligible as hedges.

### 24.3.3. Commodity risks

The 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, aluminium).

The main Group entities involved are:

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

The exposure to manganese is not hedged since there is no organised (over the counter) market in manganese.

Hedges are put in place with a horizon of 1 to 4 years, depending on the commodities, and on the basis of the budget. Only a portion of planned consumption or production is hedged (as an example, for fuel oil, a maximum of 80% of the budget is hedged). The Group uses various instruments to hedge and limit its exposure: futures and options.

At 31 December 2013, the fair value of hedges set up for the various commodities represented a liability of  $\in$ 3 million whereas it was virtually zero at 31 December 2012.

The main commodities contracts outstanding are set out below:

#### As at 31 December 2013

	FY 2013			
(tonnes)	Swaps	Call options	Put options	
Nickel	115	-	-	
Fuel oil	-	-	-	

#### As at 31 December 2012

	FY 2012					
(tonnes)	Swaps	Call options	Put options			
Nickel	182	-	-			
Fuel oil	42,720	36,000	36,000			

The pre-tax impact on shareholders' equity and earnings of financial instruments relating to commodity risks is shown below:

	Commodity and energy risk coverage							
	FY 2013				FY 2012			
(€ million)	Nickel	Fuel oil	Aluminium	Electricity	Nickel	Fuel oil	Aluminium	Electricity
At beginning of period	-	-	-	-	6	5	-	(1)
Change in unexpired hedging portion (1)	-	-	-	(3)	(19)	(12)	-	-
Change in ineffective portion via income (2)	-	-	-	-	-	-	-	-
Change in effective portion via income (3)	-	-	(1)	1	13	7	-	1
Translation adjustments and other movements	-	-	-	-	-	-	-	-
At period end	-	-	(1)	(2)	-	-	-	-
Changes recognised in shareholders' equity:								
fair value reserve	-	-	-	-	-	-	-	-
hedging reserve	-	-	(1)	(2)	(6)	(5)	-	1
<ul> <li>translation adjustments</li> </ul>	-	-	-	-	-	-	-	-
TOTAL	-	-	(1)	(2)	(6)	(5)	-	1
Changes recognised via income:								
current operating profit	-	-	1	(1)	(13)	(7)	-	(1)
net financial income	-	-	-	-	-	-	-	-
TOTAL	-	-	1	(1)	(13)	(7)	-	(1)

(1) The impact corresponds to the change in fair value of the new commodity instruments hedging future flows, and the commodity instruments hedging future flows that were contracted during the financial year and were still outstanding at the year-end.

(2) The impact corresponds to the change in fair value of commodity hedging instruments settled during the financial year (including option premiums).

(3) The impact on net financial income corresponds to the fair value of commodity instruments ineligible as hedges.

A change of plus or minus 20% in commodity prices would have no material pre-tax impact on the hedges recognised through shareholders' equity.

A change of plus or minus 10% in nickel prices would impact sales for the 2013 financial year by plus or minus USD74 million, *i.e.*  $\in$ 55 million (USD91 million, *i.e.*  $\in$ 71 million for the financial year 2012).

## 24.3.4. Liquidity risks

The Group is not exposed to liquidity risks because of its clearly positive net cash position. Cash surpluses are mostly transferred to Metal Securities, the Group's special purpose entity responsible for pooling and investing Group cash surpluses.

Besides, the Group has two additional sources of financing, as required, from a revolving credit facility and the issue of commercial paper.

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#### **Revolving credit facilities**

In 2012, ERAMET signed the extension of its credit facility as provided for in the multicurrency revolving facility agreement up to 2017, for €800 million. In early 2013, ERAMET signed an amendment to this convention increasing the amount of €800 million to €981 million, extending its maturity from January 2017 to January 2018. The credit line intended to finance the operations and investments in assets was entered into on terms congruent with market conditions at the time of its signature. This credit line has a single covenant (Note 22 – Borrowings) and was not drawn at 31 December 2013.

#### **Commercial paper**

In 2005, ERAMET set up a €400 million commercial paper programme, €148 million of which was raised in 2013 (€35 million

was raised in 2012). The unraised amount stood at €252 million at 31 December 2013 (€365 million at 31 December 2012).

#### Repos

The repo programme was not renewed by the Group at 31 December 2013.

The confirmed credit facility was renewed and increased to €981 million on 18 January 2013 with a maturity extended by 1 year, until January 2018. At 31 December 2013, this syndicated credit facility is not drawn.

The Group is liable to repay its borrowings, primarily comprising finance leases and bank borrowings (Note 22), and its other liabilities and derivatives for which the schedule at fair value is set out below:

	Statement _	Future payment schedule at fair value			
(€ million)	of financial position	Less than one year	One year to five years	More than five years	Total
Bank loans	1,004	265	225	511	1,001
Bank overdrafts and creditor banks	35	35	-	-	35
Finance lease liabilities	51	8	34	9	51
Other borrowings and financial liabilities	39	22	2	15	39
TOTAL BORROWINGS	1,129	330	261	535	1,126
Derivatives	35	35	-	-	35
Trade and other payables	773	746	-	27	773
Current tax liabilities	80	80	-	-	80
TOTAL OTHER FINANCIAL LIABILITIES	888	861	-	27	888

The schedule of future receipts on financial assets is set out below:

	Statement _	Future receipts schedule at fair value			
(€ million)	of financial position	Less than one year	One year to five years	More than five years	Total
Other current financial assets	169	169	-	-	169
Cash and cash equivalents	742	742	-	-	742
TOTAL CASH AND CASH EQUIVALENTS	911	911	-	-	911
Derivatives	45	45	-	-	45
Trade and other receivables	585	580	-	5	585
Current tax receivables	48	48	-	-	48
TOTAL OTHER FINANCIAL ASSETS	678	673	-	5	678

Where appropriate, financial liabilities are covered by banking covenants at Group level or locally; the main covenants are described below:

Company	Type of credit facility		Ratio	Amount
ERAMET	Revolving Credit facility	Net borrowings/ Shareholders' equity	< 1	€981 million
	Bank loans	Restated net borrowings/ Shareholders' equity – Attributable to equity holders of the parent company	< 1	€60 million
Comilog SA	Bank loans	Net borrowings/ Shareholders' equity	< 1.15	\$217 million
		Net cash flow/ Debt servicing	>2	
		Sales to ERAMET Norway A/S/ Debt servicing	> 150% (1)	
TiZir Ltd.	Bank loans	Net borrowings/ Shareholders' equity	< 35%	\$75 million
		Net cash flow/ Debt servicing	> 2.5	
		Minimum liquidity maintenance	\$15 million	

(1) Covenant applicable only to one of the two \$30 million borrowings subscribed by Comilog SA.

On 31 December 2013, all covenants were fulfilled.

### 24.3.5. Credit or counterparty risks

The Group is exposed to several types of counterparty risks: they arise from its customers and its financial partners because of its cash surpluses invested by its dedicated entity, Metal Securities. The Group has several means to limit this risk: gathering information ahead of transactions (from rating agencies, published financial statements, etc.), credit insurance and the arrangement of letters of credit and documentary credits. Specifically for trade receivables, there is a credit manager for each Group Division.

The age of the Group's trade receivables and overdue receivables is shown below:

		31/12/2013			31/12/2012			
(€ million)	Gross amount	Impairment Iosses	Net amount	Gross amount	Impairment losses	Net amount		
On-time or not due	312	(2)	310	339	-	339		
Delays:								
less than a month	55	(1)	54	66	(1)	65		
one to three months	9	(1)	8	17	-	17		
• three to six months	5	-	5	6	-	6		
• six to nine months	4	(2)	2	3	-	3		
nine to twelve months	2	(2)	-	2	(1)	1		
• over one year	3	(3)	-	6	(4)	2		
TOTAL TRADE RECEIVABLES	390	(11)	379	439	(6)	433		

No material unpaid or impaired receivables have been renegotiated.

### 24.3.6. Equity risks

ERAMET and its subsidiaries do not speculate in the stock markets; the equities held relate to unlisted controlled companies entirely related to the Group's activities (Note 10). At 31 December 2013, ERAMET held 284,861 treasury shares (270,499 shares at 31 December 2012), representing an investment recognised as a €44 million reduction in shareholders' equity (€54 million at

31 December 2012) (Note 16). ERAMET's shares have been traded on the Euronext Paris Deferred Settlement System (SRD) since 28 March 2006, and since 2 July 2007, it has been included in the N150 index. There is thus a risk related to the volatility of its share price should that price be lower than the net carrying amount.

It should be noted that at 31 December 2013, the capital loss with respect to the market value of the treasury stock portfolio stood at  $\in$ 24 million (unchanged from 31 December 2012).

# Note 25. Sales and other income

### **25.1.** Sales

(€ million)	FY 2013	FY 2012
Sales of goods	3,076	3,346
Sales of services	86	101
TOTAL	3,162	3,447

Consolidated sales for 2013 decreased by 8%, amounting to €3,162 million, compared to €3,447 million in 2012. The decline in sales mainly results from the fall in nickel prices.

### **25.2.** Other income

(€ million)	FY 2013	FY 2012
Translation adjustments on sales	38	2
Other	27	32
TOTAL	65	34

The "Translation adjustments on sales" item includes the differences between the monthly exchange rate used to recognise sales and the monthly exchange rate used to recognise receipts as well as the differences between the contractual exchange rate for settling hedge (or guaranteed rate) positions and the monthly exchange rate used to recognise receipts.

# Note 26. Depreciation, amortisation and provisions

## **26.1.** Depreciation, amortisation and provisions on non-current assets

(€ million)	FY 2013	FY 2012
Intangible assets	(12)	(7)
Property, plant & equipment	(240)	(228)
Intangible assets – acquisition price allocation	(8)	(8)
PP&E – acquisition price allocation	(2)	(2)
TOTAL	(262)	(245)

## **26.2.** Provisions

(€ million)	FY 2013	FY 2012
Pension and related liabilities	(8)	(2)
Other payroll contingencies and losses	(1)	2
Environmental contingencies	(2)	1
Site restoration	-	(5)
Other contingencies and losses	(3)	(5)
TOTAL	(14)	(9)

# **Note 27.** Other operating income and expenses

(€ million)	FY 2013	FY 2012
Other operating income and expenses before impairment	(80)	(73)
Impairment of assets	(423)	(1)
TOTAL OTHER OPERATING INCOME AND EXPENSES	(503)	(74)

# 27.1. Other operating income and expenses before impairment of assets

(€ million)	FY 2013	FY 2012
Niobium project	(52)	(28)
Lithium project	(9)	(8)
Other projects	(13)	(10)
Development projects	(74)	(46)
Restructuring and redundancy plans	(12)	(19)
Employee benefits	-	(1)
Other items	6	(7)
Other financial income and expenses	(6)	(27)
TOTAL	(80)	(73)

## **27.2.** Impairment of assets

(€ million)	FY 2013	FY 2012
Losses on impairment tests – Goodwill	(8)	-
Losses on impairment tests – Intangible assets	(323)	-
Losses on impairment tests – Property, plant & equipment	(77)	(1)
Losses on impairment tests	(408)	(1)
Other impairment of assets – Weda Bay	(15)	-
TOTAL	(423)	(1)

At 31 December 2013, the impairment tests carried out on the cash-generating units (CGU) that comprise the Group showed an impairment loss on assets totalling €423 million, of which

€15 million on current assets in the Weda Bay project and €408 million on non-current assets (see Note 9 – Impairment of assets), that was recognised in the financial year 2013.

# **Note 28.** Net borrowing cost and other financial income and expenses

## **28.1.** Net borrowing cost

(€ million)	FY 2013	FY 2012
Interest income	15	19
Interest expense	(24)	(19)
Net income on marketable securities	-	9
Changes in fair value of marketable securities	1	-
Net translation adjustments	1	(1)
TOTAL	(7)	8

NOTE 29. 2013 CONSOLIDATED FINANCIAL STATEMENTS

## **28.2.** Other financial income and expenses

(€ million)	FY 2013	FY 2012
Investment and dividend income	2	7
Net additions to/reversals of financial provisions	(2)	(3)
Employee benefits – net interest	(7)	(7)
Accretion expenses	(12)	(11)
Financial instruments ineligible as hedges	(4)	11
Unwinding of hedges	-	(5)
Securitisation financial expense	(1)	(2)
Other	(1)	(5)
TOTAL	(25)	(15)

Accretion expenses relate to provisions for mining site restoration (Note 19.4).

The financial instruments that do not qualify as hedges correspond to the portion of hedging instruments (currencies/commodities/ interest rates) recognised in income pursuant to IAS 32 and 39 (Note 24). In 2012, the effects of cancelling currency hedges following the downward revision of sales and purchase budgets were recognised for  $\notin$ 5 million in other financial expenses.

# Note 29. Income tax

## **29.1.** By category

(€ million)	FY 2013	FY 2012
Current tax	(72)	(69)
Deferred tax	144	40
TAX INCOME/EXPENSE	72	(29)

#### **29.2.** Effective tax rate

(€ million)	FY 2013	FY 2012
Operating profit (loss)	(548)	79
Net borrowing cost	(7)	8
Other financial income and expenses	(25)	(15)
Pre-tax profit (loss) for period of consolidated companies	(580)	72
Standard tax rate in France (%)	34.43%	34.43%
Theoretical tax income/expense	200	(25)
Impact on theoretical tax of:		
<ul> <li>permanent differences between accounting and taxable profit</li> </ul>	(61)	55
<ul> <li>standard income tax differences in foreign countries</li> </ul>	(5)	(1)
reduced tax rates	2	2
tax credits	1	1
<ul> <li>unrecognised or limited deferred tax assets</li> </ul>	(51)	(19)
• tax audits	-	14
miscellaneous items	2	2
Actual tax income/expense before dividend payout	88	29
Effective tax rate before dividend payout	15%	(40)%
Impact on theoretical tax of:		
withholding tax on dividends	(5)	(43)
shares of overheads	(11)	(15)
ACTUAL TAX INCOME/EXPENSE	72	(29)
EFFECTIVE TAX RATE	12%	40%
Pre-tax profit (loss) for period of consolidated companies	(580)	72
Impact of impairment of assets	423	1
Pre-tax profit (loss) for period of consolidated companies, before impairment	(157)	73
Actual tax income/expense	72	(29)
Effective tax rate, before impairment	46%	40%

The income tax rate applied in France is 34.43%.

Permanent differences are primarily represented by (i) the tax impact on the impairment of assets in the Weda Bay project (not eligible for tax relief) totalling €101 million offset by (ii) the portion of the provision for reconstituting mining reserves in New Caledonia and Gabon, definitively allocated to investments.

The "Standard income tax differences in foreign countries" relates to the impact of the current income tax rate applicable in the foreign countries where Group subsidiaries are located.

The main standard income tax rates in foreign countries are shown below:

(%)	FY 2013	FY 2012
Sweden	22.0%	26.3%
Norway	28.0%	28.0%
US	35.0%	35.0%
New Caledonia	35.0%	35.0%
Gabon	35.0%	35.0%
China	12.5%-25.0%	12.5%-25.0%

The withholding tax on payouts and the portions of overheads mainly relate to the dividend payments made during the financial year and planned for the next financial year by ERAMET's foreign subsidiaries, pursuant to IAS 12. This primarily involves Le Nickel-SLN in New Caledonia and Comilog SA in Gabon.

In 2013, unrecognised tax loss carry-forwards of  $\in$ 51 million mainly concerned GCMC in the Manganese Division, the Erasteel plateau (Alloys Division) and tax consolidation in France.

In 2012, the  $\leq$ 19 million unrecognised tax loss carry-forwards mainly concerned the Manganese Division (Setrag SA, "Recycling" business and Chinese subsidiaries) and the Alloys Division (foreign subsidiaries).

The total of  $\in$ 14 million allocated to "Tax audits" relate to the correction received by ERAMET in connection with the tax reassessment in New Caledonia, recognized in 2009. The various components mainly concern tax adjustments prior to the financial year.

#### 29.3. Income tax on other comprehensive income

(€ million)	FY 2013	FY 2012
Change in financial instrument revaluation reserve	(4)	(10)
Change in fair value of available-for-sale financial assets	2	(2)
ITEMS RECYCLABLE TO PROFIT OR LOSS	(2)	(12)
Actuarial gains and losses on employee benefits	(5)	5
ITEMS NOT RECYCLABLE TO PROFIT OR LOSS	(5)	5

## **Note 30.** Earnings per share

	FY 2013 FY 2012		FY 2013 FY 2012			
	Net profit (loss)	Number of shares	Earnings per share	Net profit (loss)	Number of shares	Earnings per share
Basic earnings per share	(370)	26,256,822	(14.11)	9	26,259,108	0.34
Subscription options	-	-	-	-	-	-
Bonus share grants	-	-	-	-	108,886	-
Instruments deemed anti-dilutive (1)	-	-	-	-	-	-
DILUTED EARNINGS PER SHARE	(370)	26,256,822	(14.11)	9	26,367,994	0.34

(1) Where basic earnings per share are negative, the diluted earnings per share are deemed equal to the latter, the instruments being thus considered anti-dilutive.

Treasury shares, allocated to bonus share plans (Note 16 – Shareholders' equity), numbering 108,886, were included for their diluting effect at 31 December 2012 in the calculation of diluted

net profit per share. ERAMET has not issued any other financial instruments that would be likely to dilute earnings per share.

# Note 31. Off-balance sheet commitments

(€ million)	31/12/20	3	31/12/2012
Commitments given			
Endorsements, guarantees and deposits	33	4	236
Collateral security:	(	64	36
Property, plant and equipment	16	9	
Inventories	24	13	
Receivables and other assets	24	14	
Commitments received			
Endorsements, guarantees and deposits	(	33	37
Collateral security	Noi	ie	None
Credit facilities (Note 24.3.4)	98	31	800

The above table does not include current business orders (from customers or with suppliers, or non-current asset orders).

The endorsements, guarantees and deposits given comprise:

- the bank guarantee given to the Southern Province of New Caledonia by Le Nickel-SLN in earnest of environmental supervision of the Doniambo site, any servicing works and the restoration of the site after its closure. A site restoration provision was recognised for a portion of these commitments (Note 19.4);
- the bank guarantee given to finance the TiZir project in Senegal;
- the bank guarantee given to finance investments in the Alloys Division; and
- the bank guarantee given for contracting the ICBC loan towards the construction of Comilog SA's Moanda Metallurgical Complex, which is the primary reason for the change between 2012 and 2013.

### Moanda Metallurgy Complex (CMM) investment project – Comilog SA

Comilog SA entered into an EPC – Open Book contract with TCC (a Chinese engineering firm) for an amount of 1.3 bn renminbi (CNY), equivalent to USD209 million, for the supply of the equipment for and construction of the Moanda Metallurgical Complex (CMM). The contract states that TCC shall issue its invoices in dollars on the basis of the USD/CNY exchange rate applicable on the dates the various invoices are issued. The payments under this contract began in November 2010 and amounted to USD179 million at 31 December 2013. Payments will continue as the project moves ahead, with it currently being scheduled for completion in 2014.

In order to limit its exposure to fluctuations in the USD-CNY exchange rate, Comilog has set up a USD-CNY hedging programme involving forwards/futures and options. At 31 December 2013, in line with the options taken for the programme as a whole, the maximum hedging was for USD276 million with CNY/USD at 6.314, whereas the minimum hedging was for USD178 million with CNY/USD at 6.312. Outstanding hedges under this programme ranged between a minimum of USD28 million and a maximum of USD44 million.

A loan of USD157 million was contracted from BNP Paribas and ICBC (Chinese financial institution), relating to the setting-up of

### **Note 32.** Other commitments

# Call options 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.

the project. At end December 2013, USD148 million was drawn down on that loan (USD97 million at 31 December 2012). The loan agreement was signed on 10 September 2010. The guarantees by the Gabonese State and ERAMET (for 25% and 75% of the amount respectively) were given in end-2011. The future drawdowns on the loan will be spread over the first half of 2014. Two other loans were contracted from BNP Paribas and BGFI (Gabonese bank) of USD30 million each. The funds were drawn down entirely in 2012.

# Investment project in Senegal through the TiZir Ltd joint venture

ERAMET, together with its partner Mineral Deposit Ltd (MDL), is developing a mineral sands project in Senegal. Each partner has committed, on top of the initial funds put in, to contribute USD137.5 million in capital which was fully paid in at 31 December 2013. The partners were also party to a mutual USD25 million guarantee covering certain specific contingencies. Lastly, ERAMET had committed to granting a shareholders' loan of USD45 million to TiZir Ltd, the full amount of which was paid out in the financial year 2013.

### "Transgabonais" railway concession – Setrag SA

Under the terms of the November 2005 agreement, signed for an initial period of 30 years, Setrag SA, 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 SA, is committed to ensuring that the necessary funding is made available for the capital expenditure required to achieve the operating capacity targets.

#### **Operating leases**

Operating leases whose amounts recognised in income totalled €62 million at 31 December 2013 (at 31 December 2012: €59 million) mainly related to real-estate leases and vehicle leases, particularly in New Caledonia and Gabon.

Pt Antam also has an additional stock 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 from the average market price for the 60 days preceding and 60 days following the option exercise. If Pt Weda Bay Nickel is not listed at the exercise date, the shareholding value will be assigned by independent experts.

# Agreement to increase the Gabonese Republic's interest in the capital of Comilog SA

After approval by its Board of Directors on 14 October 2010, ERAMET signed an agreement with the Gabonese Republic on 20 October 2010, increasing the Gabonese Republic's shareholding in Comilog SA; before the agreement, ERAMET's interest was 67.25%, with 25.4% held by the Gabonese Republic, and the remainder in the hands of various private investors.

Under this agreement, from 2010 to 2015, ERAMET will transfer in stages to the Gabonese Republic an additional interest of

up to 10% of Comilog SA's capital, which would increase the Gabonese Republic's shareholding in Comilog SA to 35.4%. The first transfer stage (2010-2011) involves 3.54% of Comilog SA's share capital; 2.17% of the capital (50,583 shares) was transferred on 17 December 2010, and the remaining 1.37% for this stage (31,935 shares) was transferred on 14 June 2011.

During the period from 2012 to 2015, the Gabonese Republic will acquire the remaining 6.46% from ERAMET according to terms and procedures to be determined at the time.

# Note 33. Related party transactions

Related-party transactions include the main ordinary transactions with non-consolidated controlled companies (Notes 1.11.1 and 11) and associates (Note 10).

To the best of the Group's knowledge, there were no transactions with shareholders holding over 5% of the share capital.

#### **33.1.** Income statement

Details of related-party transactions in 2013 are provided below.

(€ million)	FY 2013	FY 2012
Sales		
Non-consolidated controlled subsidiaries	29	36
Associates	-	-
Other related parties	-	12
Cost of sales, administrative and selling expenses		
Non-consolidated controlled subsidiaries	(7)	(7)
Associates	-	-
Net borrowing cost		
Non-consolidated controlled subsidiaries	-	-
Associates	-	-

#### **33.2.** Balance sheet

In 2013, the balance sheet assets and liabilities resulting from related-party transactions were as follows:

(€ million)	FY 2013	FY 2012
Trade and other receivables		
Non-consolidated controlled subsidiaries	8	12
Associates	-	-
Trade and other payables		
Non-consolidated controlled subsidiaries	11	7
Associates	-	-
Net financial assets (liabilities)		
Non-consolidated controlled subsidiaries	11	(2)
Associates	-	-

ERAMET does not in any way guarantee related-party debts.

### **33.3.** Gross compensation and benefits to Directors and members of the Executive Committee

In 2013, the gross compensation and benefits to Directors and members of the Executive Committee included in the Group's profit (loss) for the period were as follows:

(€ thousand)	FY 2013	FY 2012
Short-term benefits		
Fixed compensation	2,971	2,920
Variable compensation	1,403	1,499
Directors' fees	690	633
Other benefits		
Post-employment benefits	760	565
Retirement package	-	-
Compensation paid in shares	3,051	2,548
TOTAL	8,875	8,165

# **Note 34.** Workforce and personnel costs

### **34.1.** Average workforce by Division

	FY 2013	FY 2012
Nickel	3,015	3,045
Manganese	5,813	6,293
Alloys	4,611	4,638
Holding company and miscellaneous	209	191
TOTAL	13,648	14,167

### 34.2. Workforce by Division at end of period

	31/12/2013	31/12/2012
Nickel	2,974	2,999
Manganese	5,427	5,870
Alloys	4,603	4,607
Holding company and miscellaneous	211	201
TOTAL	13,215	13,677

# **34.3.** Personnel costs by category

(€ million)	FY 2013	FY 2012
Wages and salaries	(466)	(466)
Profit-sharing	(16)	(8)
Other personnel expenses	(198)	(195)
Employee benefits	(7)	11
Share-based payment	(8)	(15)
TOTAL	(695)	(673)
Personnel costs – temporary staff	(28)	(34)
PERSONNEL COSTS – INCOME STATEMENT	(723)	(707)
Total wage bill as % of sales (including temporary staff)	23%	21%
Average personnel cost (excluding temporary staff) (€ thousand)	(51)	(48)

# Note 35. Statutory Auditors' fees

The fees paid for the legally mandated auditing of the separate and consolidated financial statements and for other work (consultancy and services), whether directly related or not are provided below:

(€ thousand)		FY 2013		FY 2012
Statutory audit, certification, examination of individual and consolidated financial statements		2,837		2,847
Ernst & Young	1,346		1,285	
Deloitte & Associés	1,372		1,404	
• Other	119		158	
Other services directly relating to the statutory audit		260		166
Ernst & Young	159		97	
Deloitte & Associés	87		45	
• Other	14		24	
Other services provided		953		1,466
Ernst & Young	185		328	
Deloitte & Associés	565		1,029	
• Other	203		109	
TOTAL		4,050		4,479

The directly-related tasks in the financial years 2012 and 2013 were mainly audits performed for the Group's acquisition projects. The other tasks mainly relate to services carried out abroad by the members of our Statutory Auditors' network, notably the preparation of tax returns.

The sharp decrease in other services provided between 2012 and 2013 is due to the legal restructuring carried out in the United States in the financial year 2012.

### Note 36. Other information

Carlo Tassara France (part of the Romain Zaleski group) is an ERAMET shareholder that owns 3,394,146 shares (namely 12.87% of the capital at 31 December 2009), having regard to an estimate based on the most recent threshold crossing declaration by this company (No. 207C0134 of 17 January 2007).

On 17 December 2009, Carlo Tassara France summoned SIMA, SORAME and CEIR, as well as the members of the Duval family, to appear before the Paris Commercial Court. The summons specifies that these proceedings were being brought in the presence of ERAMET. In its summons, Carlo Tassara France first alleges that the presentation of the Sima group to ERAMET shareholders in 1999 was distorted as a result of the concealment from ERAMET shareholders of SMC's debt, a 38.5% Sima subsidiary, consolidated under the equity method and not fully consolidated, and that Sima allegedly concealed from the Appraisers and shareholders of ERAMET that it had full control over SMC. Secondly, Carlo Tassara France challenges the terms on which ERAMET financed SMC through the intermediary of SIMA from 1999 to 2002 (at which date, SMC filed for bankruptcy), by loans alleged to have been granted unlawfully for lack of their having received prior authorisation from the ERAMET Board of Directors; the claimant also requests the Court to find that those loans proved prejudicial to ERAMET and is applying to have Messrs. Édouard, Georges, Patrick and Cyrille Duval found jointly and severally liable to pay ERAMET a total sum of €76.4 million in damages.

Carlo Tassara France is seeking the cancellation of the resolutions of the ERAMET General Shareholders' Meeting on 21 July 1999 approving the contribution of SIMA's shares to ERAMET, the cancellation of the ERAMET shares issued in consideration for said contribution and the reduction of ERAMET's share capital by the amount of the cancelled shares, as well as the return by the holders of those shares of the dividends earned since 1999 and estimated by Carlo Tassara France at €201 million and the return by ERAMET to said contributors of the SIMA shares and of the dividends received from SIMA since 1999.

Though the summons is not directed against ERAMET or against its past or current corporate bodies, it is however likely that, were it to prevail, it would have serious implications for ERAMET as, in particular, it would lead to a significant reduction in its share capital and the exit of SIMA (and hence of Aubert & Duval) from the Group's scope of consolidation. ERAMET points out that the SIMA share contribution was approved by the ERAMET Extraordinary General Shareholders' Meeting on 21 July 1999, based on the report of two Appraisers appointed by the President of the Paris Commercial Court, the report of the Board of Directors of ERAMET, the appendix to which was approved by the COB (French Securities and Exchange Commission) on 6 July 1999 (document No. E 99-944) and the opinion as regards fairness attached to that document E.

In September 2010, the defendants lodged submissions in reply to the claims of Carlo Tassara France.

# **Note 37.** Events after the reporting date

To the best of the Company's knowledge, there are no events to report after the reporting date.

On 2 December 2011, the Paris Commercial Court ruled that all of Carlo Tassara France's claims were inadmissible on the grounds that they were time-barred. Carlo Tassara France appealed the ruling. On 19 March 2013, the Paris Court of Appeal confirmed the ruling of the Paris Commercial Court in all its provisions. Carlo Tassara France filed an appeal with the Cour de Cassation.

### 6.1.3. Report of the Statutory Auditors on the Consolidated financial statements \_\_\_\_\_

#### Year ended 31 December 2013

To the Shareholders,

In compliance with the assignment entrusted to us by your general meeting of shareholders, we hereby report to you, for the year ended 31 December 2013, on:

- the audit of the accompanying consolidated financial statements of Eramet;
- the justification of our assessments;
- the specific verification required by law.

These consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these consolidated financial statements based on our audit.

# I. Opinion on the consolidated financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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 2013 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.

Without qualifying our opinion, we draw your attention to the matter set out in Note 4 "Restated 2012 financial statements" to the consolidated financial statements regarding the impacts of the application as of 1 January 2013 of the amendments of the revised IAS19 "Employee Benefits".

#### II. Justification of our assessments

In accordance with the requirements of article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

#### Intangible and tangible assets

Your group performs annual impairment tests on goodwill and also assesses its long-term assets if there is an indication of impairment. The tests are performed under the conditions described in note 1.10 to the consolidated financial statements. We analyzed the methods for implementing these impairment tests as well as the cash flow forecasts and the consistency of the assumptions used by your group.

In addition, as mentioned in notes 6.2 and 8.1 to the consolidated financial statements, the costs for geology, exploration and studies for the Weda Bay project are recorded in assets. We reviewed the methods used to capitalize the expenses, their recoverable value, and the information provided in this note to the consolidated financial statements.

#### Provisions

As stated in notes 1.19 and 19 to the consolidated financial statements, your group is required to perform estimates and to make assumptions concerning provisions for liabilities and charges. Our work consisted in assessing the approaches used and the documentation provided, in particular on the provisions for the rehabilitation of mining sites. On these bases, we assessed the reasonableness of these estimates.

These assessments were made as part of our audit of the consolidated financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

### **III.** Specific verification

As required by law we have also verified in accordance with professional standards applicable in France the information presented in the Group's management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Neuilly-sur-Seine and Paris-La Défense, 21 February 2014

The Statutory Auditors

DELOITTE & ASSOCIÉS French original signed by Alain Penanguer ERNST & YOUNG et Autres French original signed by Aymeric de La Morandière

# 6.2. 2013 SEPARATE FINANCIAL STATEMENTS

### 6.2.1. 2013 Income statement, Balance sheet \_\_\_\_\_

### **6.2.1.1.** Income statement

(€ thousand) Notes	FY 2013	FY 2012
Operating income		
Sales of goods and merchandise	627,271	805,780
Income from ancillary activities	80,461	74,525
Sales 16	707,732	880,306
Change in inventories of finished products and work in-progress	(7,707)	(6,145)
Capitalised production	6,650	8,980
Operating subsidies	18	18
Reversal of provisions, excess depreciation & amortisation, expense transfers	9,762	25,090
Other income	34	0
Other income	8,756	27,942
TOTAL INCOME	716,488	908,247
Operating expenses		
Purchases of goods	429,416	554,090
Change in inventory (merchandise)	11,671	(102)
Raw materials and other supplies purchased	138,167	186,509
Change in inventory (raw materials and supplies)	4,233	2,312
External purchases and expenses	113,607	112,032
Taxes other than on income	4,546	5,431
Wages and salaries	32,948	31,548
Payroll charges	23,716	27,845
Depreciation and amortisation charged	7,913	6,239
Provisions for losses on current assets	4,806	4,539
Provisions for contingencies and losses	9,330	11,097
Other expenses	1,774	2,099
TOTAL EXPENSES	782,126	943,639
Operating profit (loss)	(65,638)	(35,392)
Net financial income 19	(89,984)	317,148
Profit (loss) before tax and extraordinary items	(155,622)	281,756
Extraordinary items 20	14,447	13,228
Employee profit-sharing & incentives	(1,425)	(1,712)
Income tax 17	9,594	27,790
PROFIT (LOSS) FOR THE PERIOD	(133,006)	321,062

#### FINANCIAL STATEMENTS

6.2. 2013 SEPARATE FINANCIAL STATEMENTS

### **6.2.1.2.** Balance sheet

#### Assets

			Depreciation, amortisation	31/12/2013	31/12/2012
(€ thousand)	Notes	Gross amounts	and provisions	Net amounts	Net amounts
Intangible assets					
Patents, rights and similar assets		14,305	11,157	3,147	129
Non-current assets in progress		20,866		20,866	19,496
Subtotal		35,171	11,157	24,013	19,625
Property, plant & equipment					
Land		1,131		1,131	1,131
Buildings		25,855	19,205	6,650	6,588
Technical installations, machinery and equipment		69,497	53,501	15,997	15,924
derrahmaneOther		13,521	9,960	3,562	4,204
Non-current assets in progress		1,373		1,373	1,125
Down payments				0	88
Subtotal		111,378	82,666	28,712	29,060
Non-current financial assets					
Investments in associates		1,593,800	406,670	1,187,130	1,279,306
Receivables on investments in associates	5	1,347,648	312,428	1,035,219	773,157
Other capitalised investments		44,217	37,095	7,122	6,855
Other		22,447	13,343	9,104	15,556
Subtotal		3,008,112	769,536	2,238,576	2,074,874
NON-CURRENT ASSETS	4	3,154,660	863,359	2,291,301	2,123,559
Inventories and work in progress					
Raw materials and other supplies		34,640	4,741	29,899	34,333
Work in progress		9,341		9,341	11,311
Semi-finished and finished products		13,217		13,217	18,954
Merchandise		20,772		20,772	32,443
Subtotal	10	77,970	4,741	73,229	97,042
Down payments made on orders		133		133	250
Operating receivables					
Trade receivables		75,438	835	74,603	76,809
Other receivables		79,176	21,920	57,256	56,857
Subtotal	5&10	154,614	22,754	131,859	133,666
Cash & cash equivalents	6	4,643		4,643	3,610
Accruals	7	16,220		16,220	5,834
CURRENT ASSETS		253,580	27,495	226,084	240,403
TOTAL ASSETS		3,408,240	890,854	2,517,386	2,363,962

### Liabilities

(€ thousand)	Notes	31/12/2013	31/12/2012
Share capital		80,957	80,957
Issue, merger and contribution premiums		373,337	373,337
Legal reserve		8,096	8,088
Other reserves		253,839	253,839
Retained earnings		1,028,966	742,009
Profit (loss) for the period		(133,006)	321,062
Shareholders' equity	8	1,612,188	1,779,292
Regulated provisions	11	47,934	66,057
Shareholders' equity		1,660,122	1,845,349
Provisions for contingencies		10,102	17,071
Provisions for losses		8,499	6,761
Provisions for contingencies and losses	11	18,601	23,833
Bond issues		403,000	
Borrowings from and payables to credit institutions		225,512	35,878
Miscellaneous borrowings		460	460
Inter-company current accounts		60,153	309,322
Long-term borrowings		689,125	345,660
Down payments received on current orders		395	198
Operating payables			
Trade payables		103,580	122,550
Tax and payroll liabilities		18,066	15,263
Miscellaneous liabilities			
Liabilities on non-current assets and related payables		1,531	2,055
Other liabilities		25,945	9,034
Accruals		20	20
Liabilities	13&14	838,662	494,780
TOTAL LIABILITIES		2,517,386	2,363,962

6.2. 2013 SEPARATE FINANCIAL STATEMENTS

### 6.2.1.3. Cash flow statement

(€ thousand)	FY 2013	FY 2012
Operating activities		
Profit (loss) for period	(133,006)	321,062
Elimination of non-cash and non-operating income and expenses	400,141	(15,589)
Cash generated from operations	267,135	305,473
Change in operating working capital requirement	24,451	42,355
Net cash generated by operating activities	291,586	347,828
Cash flows from investing activities		
Net payments for non-current financial assets	(3,150)	(56,229)
Payments for non-current intangible assets, PP&E	(14,944)	(19,331)
Proceeds from non-current asset disposals	3,144	1,796
Change in other receivables and debts	(10,479)	2,359
Net cash used in investing activities	(25,429)	(71,405)
Cash flows from financing activities		
Dividends paid to ERAMET SA shareholders	(34,098)	(59,078)
Share capital increases	0	1,558
Change in working capital requirement arising from financing activities	0	(517)
Net cash used in financing activities	(34,098)	(58,037)
INCREASE (DECREASE) IN NET CASH	232,059	218,385
Net cash (borrowings) at 1 January	431,107	212,722
NET CASH (BORROWINGS) AT 31 DECEMBER	663,165	431,107

### 6.2.1.4. Highlights

#### Sales

Sales of metallurgical products fell by 22.7% compared with 2012, in line with the decrease in the secured average price on the LME that dropped from USD8.3/lb in 2012 to USD7.1/lb in 2013.

Over the same period, tonnages sold stood at 52.4 thousand tonnes in 2013, down 7.5% (56.8 thousand tonnes in 2012).

#### **Operating profit (loss)**

Operating profit declined compared to 2012, going from - $\in$ 35 million in 2012 to - $\in$ 66 million in 2013 due to the fall in nickel prices and the increase in project costs, notably the Niobium project.

#### Net financial income

Net financial income consisted mainly of dividends received from subsidiaries (Nickel: 156.13 million, Manganese: €112.99 million), provision for investments (Weda Bay Mineral Inc.: €3.62 million; Weda Bay Mineral Singapore: €52.57 million) and Ioan provision (Weda Bay Mineral Singapore: €301.5 million) following the fall in value of the Nickel Weda Bay project due to the current conditions of the Nickel market.

Net foreign exchange gains amounted to  $\in$ 1.4 million in 2013 compared to a net loss of  $\in$ 4.8 million at the end of 2012.

#### **Extraordinary items**

Extraordinary items mainly comprised the reversal of the €19.1 million provision for price increase in 2006.

#### Changes in the cash position

Net cash comprised receivables on investments in associates and cash & cash equivalents, less borrowings and inter-company current accounts. The net cash position rose from  $\notin$ 431.1 million to  $\notin$ 663.17 million.

# 6.2.2. Notes to the separate financial statements \_\_\_\_\_

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# Accounting principles, rules and methods

The ERAMET SA Board of Directors closed the financial statements for the year ended 31 December 2013 on 20 February 2014.

### Note 1. Reminder of principles

The financial statements were prepared in accordance with the general chart of accounts as amended by Regulation 99-03 of 29 April 1999 issued by the French Accounting Regulations Committee (*Comité de la règlementation comptable*).

The general accounting conventions were applied, adhering to the principle of prudence, and in accordance with the basic assumptions: going concern, permanence of accounting methods and matching principle, with observance of the rules for drawing up and presenting annual financial statements.

The historical cost method is the basic method used to measure items.

## Note 2. Change in methods

There has been no change in method compared to 31 December 2012.

# **Note 3.** Rules and methods applied to the various balance sheet and income statement line items

# **3.1.** Property, plant and equipment and intangible assets

The gross amount of assets is the amount at which the items were first recognised in the Company's balance sheet and includes any expenses required to bring them into working order. Unused assets or assets with fair market values lower than the carrying amount are, as a general rule, impaired by non-recurring depreciation expense or by charging to provisions.

Economically justified depreciation is calculated using the straightline method. This depreciation is calculated over the asset's useful life.

The useful lives in depreciation periods for property, plant and equipment are as follows, apart from exceptional cases:

Buildings:	20-30 years;
Technical installations:	12-20 years;
Machinery, equipment and tooling:	3-10 years;
General installations, fittings and fixtures:	5-10 years;
Transportation equipment:	5-8 years;
Office furniture and equipment,	
and computer equipment:	3-8 years.

The impact of any difference between the straight-line and declining balance depreciation methods is recognised *via* excess depreciation.

### **3.2.** Non-current financial assets

As from 1 January 2006, the gross amount of non-current financial assets includes the purchase cost less incidental expenses. Borrowings are recognised at their nominal value. Securities are estimated at their value in use, which takes account of both their net asset value and the likely returns. If the value in use is lower than their gross amount, an impairment loss is recognised for the difference.

### **3.3.** Ongoing development projects

As a rule, development projects are initiated by ERAMET as the holding company. The costs incurred on these projects are recognised either as Non-current financial assets or as Other Receivables if they are to be billed back to the Divisions, or are expensed. For acquisitions, those costs are included in the value of the shares. If the development projects are not successful, their costs are impaired or booked under non-recurring losses.

#### **3.4.** Inventories

Inventories of nickeliferous products are measured at cost, calculated on a first-in-first-out (FIFO) basis. If the value thereby obtained is greater than the net realisable value (*i.e.* selling price less selling expenses), a provision is recognised for the difference.

Consumables are measured at cost, which is calculated using the weighted average price method.

Spare parts inventories are fully impaired for any item whose quantity exceeds one year's supply.

#### **3.5.** Receivables and debts

Foreign currency receivables and debts are re-measured at the closing rate or at the forward hedging rate, as the case may be.

Unrealised losses or gains on foreign exchange arising from re-measurement at the forward hedging rate or, where unhedged, at the closing rate, are recognised as exchange losses or gains in the income statement.

Impairment losses on trade receivables are measured for each customer individually, based on the estimated risk.

### **3.6.** Investment securities

Investment securities are measured at acquisition cost, with provisions for impairment loss being recognised where their net asset value is lower. Unrealised capital gains are not recognised.

### **3.7.** Provisions for contingencies and losses

Provisions are recorded, where their 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 economic benefits in order to settle the liability.

#### **Employee indemnities and benefits**

ERAMET offers its employees various long-term benefits such as retirement packages and other additional post-employment benefits and long-service bonuses.

Some liabilities are wholly or partly covered by contracts taken out with insurance companies. In this case, the liabilities and hedging

The following actuarial assumptions are used for measurement:

assets are measured independently. A provision is then made on the basis of the amount of financial assets and liabilities.

ERAMET's liabilities are assessed by independent actuaries. The actuarial assumptions used (likelihood of working employees staying with ERAMET, mortality tables, retirement age, salary trends, etc.) vary according to the prevailing demographic and economic conditions in the country. The discount rates used are based on the rate of government bonds or bonds of blue-chip companies with a maturity equivalent to that of the liabilities on the appraisal date.

The expected long-term return on assets was calculated by taking into account the structure of the investment portfolio.

	2013	2012	2011
Discount rate	3.30%	3.00%	4.75%
Inflation rate	2.00%	2.00%	2.00%
Rate of increase in salaries	3.00-3.50%	3.00%	3.00%
Return on plan financial assets	3.30%	3.00%	3.50%

#### Employee bonus share plan

The company has eight ongoing bonus share plans:

- two plans approved by the General Shareholders' Meeting of 20 May 2010 for 28,816 and 65,008 shares;
- two plans approved by the Board of Directors' meeting of 16 February 2011 for 28,614 and 71,665 shares;
- two plans approved by the Board of Directors' meeting of 15 February 2012 for 28,620 and 89,720 shares;
- two plans approved by the Board of Directors' meeting of 21 March 2013 for 28,706 and 144,840 shares;

The corresponding provision was measured on the basis of the value of treasury shares (177,909 shares) and the stock price on 31 December 2013 (for 175,454 shares).

The provision was staggered over the vesting period (2 or 3 years depending on the plan) for the ERAMET SA staff. For the other beneficiaries (outside ERAMET SA), the provision is made as of the plan award date.

On 16 February 2013, the shares of the plan dated 16 February 2011 with no performance condition, were definitively granted to the employees of French companies. On 20 May 2013, the shares of the plan dated 20 May 2010 were definitively granted to the employees of French companies.

### **3.8.** Sales

Sales consist of the following:

- ferro-nickel sales (purchase and sale of SLN products);
- nickel salts (produced at the Sandouville plant);
- provision of services and re-invoicing of shared expenses.

Income is recognised as revenue once the company has transferred to the buyer the main risks and benefits inherent in ownership of the goods.

### Note 4. Non-current assets

### 4.1. Acquisition values

(€ thousand)	Acquisition values 31/12/2012	Acquisitions	Disposals, retirements and adjustments	Acquisition values 31/12/2013
Intangible assets				
Patents, rights and similar assets	9,585	4,766	(46)	14,305
Non-current assets in progress (1)	19,496	8,552	(7,183)	20,866
Subtotal	29,081	13,318	(7,229)	35,171
Property, plant & equipment				
Land	1,131			1,131
Buildings	24,504	1,360	(9)	25,855
Technical installations, machinery and equipment	65,708	3,789		69,497
Other	13,234	466	(178)	13,521
Non-current assets in progress	1,125	248		1,373
Down payments	88		(88)	0
Subtotal	105,790	5,863	(276)	111,378
Non-current financial assets				
Investments in associates	1,593,790	10		1,593,800
Receivables on investments in associates	773,157	604,231	(29,740)	1,347,648
Other capitalised investments (2)	54,323	6,524	(16,630)	44,217
Other <sup>(3)</sup>	28,899	4	(6,455)	22,447
Subtotal	2,450,169	610,769	(52,826)	3,008,112
TOTAL	2,585,040	629,950	(60,330)	3,154,660

(1) Non-current assets connected with the IT infrastructure (€2.8 million at 31 December 2013, €7.5 million at 31 December 2012) and the development of hydrometallurgical technology (€17.9 million at 31 December 2013, €11.5 million at 31 December 2012).

(2) The "Other capitalised investments" line relates to treasury shares.

The increase is due to the purchase of 37,747 shares for  $\in$ 3.1 million as part of buyback instructions given to EXANE BNP Paribas in July 2012 as well as the purchase of 44,398 shares for  $\in$ 3.4 million in connection with the price support agreement. The shares acquired as part of the buyback instructions (balance of 177,909 shares at 31 December 2013) are intended to be distributed as part of a bonus share plan (see Section 3.7).

The decrease results from the awarding of shares under the bonus share award plan totalling  $\in$ 16.6 million.

Provisions have been funded for the full value of the treasury shares set aside to cover the requirements of the bonus share plans ( $\leq$ 30.8 million at 31 December 2013). A provision of  $\leq$ 3 million was made for the other treasury shares held under the share price support contract at 31 December 2013 since the stock market price at that date was below the portfolio valuation price.

(3) The decrease is due to the transfer of treasury stock acquisitions of €3.4 million to "Other capitalised investments" in connection with the price support agreement (see Section 2 above) and the decrease of €3 million in pension plan assets.

### 4.2. Depreciation, amortisation and provisions

(€ thousand)	Depreciation, amortisation and provisions at 31/12/2012	Depreciation, amortisation and provisions	Reversals of depreciation, amortisation and provisions	Disposals, retirements and adjustments	Depreciation, amortisation and provisions at 31/12/2013	Carrying amounts at 31/12/2013
Intangible assets						
Concessions, patents, licences, trademarks, processes, rights and similar assets	9,456	1,722	(21)		11,157	3,147
Non-current assets in progress (1)	0				0	20,866
Subtotal	9,456	1,722	(21)	0	11,157	24,013
Property, plant & equipment						
Land	0				0	1,131
Buildings	17,916	1,298		(9)	19,205	6,650
Technical installations, machinery and equipment	49,783	3,803	(86)		53,501	15,997
Other	9,030	974		(45)	9,960	3,562
Non-current assets in progress	0				0	1,373
Down payments						0
Subtotal	76,730	6,076	(86)	(54)	82,666	28,712
Non-current financial assets						
Investments in associates (5)	314,484	92,186			406,670	1,187,130
Receivables on investments in associates <sup>(6)</sup>	0	312,428			312,428	1,035,220
Other capitalised investments (2)	47,468	3,093		(13,465)	37,095	7,121
Other <sup>(4)</sup>	13,343				13,343	9,104
Subtotal	375,295	407,707	0	(13,465)	769,536	2,238,575
TOTAL	461,481	415,505	(108)	(13,519)	863,359	2,291,301

(1) Non-current assets connected with the IT infrastructure (€2.8 million at 31 December 2013, €7.5 million at 31 December 2012) and the development of hydrometallurgical technology (€17.9 million at 31 December 2013, €11.5 million at 31 December 2012).

(2) The "Other capitalised investments" line relates to treasury shares.

The increase is due to the purchase of 37,747 shares for  $\notin$ 3.1 million as part of buyback instructions given to EXANE BNP Paribas in July 2012 as well as the purchase of 44,398 shares for  $\notin$ 3.4 million in connection with the price support agreement. The shares acquired as part of the buyback instructions (balance of 177,909 shares at 31 December 2013) are intended to be distributed as part of a bonus share plan (see Section 3.7).

The decrease results from the awarding of shares under the bonus share award plan totalling €16.6 million.

Provisions have been funded for the full value of the treasury shares set aside to cover the requirements of the bonus share plans ( $\in$ 30.8 million at 31 December 2013). A provision of  $\in$ 3 million was made for the other treasury shares held under the share price support contract at 31 December 2013 since the stock market price at that date was below the portfolio valuation price.

(3) The decrease is due to the transfer of treasury stock acquisitions of €3.4 million to "Other capitalised investments" in connection with the price support agreement (see Section 2 above) and the decrease of €3 million in pension plan assets.

(4) A €13.4 million provision was made in 2009 for the option purchased on a project to exploit a manganese deposit in Namibia, since the project was abandoned.

(5) The increase concerns the provision on Weda Bay Mineral Singapore shares of (€52.57) million and Weda Bay Mineral Inc. for (€3.62) million as well as an additional provision of (€36) million for Erasteel.

(6) The increase concerns the loan provision of (€301.5) million for the Weda Bay Mineral Singapore and (€10.93) million for Eramine.

# Note 5. Schedule of receivables

(€ thousand)	Gross amount 31/12/2013	1 year or less	Over 1 year	Reminder 31/12/2012
Receivables on investments in associates (1)	1,347,648	1,347,648		773,157
Pension plan assets (2)	6,450	6,450		9,518
Other investments	15,997	15,997		19,381
Trade receivables	75,438	74,606	832	77,579
Other receivables (3)	79,175	79,175		75,185
Prepaid expenses	4,768	4,768		2,854
TOTAL	1,529,476	1,528,644	832	957,673

(1) Receivables on investments in associates: loans to Group companies:

(€ thousand)	31/12/2013	31/12/2012
Strand Minerals Ltd/Weda Bay Minerals Singapore	400,847	320,344
Eramet Holding Alliages (formerly SIMA)	252,060	252,057
Erasteel SAS	120,996	104,603
CFED	62,118	68,002
Comilog SA	0	21,814
ERAMET Research	60	1,095
Eramine SAS	10,928	5,242
Metal Securities	464,077	0
TiZir	36,560	0
TOTAL	1,347,647	773,157

(2) Excess payment of defined benefit supplementary pension plan contributions.

(3) Other receivables include, among others, a receivable net of tax from the companies of €42.3 million connected with tax consolidation and payments of €21.9 million on development projects, that were fully provisioned.

# Note 6. Cash & cash equivalents

Solely composed of demand bank accounts.

# Note 7. Prepaid expenses and accrued income

(€ thousand)	31/12/2013	31/12/2012
Prepaid expenses (1)	4,768	2,854
Deferred debt issue costs (2)	8,592	2,980
Bon redemption premiums	2,862	0
Translation adjustments: loss	(2)	0
TOTAL	16,220	5,834

(1) Prepaid insurance premiums totalled €2.6 million (compared with €2.4 million at 31 December 2012).

(2) Debt issue costs (syndicated credit facility, bond issue, Schuldschein).

# Note 8. Shareholders' equity

The share capital breaks down as follows:

	31/12/2013	31/12/2012
F.S.I. Equation (Bpifrance)	25.66%	25.66%
SORAME/CEIR	37.06%	37.05%
STCPI	4.03%	4.03%
Miscellaneous	33.25%	33.26%
TOTAL	100%	100%

Pursuant to a shareholders' agreement signed on 16 March 2012, which entered into force on 16 May 2012 and will expire on 31 December 2016, subject of the AMF decision and notification No. 212C0647, the Company, as of 16 May 2012, is under the majority control of a declared concert party of shareholders comprising:

- a concert sub-group comprised of SORAME and CEIR, companies controlled by the Duval family, pursuant to a simultaneous shareholders' agreement of 19 July 1999, that came into effect on 21 July 1999, and was amended by a rider on 13 July 2009;
- Banque Publique d'Investissement (Bpifrance), via its subsidiary FSI Equation.

The provisions of the above shareholders' agreement and of the concert sub-group can be found in the main extracts of the texts of the AMF decision and notification No. 212C0647 and No. 209C1013 (amendment of 13 July 2009).

ERAMET's distributable reserves amounted to €1,656 million prior to the allocation of 2013 earnings (€1,369 million at 31 December 2012).

(€ thousand)	Number of shares	Share capital	Premiums, reserves and retained earnings	Profit for financial year	Total
Shareholders' equity as at 31 December 2011	26,519,116	80,883	1,093,925	340,942	1,515,751
Dividends paid				(59,078)	(59,078)
Carried forward to retained earnings and reserves			281,864	(281,864)	0
Withholding tax					0
Other transactions					0
Share capital increases in cash	24,102	74	1,484		1,558
Share capital increases by incorporation of reserves					0
Contributions in cash					0
Dividends paid in shares					0
Share capital increases in kind					0
Profit (loss) for the 2012 financial year				321,062	321,062
Shareholders' equity as at 31 December 2012	26,543,218	80,957	1,377,273	321,062	1,779,292
Dividends paid				(34,098)	(34,098)
Carried forward to retained earnings and reserves			286,964	(286,964)	0
Withholding tax					0
Other transactions					0
Share capital increases in cash					0
Share capital increases by incorporation of reserves					0
Contributions in cash					0
Dividends paid in shares					0
Share capital increases in kind					0
Profit (loss) for the 2013 financial year				(133,006)	(133,006)
SHAREHOLDERS' EQUITY AS AT 31 DECEMBER 2013	26,543,218	80,957	1,664,238	(133,006)	1,612,188

The share capital is comprised of 26,543,218 fully paid-up ordinary shares (26,543,218 ordinary shares at 31 December 2012) with a par value of €3.05.

# **Note 9.** Treasury shares

The table below summarises the treasury share transactions:

		Price support	Grants to employees	Other purposes	Total
Position at 31 December 2011		83,596	175,950	-	259,546
As a percentage of share capital	26,519,116	0.32%	0.66%	-	0.98%
Allocated to stock options/bonus shares:					
<ul> <li>grants/bonus shares – 2010 plans</li> </ul>		-	(9,526)	-	(9,526)
• grants/bonus shares – 2011 & 2012 plans		-	(732)	-	(732)
Purchases		181,098	42,253	-	223,351
Sales		(202,140)	-	-	(202,140)
Share cancellations/capital reduction		-	-		0
Share allocation/acquisition of Eralloys non-control. interests		-	-		0
Position at 31 December 2012		62,554	207,945	-	270,499
As a percentage of share capital	26,543,218	0.24%	0.78%	-	1.02%
Allocated to stock options/bonus shares:					
<ul> <li>grants/bonus shares – 2009 plans</li> </ul>		-	(38,495)	-	(38,495)
<ul> <li>grants/bonus shares – 2010 plans</li> </ul>		-	(13,097)	-	(13,097)
• grants/bonus shares – 2011 & 2012 plans		-	(16,191)	-	(16,191)
Purchases		235,693	37,747	-	273,440
Sales		(191,295)	-	-	(191,295)
POSITION AT 31 DECEMBER 2013		106,952	177,909	-	284,861
As a percentage of share capital	26,543,218	0.40%	0.67%	-	1.07%

The balance of 284,861 shares corresponds to:

shares intended to be awarded under the bonus share plans.

 the shares purchased under the share price support agreement with EXANE BNP Paribas and not yet registered at the date of drawing up the table;

# Note 10. Provisions for impairment of current assets

(€ thousand)	31/12/2012	Additions	Reversals	31/12/2013
Raw materials				
Other supplies (1)	4,539	202		4,741
Trade receivables	769	65		835
Miscellaneous receivables (2)	18,327	4,187	(595)	21,920
TOTAL	23,635	4,454	(595)	27,495

(1) Full provisions are made for items in spare parts inventories that are short of one year's supply.

(2) The additions to provisions are recognised mainly in the expenses recorded under Other receivables on the Lithium exploration and operation project.

# Note 11. Provisions under liabilities

			Reversals			
(€ thousand)	31/12/2012	Additions	Used during financial year	Unused in financial year	Reclassification	31/12/2013
Provisions for price increases (1)	51,902		(19,066)			32,836
Excess amortisation and depreciation $^{\scriptscriptstyle (2)}$	14,155	2,109	(1,167)			15,098
Provisions for restoring mining deposits	0					0
Total regulated provisions	66,057	2,109	(20,233)	0	0	47,934
Foreign currency losses						
Employees (3)	6,228	4,577	(90)		(3,068)	7,647
Environment (4)	483	318				802
Sector contingencies	0					0
Taxes	0					0
Other provisions for contingencies (5)	11,658		(8,284)			3,374
Other provisions for losses (6)	5,463	4,461	(16,612)		13,465	6,778
Total provisions for contingencies and losses	23,833	9,356	(24,985)	0	10,397	18,601
PROVISIONS FOR LIABILITIES	89,890	11,465	(45,218)	0	10,397	66,535

(1) Reversal of the provision made against the 2006 price increase.

(2) Net excess tax depreciation of €1 million, primarily for acquisition costs capitalised with Tinfos shares.

(3) ERAMET makes provisions for pension and related liabilities on the basis of the actuarial appraisal by an outside firm. Detailed calculations were carried out at 31 December 2013. The excess payment of defined benefit supplementary pension plan contributions was reclassified under Other investments.

(4) Provision to clear the drainage channel at the Sandouville plant before its sale back to Port autonome du Havre (Le Havre Port Authority). The provision was partially reversed for the works completed during the financial year.

(5) The provision for financial contingencies mainly relates to the potential loss on the Metal Securities bond portfolio secured by ERAMET.

(6) The provision for losses was recognised in connection with the bonus share plans approved by the Board of Directors' meeting on 29 July 2009, by the General Shareholders' Meeting on 20 May 2010, by the Board of Directors' meeting on 16 February 2011, and by the Board of Directors' meeting on 10 May 2012 (see Chapter 3.7).

# **Note 12.** Employee-related liabilities

(€)	Fair value of plan assets	Actuarial value of obligations	Financial position Surplus /(deficit)
Pension plan	52,318,000	63,421,000	(11,103,000)
Retirement package	2,052,000	6,181,000	(4,129,000)
Long-service bonuses and awards		3,546,000	(3,546,000)
Healthcare plans		3,564,000	(3,564,000)
TOTAL	54,370,000	76,712,000	(22,342,000)

(€)	Unrecognised actuarial (gains)/losses	Unrecognised past services	Balance sheet provision(Assets)/ liabilities
Retirement benefits	13,722,000	3,230,000	(5,849,000)
Retirement package	2,885,000	1,162,000	82,000
Long-service bonuses and awards			3,546,000
Healthcare plans	146,000		3,418,000
TOTAL	16,753,000	4,392,000	1,197,000

Actuarial assumptions:

Discount rate	3.3%
Inflation rate	2%
Salary increase rate	3%-3.5%
Return on plan financial assets	3.3%

Breakdown of pension fund investments:

(€)	Equities Bonds	Other investments	Total
Amount	2,052,000	52,318,000	54,370,000
Percentage	3.8%	96.2%	100%

Change in pension liabilities:

(€)		2013
At beginning of period		(3,290,000)
Expenses recognised		4,621,000
service cost	1,944,000	
net interest expense	2,106,000	
return on plan assets	(1,591,000)	
<ul> <li>amortisation of actuarial gains (losses) and past service cost</li> </ul>	2,162,000	
other		
Contributions paid		(134,000)
Translation adjustments and other movements		
AT PERIOD END		1,197,000

The  $\in$ 1.2 million balance breaks down into a  $\in$ 7.6 million provision for contingencies and losses and pension plan assets of  $\in$ 6.4 million in the balance sheet of ERAMET SA at 31 December 2013.

# **Note 13.** Breakdown of liabilities and maturity schedule

Net amount (thousand euros)	31/12/2013	Up to 1 year	Over 1 year to under 5 years	Over 5 years
Other bond issues (1)	403,000	3,000		400,000
Borrowings from credit institutions (2)	225,512	149,088	16,424	60,000
Miscellaneous long-term borrowings (3)	60,613	60,613		
Trade payables <sup>(4)</sup>	103,580	103,572	8	
Tax and payroll liabilities	18,066	18,066		
Liabilities on non-current assets and related payables	1,531	1,531		
Other miscellaneous liabilities (5)	25,495	25,495		
Unearned income	20	20		
TOTAL	837,818	361,386	16,432	460,000

(1) Other bond issues include the bond issue for €400 million by ERAMET SA in early November 2013.

(2) Bank borrowings include €148 million in commercial paper issued by ERAMET.

(3) ERAMET is financed by Metal Securities, its 87.92%-owned subsidiary. The amount at 31 December 2013 was €58 million (compared to €307 million at 31 December 2012).

(4) The Company's Supplier payables outstanding from more than 60 days as of the invoice date amount to  $\in$ 131,000.

(5) In 2012, the tax-consolidated French subsidiaries paid corporate income tax instalments to ERAMET SA exceeding the corporate income tax payable by  $\in$ 21.2 million.

### **Miscellaneous borrowings**

Net amount (thousand euros)	31/12/2013	31/12/2012
Current accounts with Metal Securities	58,274	307,407
Borrowing from Weda Bay Minerals, Inc.	1,879	1,915
Deposits received	460	460
TOTAL	60,613	309,782

# Note 14. Breakdown of liabilities and accrued expenses

Gross amount (thousand euros)	31/12/2013	31/12/2012
Miscellaneous borrowings	60,613	309,782
Trade payables	103,580	122,550
Tax and payroll liabilities	18,066	15,263
Liabilities on non-current assets	1,531	2,055
Other miscellaneous liabilities	25,945	9,034
Unearned income	20	20
TOTAL	209,756	458,704

# **Note 15.** Items relating to associates

Amount (€ thousand)	31/12/2013	31/12/2012
Balance sheet		
Investments in associates	1,593,335	1,593,335
Financial receivables	1,347,648	773,157
Trade receivables	17,526	11,159
Miscellaneous receivables	5,054	12,365
Miscellaneous financial borrowings	(60,153)	(309,782)
Trade payables	(65,397)	94,010
Other liabilities	(21,705)	(14,334)
Income statement		
Operating income	85,405	72,615
Operating expenses	(557,335)	(730,326)
Financial income	319,763	325,245
Financial expenses	(1,049)	(2,902)

# Note 16. Sales

(€ thousand)	Total	France	International
Sales of goods and merchandise (1)	627,271	26,079	601,192
Income from ancillary activities	80,461	30,001	50,460
SALES	707,732	56,080	651,652

(1) Sales include a foreign currency loss of  $\in 1$  million resulting primarily from USD hedging.

# **Note 17.** Increases and reductions in future tax liabilities

(€ thousand)	31/12/2013	31/12/2012
Increases in taxable base		
Regulated provisions	47,937	66,057
<ul> <li>Translation adjustment losses at close</li> </ul>		
Deferred expenses		
Reductions in taxable base		
<ul> <li>Provisions not deductible during the financial period</li> </ul>	(688,834)	(315,792)
Accrued expenses	(1,181)	(321)
<ul> <li>Translation adjustment gains at close</li> </ul>		
Unrealised financial income		
Tax loss carry-forwards	(137,023)	(108,559)
Reductions in taxable base	(779,101)	(358,615)
INCREASE IN FUTURE TAXATION	(268,244)	(123,471)
	34%	34%

### Breakdown of income tax

(€ thousand)	Gross amount	Tax owed	Profit (loss)
Current profit (loss)	(119,622)		(119,622)
Extraordinary items	14,447		14,447
Employee profit-sharing and incentives	(1,425)		(1,425)
Impact of tax consolidation and research tax credit		9,594	9,594
TOTAL	(106,600)	9,594	(97,006)

#### Income tax

The tax consolidation agreement signed between ERAMET and its subsidiaries complies with the principle of neutrality and places the subsidiaries in the situation in which they would have been in the absence of such consolidation. Each subsidiary calculates its tax as if it were not part of the consolidated tax group and pays its income tax contribution to ERAMET as Group parent company.

The subsidiaries retain their losses to determine the amount of the income tax contribution they should pay ERAMET.

As a result of tax consolidation, the income tax line item broke down as follows: an income tax expense of €14.9 million for the tax group (of which €14.3 million in tax credits for 2013, +0.6 million in adjustments to the 2012 Group tax credits), €7.7 million in tax consolidation revenue (2013 income tax of consolidated subsidiaries) and (€13.1) million in tax consolidation expenses [including tax credits passed back to the subsidiaries: (€0.4) million in adjustment for 2012 and (€12.7) million in research tax credit for 2013].

# Note 18. Tax consolidation

All French subsidiaries in which ERAMET holds at least a 95% interest are consolidated for tax purposes, ERAMET being the Group parent. Tax consolidation in France comprises the following companies:

Tax-consolidated companies	31/12/2013	31/12/2012	31/12/2011
Consolidated companies			
ERAMET	х	х	х
Metal Securities	х	х	х
ERAMET Holding Nickel (EHN)	х	х	х
Eramine	х	х	х
Eurotungstène Poudres	х	х	х
ERAMET Holding Manganèse (EHM)	х	х	х
ERAMET Holding Alliages (formerly SIMA)	х	х	х
ERAMET Alliages	х	х	х
Aubert & Duval (AD)	х	х	х
Airforge		х	х
Erasteel	х	х	х
Erasteel Champagnole	х	х	х
Valdi	х	х	х
Non-consolidated companies			
ERAMET International	х	х	х
ERAMET Ingénierie (formerly TEC)	х	х	х
ERAMET Research (formerly CRT)	х	х	х
Forges de Montplaisir	х	х	х
Supa	х	х	х
Transmet	х	х	х
Brown Europe	х	х	х
Metal Securities Investissement	х	х	х
AD TAF	х	х	х
Campus Alliages	х	х	

Tax group losses utilisable at 31 December 2013 amounted to €137.02 million.

## Note 19. Net financial income

(€ thousand)	31/12/2013	31/12/2012
Dividends from associates (1)	299,324	305,323
Interest from associates (2)	20,484	19,989
Other dividends and interest	486	702
Reversal of provisions (3)	8,284	5,309
Foreign currency gains (4)	1,280	
Financial income	329,858	331,322
Depreciation and amortisation expense and addition to provisions (3)	(407,776)	
Interest and similar expenses (5)	(12,215)	(9,370)
Foreign currency gains (4)	149	(4,804)
Net losses on disposal of marketable securities		
Financial expenses	(419,842)	(14,175)
NET FINANCIAL INCOME	(89,984)	317,148

(1) Dividends from the Nickel Division (€156.13 million) and the Manganese Division (€143.08 million).

(2) Interest income on Group current account loans (€20 million).

(3) Reversal of provision for financial contingencies covering the potential loss on the Metal Securities bond portfolio secured by ERAMET: €8.28 million.

Additions to loan provisions of (€301.5) million for the Weda Bay Mineral Singapore and (€10.93) million for Eramine, provision on Weda Bay Mineral Singapore shares for (€52.57) million and Weda Bay Mineral Inc. for (€3.62) million, provision of (€36) million on Erasteel shares, and provision of (€3) million for treasury shares held under the share price support agreement.

In 2012, the reversal of provisions for financial contingencies covering the potential loss on the Metal Securities bond portfolio secured by ERAMET: €4.1 million and reversal of provisions for treasury shares held under the price support agreement: €1.3 million.

(4) Net exchange gain of €1.4 million resulting mainly from the remeasurement of the Group's loans and borrowings in foreign currencies.

(5) Debt interest expense (syndicated credit, Metal Securities, bond issue, Schuldschein).

# Note 20. Extraordinary items

(€ thousand)	31/12/2013	31/12/2012
Hedging gains	19	0
Gains on share capital transactions <sup>(1)</sup>	3,144	1,796
Reversal of provisions and expense transfer <sup>(2)</sup>	37,439	21,677
Non-recurring income	40,602	23,473
Hedging losses	(29)	(14)
Expenses on share capital transactions (1)	(19,831)	(3,895)
Extraordinary depreciation and amortisation expense and addition to provisions (3)	(6,296)	(6,336)
Extraordinary expenses	(26,156)	(10,245)
EXTRAORDINARY ITEMS	14,447	13,228

(1) Net carrying amount of the shares awarded under the bonus share award plan accounting for ( $\in$ 16.6) million.

(2) Reversal of the price increase provision amounting to €19.1 million, of the €1.5 million regulated provisions to cover Sandouville assets, reversal of the €16.6 million provision made for the bonus share plan.

(3) Additions to regulated provisions totalling (€2.1) million and additions to provisions for sundry receivables totalling (€4.1) million, mainly for the Lithium exploration and operation project.

# Note 21. Workforce

	FY 2013	FY 2012
Management	205	201
Supervisory staff	187	192
Workers	48	48
WORKFORCE AT END OF PERIOD	440	441
AVERAGE NO. OF EMPLOYEES	446	432

# **Note 22.** Off-balance-sheet commitments

(€ thousand)	31/12/2013	31/12/2012
Commitments given		
Endorsements, guarantees and deposits	131,558	54,816
Collateral security	None	None
Forward/future sales in USD	168,769	172,644
Commitments received		
Endorsements, guarantees and deposits	None	None
Collateral security	None	None
Multi-currency syndicated loan	981,000	800,000
Forward/future purchases in USD		
Reciprocal commitments		
Currency hedge via Metal Currencies	47,700	54,170

The above table does not include current business orders or liabilities stemming from orders for non-current assets under capital expenditure programmes.

# Note 23. Risk management

#### **23.1.** Foreign currency risk

ERAMET has two levels of exposure to currency risk:

All Nickel earnings are invoiced in currency (for the most part in US dollars), whereas its costs are mainly denominated in euros (Sandouville plant expenses and purchases of nickel and matte from SLN). Accordingly, hedging transactions are performed on the basis of multi-year budgets and forecasts, within a maximum 36-month horizon.

Under the technical support arrangements between ERAMET and its subsidiary SLN, all commercial hedging is performed on behalf of SLN and billed back directly to SLN under the marketing agreement.

For all other currency transactions, particularly long-term loans to Group companies, ERAMET may be required to provide currency hedging according to the loan repayment schedules. At 31 December 2013, only the loan to Strand Minerals Indonesia was currency-hedged.

### **23.2.** Commodity risk

ERAMET is exposed to commodity price volatility, impacting its sales. ERAMET hedges part of its nickel sales on the basis of 1- or 2-year budget forecasts. The hedges in question are contracted on behalf of SLN, which produces ferronickel and matte. Under the technical support agreement, the profit or loss on these hedges is passed on in the monthly invoicing to SLN. At 31 December 2013, 106 tonnes were hedged for a fair value of (USD73,000) (for the record, in 2012: 137 tonnes for a fair value of -USD120,000). ERAMET mainly uses forwards, combined call and put options and purchase options.

### 23.3. Credit or counterparty risk

ERAMET's counterparty risks mainly relate to its commercial transactions and, by extension, to trade receivables. Accordingly, ERAMET may be exposed to credit risk in the event of default by a counterparty. ERAMET has various means at its disposal to limit counterparty risk, for which the maximum exposure is equal to the net amount of receivables recognised in the balance sheet: gathering information ahead of financial transactions (from rating agencies, published financial statements, etc.), credit insurance and the arrangement of letters of credit and documentary credits to hedge certain specific inherent risks, such as the geographic location of its customers. In any event, ERAMET's customer base is primarily composed of leading international metallurgy groups for which insolvency risks are limited.

#### 23.4 Interest rate risk

At 31 December 2013, ERAMET had no interest rate hedges in place on its debt. Its surpluses invested with Metal Securities are remunerated at (floating) market rates.

### 23.5 Liquidity risk

Measured Group-wide, ERAMET's financial situation renders it relatively immune to liquidity risk: In fact, ERAMET SA's net cash position at 31 December 2013 stood at €663.16 million (as opposed to €431.7 million at 31 December 2012). All of its debt is towards Metal Securities, the Group's special-purpose company in charge of pooling and managing Group surpluses.

# **Note 24.** Property finance leases

Not applicable.

# **Note 25.** Consolidation of the corporate financial statements

The Company is consolidated within the ERAMET Group, of which it is the parent company.

Furthermore, the company may if necessary resort to any of the following three additional sources of financing:

#### **Revolving credit facilities**

In 2012, ERAMET signed the extension of its credit facility as provided for in the multicurrency revolving facility agreement up to 2017, for €800 million. In early 2013, ERAMET signed an amendment to this convention increasing the amount of €800 million to €981 million, extending its maturity from January 2017 to January 2018. The credit line intended to finance the operations and investments in assets was entered into on terms congruent with market conditions at the time of its signature.

This credit line has a single covenant and was not drawn at 31 December 2013.

#### **Commercial paper**

In 2005, ERAMET set up a €400 million commercial paper programme, €148 million of which was raised at 31 December 2013 (€35 million was raised in 2012). The unraised amount stood at €252 million.

#### Repos

The repo programme was not renewed by the Group at 31 December 2013.

# Note 26. Compensation of management and supervisory bodies

(€ thousand)	FY 2013	FY 2012
Short-term benefits		
Fixed compensation	2,971	2,920
Variable compensation	1,403	1,499
Directors' fees	498	429
Other benefits		
Post-employment benefits	760	565
TOTAL	5,632	5,412

The ten highest paid individuals received a total of €4.7 million in 2013.

## Note 27. Bonus share plan

				No. of b	eneficiaries		Subscri- bed or				Still to be	Number of	
(1)	Date of the Shareholders' Meeting	Date of the Board meeting	Subscription price	At outset	At 01/01/2013	Granted at outset	lapsed prior to 01/01/2013	Granted definitively in 2013	Lapsed in 2013	Expired in 2013	exercised as from 01/01/2014	beneficiaries at 01/01/2014	Expiry of plans
1	05/11/2005	25/04/2007	free	1	-	10,000	(10,000)	-	-	-	-	-	-
2	05/11/2005	23/07/2007	free	61	-	16,000	(16,000)	-	-	-	-	-	-
3	13/05/2009	29/07/2009	free	14,766	6,928	73,830	(39,190)	(38,495)	3,855	-	-	-	29/07/2013
4	20/05/2010	20/05/2010	free	14,405	8,486	28,810	(11,838)	-	(1,608)	-	15,364	7,682	20/05/2014
5	20/05/2010	20/05/2010	free	162	156	65,008	(6,595)	(13,097)	(150)	(40,714)	4,452	53	20/05/2015
6	20/05/2010	16/02/2011	free	14,298	13,453	28,596	(1,690)	(9,548)	(1,964)	-	15,394	7,697	16/02/2015
7	20/05/2010	16/02/2011	free	205	196	71,665	(7,082)	-	(240)	(10,265)	54,078	193	16/02/2016
8	20/05/2010	15/02/2012	free	14,318	13,669	28,636	(1,298)	(6,643)	4,525	-	25,220	12,610	15/02/2016
9	20/05/2010	15/02/2012	free	201	198	89,885	(560)	-	(6,600)	(12,564)	70,161	187	15/02/2017
10	20/05/2010	21/03/2013	free	14,353	-	28,706	-	-	(3,404)	-	25,302	12,651	21/03/2017
11	20/05/2010	21/03/2013	free	209	-	145,040	-	-	(1,650)	-	143,390	204	21/03/2018
TOTAL						586,176	(94,253)	(67,783)	(7,236)	(63,543)	353,361		

(1) Final vesting date: 3 = 29/07/2011 France & 29/07/2013 Worldwide, 4 = 20/05/2012 & 20/05/2014, 5 = 20/05/2013 & 20/05/2015, 6 = 16/02/2013 & 16/02/2015, 7 = 16/02/2014 & 16/02/2016, 8 = 15/02/2014 & 15/02/2016; 9 = 15/02/2015 & 15/02/2017; 10 = 21/03/2015 & 21/03/2017 and 11 = 21/03/2016 & 21/03/2016.
 The shares cannot be sold prior to: 3 = 29/07/2013, 4 = 20/05/2014, 5 = 20/05/2015, 6 = 16/02/2015, 7 = 16/02/2016, 8 = 15/02/2016; 9 = 15/02/2017; 10 = 21/03/2017 and 11 = 21/03/2016; 9 = 15/02/2017; 10 = 21/03/2017 and 11 = 21/03/2018.

# Note 28. Individual training rights

Individual training rights vesting over a full year amount to 20 hours per full-time employee and pro rata for employees working part-time or hired during the year.

Taking into account the size of the workforce at 31 December 2013, individual training rights amounted to 32,895 hours (32,452 hours at 31 December 2012).

# Note 29. Other information

Carlo Tassara France (part of the Romain Zaleski group) is an ERAMET shareholder that owns 3,394,146 shares (namely 12.87% of the capital at 31 December 2009), having regard to an estimate based on the most recent threshold crossing declaration by this company (No. 207C0134 of 17 January 2007).

On 17 December 2009, Carlo Tassara France summoned SIMA, SORAME and CEIR, as well as the members of the Duval family, to appear before the Paris Commercial Court. The summons specifies that these proceedings were being brought in the presence of ERAMET. In its writ of summons, Carlo Tassara France claims first, that the SIMA group's presentation to the ERAMET shareholders in 1999 misled those shareholders by concealing from them the indebtedness of SMC, a 38.5%-owned subsidiary of SIMA, consolidated not fully, but by the equity method, whereas SIMA is stated to have concealed from both the appraisal auditors for the transfer of assets (commissaires aux apports) and the ERAMET shareholders that it had full control of that subsidiary. Secondly, Carlo Tassara France challenges the terms on which ERAMET financed SMC through the intermediary of SIMA from 1999 to 2002 (at which date, SMC filed for bankruptcy), by loans alleged to have been granted unlawfully for lack of their having received prior authorisation from the ERAMET Board of Directors; the claimant also requests the Court to find that those loans proved prejudicial to ERAMET and is applying to have Messrs. Édouard, Georges, Patrick and Cyrille Duval found jointly and severally liable to pay ERAMET a total sum of €76.4 million in damages.

Carlo Tassara France is seeking the cancellation of the resolutions of the ERAMET General Shareholders' Meeting on 21 July 1999 approving the contribution of SIMA's shares to ERAMET, the cancellation of the ERAMET shares issued in consideration for said contribution and the reduction of ERAMET's share capital by the amount of the cancelled shares, as well as the return by the holders of those shares of the dividends earned since 1999 and estimated by Carlo Tassara France at €201 million and the return by ERAMET to said contributors of the SIMA shares and of the dividends received from SIMA since 1999.

Though the summons is not directed against ERAMET or against its past or current corporate bodies, it is however likely that, were it to prevail, it would have serious implications for ERAMET as, in particular, it would lead to a significant reduction in its share capital and the exit of SIMA (and hence of Aubert & Duval) from the Group's scope of consolidation. ERAMET points out that the SIMA share contribution was approved by the ERAMET Extraordinary General Shareholders' Meeting on 21 July 1999, based on the report of two Appraisers appointed by the President of the Paris Commercial Court, the report of the Board of Directors of ERAMET, the appendix to which was approved by the COB (French Securities and Exchange Commission) on 6 July 1999 (document No. E 99-944) and the opinion as regards fairness attached to that document E.

In September 2010, the defendants lodged submissions in reply to the claims of Carlo Tassara France.

On 2 December 2011, the Paris Commercial Court ruled that all of Carlo Tassara France's claims were inadmissible on the grounds that they were time-barred. Carlo Tassara France appealed the ruling. On 19 March 2013, the Paris Court of Appeal confirmed the ruling of the Paris Commercial Court in all its provisions. Carlo Tassara France filed an appeal with the *Cour de Cassation*.

#### Gabon environmental lawsuit

Four NGOs (non-governmental organisations), an inhabitants' protest group (*collectif d'habitants*) and a former *député* (Member of Parliament) filed a number of applications in February and March 2011 with the Libreville Court of First Instance, instituting various civil proceedings in Gabon, seeking damages from Comilog SA and ERAMET for alleged environmental harm caused as a result of the operation of the Moanda mining site. On 13 November 2012, the Libreville Court of First Instance, in response to the demand of Comilog SA and the other defendants, declined territorial competence. The appeal filed by the applicants against this ruling was declared inadmissible by the Libreville Court of Appeal on 16 May 2013. The applicants appealed to the Cour de Cassation against the Libreville Court of Appeal decision on September 2013. At present, the pleas put forward by the applicants do not support their claims.

# Note 30. Events after the reporting date

To the best of the Company's knowledge, no other events have occurred since the reporting date.

NOTE 30. 2013 SEPARATE FINANCIAL STATEMENTS

# 6.2.3. Table of subsidiaries and investments \_\_\_\_\_

As at 31 December 2013

(thousand euros or foreign currency units, except XAF million)		Share capital Currency	Own funds other than capital Currency	Share of capital held	Gross carrying value of shares held	Net carrying value of shares held €	Loans and advances granted and not repaid	Endorse- ments and guarantees given	Dividends received in the financial year €	Total sales of past financial year Currency	Profit (loss) of last financial year closing Currency
I. Detailed information on each s	tock (ard					_					
Subsidiaries (at least 50% of sha			Ŭ			. ,					
Eras	EUR	2,000	0	100.00	1,986	1,986				0	0
ERAMET Ingénierie	EUR	525	4,004	100.00	838	838				12,686	(175)
ERAMET Research	EUR	1,410	17,796	100.00	1,161	1,161	60			30,560	7,247
ERAMET International	EUR	160	3,038	100.00	892	892				11,326	471
ERAMET Holding Nickel	EUR	227,104	23,163	100.00	229,652	229,652			156,134	0	155,680
Weda Bay Mineral Inc.	USD	35,505	17,928	100.00	3,616	0				0	(1,080)
Weda Bay Mineral Singapore Ltd	USD	347,743	(9,749)	19.75	52,570	0	400,847			0	(25)
ERAMET Holding Manganèse	EUR	310,156	230,888	100.00	310,156	310,156			112,989	0	55,576
Eralloys Holding	NOK	12,800	1,575,510	100.00	419,445	224,445				805	34,596
ERAMET Holding Alliages (formerly SIMA)	EUR	148,000	17,906	100.00	329,584	325,100	252,060			5,106	4,209
Erasteel	EUR	15,245	35,097	100.00	143,169	50,169	120,996			127,576	(27,228)
					1,493,069	1,144,399					
Investments in associates (betw	een 10%	% and 50%	owned)								
Comilog	XAF	40,812	337,960	23.22	53,407	53,407			30,088	407,577	34,349
Tinfos	NOK	3,088	228,888	33.35	46,751	24,751			67	85,880	22,448
					100,158	78,158					
II. General information on other s	tocks (g	ross amou	nt at most e	qual to 1%	of the Compa	any's share ca	apital)				
French subsidiaries	EUR				117	117	475,006				
<ul> <li>Foreign subsidiaries</li> </ul>	EUR										
Investments in associates	EUR				456	456		49,565	46		
TOTAL					1,593,800	1,223,130	1,248,969	49,565	299,324		

#### **FINANCIAL STATEMENTS** NOTE 30. 2013 SEPARATE FINANCIAL STATEMENTS

	SIREN business identifier	Address of registered office
I. Detailed information on each stoc	k (gross amount e	xceeding 1% of the Company's share capital)
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 Ingénierie	301 570 214	1, avenue Albert Einstein 78190 Trappes, France
ERAMET Research	301 608 634	1, avenue Albert Einstein BP 120 78193 Trappes, France
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
Weda Bay Mineral Singapore Ltd	N/A	8 Marina Boulevard #05-02 – Marina Bay Financial Centre – Singapore 01898
ERAMET Holding Manganèse	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 Alliages (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% ov	wned)
Comilog	N/A	Compagnie minière de l'Ogooué Z.I. de Moanda BP 27-28 Gabon
Tinfos	N/A	O. H. Holtas gate 21 – N-3678 Notodden Norway

### 6.2.4. Report of the Statutory Auditors on the annual financial statements \_\_\_\_\_

#### Year ended 31 December 2013

To the Shareholders

In compliance with our appointment as Statutory Auditors at your Shareholders' Meetings, we hereby report to you, for the year ended 31 December 2013, on:

- the audit of the accompanying financial statements of ERAMET;
- the justification of our assessments;
- the specific verification and information required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements, based on our audit.

### I. Opinion on the financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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 2013 and of the results of its operations for the year then ended in accordance with French accounting principles.

#### **II.** Justification of our assessments

In accordance with the requirements of article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matter:

As indicated in Note 3.2 "Accounting policies and methods" to the financial statements, equity interests in subsidiaries are measured taking into account the value of the net assets held and the profitability outlook. Our procedures consisted in assessing the financial information and the assumptions upon which these estimates were based and in reviewing the calculations performed by your Company. On these bases, we assessed the reasonableness of these estimates.

These assessments were made as part of our audit approach for the financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

### **III.** Specific procedures and disclosures

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the documents addressed to shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of article L. 225-102-1 of the French Commercial Code (*Code de commerce*) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from companies controlling your company or controlled by it. Based on this work, we attest the accuracy and fair presentation of this information.

In accordance with French law, we have verified that the required information concerning the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Paris-La Défense and Neuilly-sur-Seine, 21 February 2014

The Statutory Auditors

ERNST & YOUNG et Autres French orignal signed by Aymeric de La Morandière DELOITTE & ASSOCIÉS French orignal signed by Alain Penanguer

# 6.2.5. Special report of the Statutory Auditors on regulated agreements and commitments \_\_\_\_\_\_

#### Year ended 31 December 2013

To the Shareholders,

In our capacity as Statutory Auditors of your Company, we hereby report to you on regulated agreements and commitments.

The terms of our engagement require us to communicate to you, based on information provided to us, the principal terms and conditions of those agreements and commitments brought to our attention or which we may have discovered during the course of our audit, without expressing an opinion on their usefulness and appropriateness or identifying such other agreements and commitments, if any. It is your responsibility, pursuant to article R. 225-31 of the French Commercial Code (*Code de commerce*), to assess the interest involved in respect of the conclusion of these agreements and commitments for the purpose of approving them.

Our role is also to provide you with the information stipulated in article R. 225-31 of the French Commercial Code (*Code de commerce*) relating to the implementation during the past year of agreements and commitments previously approved by the Shareholders' Meeting, if any.

We conducted the procedures we deemed necessary in accordance with the professional guidelines of the French National Institute of Statutory Auditors (*Compagnie nationale des Commissaires aux comptes*) relating to this engagement. These procedures consisted in agreeing the information provided to us with the relevant source documents.

# Agreements and commitments submitted to the approval of the Shareholders' Meeting

#### Agreements and commitments authorized during the year

We hereby inform you that we have not been advised of any agreement or commitment authorized during the year to be submitted to the approval of the Shareholders' Meeting pursuant to article L. 225-38 of the French Commercial Code (*Code de commerce*).

# Agreements and commitments previously approved by the Shareholders' Meeting

# A. Agreements and commitments approved in prior years which remained in force during the year

Pursuant to article R. 225-30 of the French Commercial Code (*Code de commerce*), we have been informed that the following agreements and commitments, previously approved by Shareholders' Meetings of prior years, have remained in force during the year.

#### With Le Nickel-SLN

#### Technical assistance contract

#### Nature and purpose:

Pursuant to the technical assistance contract signed in 1999, ERAMET provides strategic, industrial, financial, tax and human resource management assistance to Le Nickel-SLN. This agreement was amended with retroactive effect from 1 January 2010.

#### Terms and conditions:

These services are remunerated based on actual costs incurred by ERAMET to perform such services, plus an 8% margin. In 2013, the amount invoiced totaled  $\notin$ 9,118,250, compared to  $\notin$ 7,908,460 in 2012.

#### Marketing agreement

#### Nature and purpose:

The marketing agreement entered into between ERAMET and Le Nickel-SLN in 1985 pursuant to which ERAMET ensures the marketing of Le Nickel-SLN products (excluding ore) was also amended with retroactive effect from 1 January 2010.

#### Terms and conditions:

Pursuant to this agreement, ERAMET purchased nickel and ferronickel matte from Le Nickel-SLN at a selling price that allowed ERAMET to make a 3% margin, plus a premium the calculation methods and trigger price of which have been redefined. The total amount invoiced by Le Nickel-SLN to ERAMET was €551,647,051 in 2013, compared to €724,872,148 in 2012.

Under this same agreement, ERAMET invoiced to Le Nickel-SLN a contribution to other costs instead of a flat-rate fee, intended to cover standard nickel matte transformation costs incurred by ERAMET prior to marketing the finished products. The total amount invoiced to Le Nickel-SLN was €26,698,090 in respect of 2013, compared to €26,657,960 in 2012.

Persons concerned holding a directorship or a general management position in both companies:

Patrick Buffet, Édouard Duval, Bertrand Madelin and Michel Quintard.

# With Messrs. Patrick Buffet, Georges Duval, Bertrand Madelin and Philippe Vecten

Membership of the ERAMET corporate officers in an ERAMET group complementary health, disability and death benefits plan

#### Nature, purpose and terms and conditions:

The Board of Directors meeting of 17 February 2010 authorized Messrs. Patrick Buffet, Georges Duval, Bertrand Madelin and Philippe Vecten, corporate officers, to join the Group's complementary health, disability and death plan.

#### FINANCIAL STATEMENTS

NOTE 30. 2013 SEPARATE FINANCIAL STATEMENTS

#### Defined benefits retirement plan

#### Nature, purpose and terms and conditions:

This plan, is applicable to all ERAMET group corporate officers, authorized by the Board of Directors Meeting on 30 July 2008 and approved by the Shareholder's Meeting on 13 May 2009.

#### With Mr. Patrick Buffet

Termination Benefits

#### Nature, purpose and terms and conditions:

The termination benefits authorized by the Boards of Directors on 20 July 2008 and approved by the Shareholder's Meeting on 16 April 2008, then following the renewal of the term of office of the Chairman & CEO, authorized by the Boards of Directors on 27 July 2011 and approved by the Shareholder's Meeting on 15 May 2012. The payment of the termination benefits in the event of departure will be subject to the following performance condition: the amount of variable gross compensation received during the last three full fiscal years of his term of office as Chairman & CEO must exceed or be equal to 20% of the annual gross fixed compensation paid during those same fiscal years. In this respect, the amount of termination benefits to be owed will be equal to three times his most recent annual gross fixed compensation, to which will be added an amount equal to three times the average of the variable gross compensation received during the last three full fiscal years prior to his departure.

Paris-La Défense and Neuilly-sur-Seine, 21 February 2014

The Statutory Auditors

ERNST & YOUNG et Autres French orignal signed by Aymeric de La Morandière DELOITTE & ASSOCIÉS French orignal signed by Alain Penanguer

### 6.2.6. Separate financial results over the past five financial years \_\_\_\_\_

	2009	2010	2011	2012	2013
Share capital at year-end					
a) Share capital (€)	80,427,930	80,866,071	80,883,304	80,956,815	80,956,815
b) Number of shares issued	26,369,813	26,513,466	26,519,116	26,543,218	26,543,218
Transactions and profit (loss) for the year (thousand euros)					
a) Sales ex. tax	751,791	1,067,012	1,043,590	880,306	707,732
<ul> <li>b) Profit (loss) before tax, employee profit-sharing, depreciation, amortisation and provisions</li> </ul>	106,182	127,381	608,704	278,523	243,083
c) Income tax	(6,433)	(9,900)	(9,641)	(27,790)	(9,594)
d) Employee profit-sharing	0	0	0	0	0
<ul> <li>e) Profit (loss) after tax, employee profit-sharing, depreciation, amortisation and provisions</li> </ul>	(29,942)	146,112	340,942	321,062	(133,006)
f) Proposed dividend	47,466	92,797	59,668	34,506	0
Earnings per share (€)					
a) Profit (loss) after tax, employee profit-sharing, but before depreciation, amortisation and provisions	4.27	5.18	23.32	11.54	9.52
<ul> <li>b) Profit (loss) after tax, employee profit-sharing, depreciation, amortisation and provisions</li> </ul>	(1.14)	5.51	12.86	12.10	(5.01)
c) Proposed dividend per share	1.80	3.50	2.25	1.30	0
Personnel					
a) Average number of employees	383	381	402	432	439
b) Total wage bill (€ <i>thousand</i> )	27,350	30,873	32,573	33,259	34,373
c) Amounts paid out in employee benefits (€ thousand)	15,478	22,105	50,189	27,845	23,716

### 6.3. CONSOLIDATED FINANCIAL STATEMENTS FOR 2012 AND 2011

Pursuant to Article 28 of (EC) Regulation No. 809/2004 of the Commission, the following information is included by reference in this Registration Document:

 a) 2012 consolidated financial statements, the related audit report and the overview of the items included respectively in Sections
 6.1, 6.1.3 and 2 of the 2012 Registration Document filed with the AMF on 27 March 2013;

 b) 2011 consolidated financial statements, the related audit report and the overview of the items included respectively in Sections
 6.1, 6.1.3 and 2 of the 2011 Registration Document filed with the AMF on 29 March 2012. The sections of the 2012 and 2011 Registration Documents not included are therefore either of no relevance to investors or covered elsewhere in this Registration Document.

The two abovementioned Registration Documents can be found on the Company's website (www.eramet.com) and on that of AMF (www.amf-france.org).

### 6.4. DIVIDEND POLICY

#### 6.4.1. Dividend payout arrangements \_

Dividends are paid annually at the times and in the places specified by the General Shareholders' Meeting, or failing that by the Board of Directors, within nine months of the end of the financial year. Properly paid dividends cannot be repeated.

Interim dividend payments may be made prior to the date of the Meeting setting the amount thereof, at the initiative of the Board of Directors pursuant to the provisions of subparagraph 2 of Article L. 232-12 of the French Commercial Code.

Shareholders may be given the option of payment wholly or partly in new Company shares, pursuant to the provisions of subparagraph 1 of Article L. 232-18 of the French Commercial Code.

In accordance with applicable provisions in France, unclaimed dividends lapse five years from the date of payment.

Unclaimed amounts are paid over to the French State during the first 20 days of January of each year following the year in which they are time-barred, pursuant to the provisions of Articles L. 27 and R. 46 of the French Public Property Code.

#### 6.4.2. Allocation and distribution of earnings (Article 24 of the Articles of Association) \_

"5% of earnings, as defined by law, less any past losses, where applicable, are withheld to make up the legal reserve, until such time as the reserve is equal to 10% of the share capital.

Distributable earnings consist of earnings for the financial year, less any past losses and the abovementioned withheld amount, plus any retained earnings. Out of the distributable earnings, the Ordinary General Shareholders' Meeting may deduct any sum it deems appropriate, either to be carried forward to the following financial year or to be added to one or more special or general reserves, of which it determines the allocation or use.

Any surplus is divided equally between all shares.

The General Shareholders' Meeting may grant each shareholder, for all or part of the dividend being distributed, the option to be paid in shares in the legally established manner, or in cash."

#### Breakdown of 2013 earnings allocation

The proposed allocation of the 2013 earnings can be found in Resolution 2 of the upcoming General Shareholders' Meeting, in Chapter 8 of this document.

#### 6.4.3. Dividend policy \_

#### 6.4.3.1. Policy applied

#### **Payment arrangements**

As the Company does not usually make interim payments, dividends are paid annually after the General Shareholders' Meeting called to approve the management activities and financial statements for the past financial year.

Mixed payments, in cash and shares, are sometimes offered at the shareholder's option.

#### Amount of dividend

In recent years, the Company has endeavoured to pay a regular and substantial dividend. No dividend is proposed for votes at the AGM of May 2014.

#### Dividends paid out over the past few years

	2013	2012 (1)	2011	2010	2009
Number of shares receiving dividends	26,543,218	26,543,218	26,519,116	26,513,466	26,369,813
Net profit (loss), Group share	(€370) million	€9 million	€195 million	€328 million	(€265) million
Dividends per share	€0	€1.30	€2.25	€3.50	€1.80
Total payout	€0 million	€34.5 million	€59.7 million	€92.8 million	€47 million

(1) Restated for the retrospective application of the revised IA19 standard.

#### Outlook

The Company intends to continue to follow the policy applied over the past years.

### 6.5. FEES PAID TO THE STATUTORY AUDITORS

Full details of the fees paid for the past three years to the various audit firms, with the breakdown by type of service, can be found in Note 35 to the consolidated financial statements.

## CORPORATE AND SHARE-CAPITAL INFORMATION

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7.1. MARKET IN THE COMPANY'S SHARES

### 7.1. MARKET IN THE COMPANY'S SHARES

## 7.1.1. Market on which shares are listed \_\_\_\_\_

The Company's shares were floated on the Second Market of the Paris Bourse (at a price of 310 francs, approximately equivalent to  $\in$ 47.26) on 29 September 1994, following the decision of the Combined Ordinary and Extraordinary General Meeting of Shareholders on 15 June 1994 to carry out a five-to-one split.

With effect from 26 June 1995, the shares were transferred to the Official List (monthly settlement segment).

The Company's shares are traded on the NYSE Euronext Paris market (ISIN code: FR0000131757) where ERAMET is included in segment A.

The stock is included in the Euronext Paris CAC MID 60 index. At the end of 2007, ERAMET joined the DJ STOXX 600 index.

No shares in any other Group company are traded on any other stock exchange.

#### 7.1.2. Share price performance \_\_\_\_\_

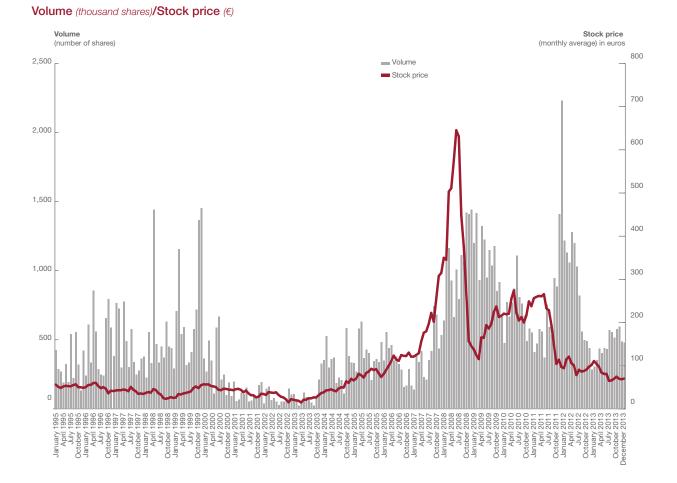
The ERAMET share continued to be penalised in 2013 by fears about the global and Chinese economies, as well as by the decline in nickel prices that were particularly low in the second half-year of 2013. It was down 36% at year-end compared to the end of 2012, at €70.29. The corresponding stock-market capitalisation was €1,876 million.

After a rapid and virtually unceasing decline in the first half of 2013, the share price fell below the support at around  $\epsilon$ 76/78 and dipped down to  $\epsilon$ 64, after which it moved upwards again, testing the former support now resistance level. In the second half-year, the share mostly fluctuated, oscillating between these two high and low limits.

The volumes traded are at their lowest since 2006/2007.

## 7.1.2.1. EraShare programme continued for ERAMET group employees

In 2013, the EraShare programme continued with the awarding of two bonus ERAMET shares to each employee of the Group, following from 5 shares granted per employee in 2009, and 2 shares granted per employee in 2010, 2011 and 2012.



#### 7.1.2.2. Changes in trading volumes and ERAMET share price performance

#### Stock market data

	Price $(\in)$ Extremes for the period		Year ended	Stock-market capitalisation at 31/12	Number of shares traded
	High	Low	31/12	(€ million)	(daily average)
2004	72.90	36.70	66.20	1,704	15,953
2005	94.90	66.10	81.00	2,089	19,319
2006	147.40	79.00	121.40	3,142	14,806
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	70.25	2,505	22,927

#### **CORPORATE AND SHARE-CAPITAL INFORMATION**

7.1. MARKET IN THE COMPANY'S SHARES

			Price (€)	Number of shares traded
	Low	High	Average (year end)	(monthly average)
2013				
December	63.76	70.48	66.572	478.1
November	65.20	73.94	69.800	486.7
October	66.82	75.69	70.579	594.3
September	71.19	82.50	76.823	576.4
August	64.85	75.99	70.777	516.45
July	64.01	74.97	68.730	555.9
June	65.00	81.85	73.337	568.3
May	80.00	89.00	83.357	432.2
April	76.52	86.50	81.563	440.1
March	84.00	96.83	90.460	405.2
February	89.40	106.00	99.243	434.8
January	102.50	116.00	111.193	352.2
2012				
December	100.50	114.15	109.27	305.3
November	92.40	102.40	98.21	284.1
October	90.40	105.00	96.89	438
September	85.68	107.00	95.57	490.4
August	82.01	93.00	88.09	496.5
July	80.00	96.79	87.13	560.1
June	77.50	95.24	86.50	818.3
Мау	75.95	102.75	86.68	1,029
April	92.00	109.80	100.95	1,201
March	102.25	122.50	111.29	1,280
February	115.45	139.90	125.81	1,060
January	94.97	124.50	113.02	1,130.9
2011				
December	86.80	104.15	94.54	1,218,964
November	80.05	113.95	98.75	2,233,782
October	96.70	127.10	108.02	1,409,007
September	103.05	150.00	124.79	883,210
August	132.00	196.65	148.75	947,185
July	190.00	231.70	212.60	532,776
June	208.65	236.35	221.75	596,236
May	226.40	267.50	240.60	2,120,666
April	253.50	273.85	265.29	371,891
March	230.00	268.80	255.15	560,001
February	251.75	278.50	265.15	575,457
January	249.00	266.50	256.76	476,163
Source: NYSE Euronext.	2.0.00	_00.00	2000	

#### 7.1.3. Securities services \_

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, France

Exane BNP Paribas was commissioned to implement the liquidity contract.

### 7.2. SHARE CAPITAL

#### 7.2.1. Subscribed capital \_\_\_\_\_

#### 7.2.1.1. Amount and shares

At 1 January 2013, share capital amounted to  $\in$ 80,956,814.90, in the form of 26,543,218 fully paid-up shares in the same class with a par value of  $\in$ 3.05 each.

#### 7.2.1.2. Rights attached to the shares

Every share provides entitlement to ownership in the Company's assets and a share of its earnings, in an amount proportional to the percentage of the share capital it represents, taking into account, as appropriate, the balance of redeemed and unredeemed share capital, paid and unpaid share capital, and the par value and rights of the various share classes.

Every share provides entitlement, whether as a going concern or in the event of liquidation, to payment of the same net sum for any distribution or redemption, in such a way that any tax exemptions or tax to which the Company may be entitled or liable shall be applied to all shares.

#### 7.2.1.3. Subscribed unpaid capital

None.

## 7.2.2. Securities not representing share capital \_\_\_\_\_

**7.2.2.1.** Founders' shares, voting right certificates

None.

#### 7.2.2.2. Other securities

The Company has not issued any other currently valid financial instruments that do not represent share capital but which may provide entitlement to the share capital in the future or by way of options. However, authorisations exist for such issues, upon a decision of the Board. No use has yet been made of such authorisations.

#### 7.2.3. Changes in share capital \_\_\_\_\_

Details of share capital are given in Note 16.1 to the consolidated financial statements in Chapter 6 of this document. The Company has not been notified of any material change in shareholdings since the end of the year.

## 7.2.4. Changes in ownership structure over the past three years \_\_\_\_\_

On 16 May 2012, Bpifrance Participations (formerly Fonds Stratégique d'Investissement) acquired, via its subsidiary FSI Equation, 6,810,317 shares from AREVA, representing 25.68% of ERAMET's share capital.

#### 7.2.5. Share ownership \_\_\_\_\_

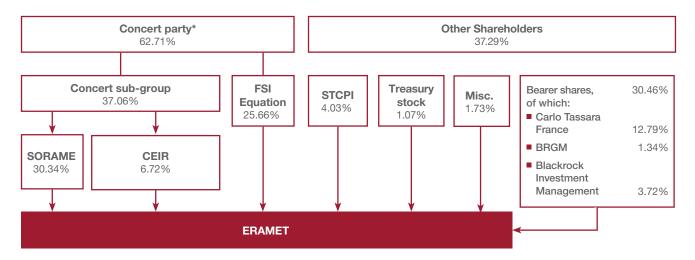
The known ownership of the Company's share capital over the past three financial years is taken from a study carried out at 31 December of each year by the bank responsible for maintaining the share register, notified declarations of significant-shareholding threshold crossings as well as the exercise of still-valid options and bonus shares.

#### **CORPORATE AND SHARE-CAPITAL INFORMATION**

7.2. SHARE CAPITAL

#### 7.2.5.1. Ownership structure

#### Company shareholders as at 31 December 2013 (% of shares)



(\*) Pursuant to a shareholders' agreement, subject of the AMF decision and notification No.212C0486 published on 12 April 2012.

## 7.2.5.2. As at 31 December 2013 (including shareholders holding – or potentially holding – at least 1% of the share capital or voting rights and of which the Company is aware)

Main shareholders	Equities	Percentage of capital	Theoretical voting rights	Percentage of theoretical voting rights	Voting rights exercisable at GSM	Percentage of voting rights exercisable at GSM
SORAME <sup>(1)</sup>	8,051,838	30.33%	13,558,933	40.46%	13,558,933	40.81%
CEIR <sup>(1)</sup>	1,783,996	6.72%	1,783,996	5.32%	1,783,996	5.37%
Total for the SORAME/CEIR <sup>(1)</sup> concert sub-group	9,835,834	37.06%	15,342,929	45.79%	15,342,929	46.18%
FSI Equation (subsidiary of Bpifrance) (1)	6,810,317	25.66%	6,810,317	20.32%	6,810,317	20.50%
Total concert party (SORAME/CEIR/Bpifrance) <sup>(1)</sup>	16,646,151	62.71%	22,153,246	66.11%	22,153,246	66.68%
Carlo Tassara France (Romain Zaleski group company) <sup>(2)</sup>	3,394,146	12.79%	3,394,146	10.13%	3,394,146	10.22%
STCPI	1,070,586	4.03%	2,141,172	6.39%	2,141,172	6.44%
BRGM <sup>(3)</sup>	356,044	1.34%	356,044	1.06%	356,044	1.07%
BlackRock Investment Management UK Ltd $^{\scriptscriptstyle (3)}$	987,240	3.72%	987,240	2.95%	987,240	2.97%
Employees (ERAMET share fund)	52,373	0.20%	86,227	0.26%	86,227	0.26%
Corporate officers	21,855	Not significant	35,667	Not significant	35,667	Not significant
ERAMET treasury shares	284,861	1.07%	284,861	0.85%	0	0.00%
Other	3,729,962	14.13%	4,069,261	12.25%	4,069,261	12.36%
TOTAL SHARES	26,543,218	100.00%	33,507,864	100.00%	33,223,003	100.00%
TOTAL REGISTERED SHARES	18,457,986	69.54%	25,529,626	76.19%	25,244,765	75.99%
TOTAL BEARER SHARES	8,085,232	30.46%	7,978,238	23.81%	7,978,238	24.01%

(1) SORAME, CEIR and FSI Equation are party to a shareholders' agreement constituting a concert party, subject of the AMF decision and notification No.212C0486.

(2) Since the latest declaration by Carlo Tassara France of its crossing a significant-shareholding threshold, No.207C0134 of 17 January 2007.

(3) Estimate on the basis of the most recent Thomson Reuters survey. Blackrock Investment Management (UK) Ltd stated that BlackRock Global Funds controlled 1,303,888 shares (4.92% of the capital) as from 13 March 2012.

## 7.2.5.3. As at 31 December 2012 (including shareholders holding – or potentially holding – at least 1% of the share capital or voting rights and of which the Company is aware)

			Theoretical	Percentage of theoretical	Voting rights	Percentage of voting rights
		Percentage	voting	voting	exercisable	exercisable
Main shareholders	Equities	of capital	rights	rights	at GSM	at GSM
SORAME (1)	8,051,838	30.33%	13,558,933	40.50%	13,558,933	40.83%
CEIR <sup>(1)</sup>	1,783,996	6.72%	1,783,996	5.33%	1,783,996	5.37%
Total for the SORAME/CEIR <sup>(1)</sup> concert sub-group	9,835,834	37.06%	15,342,929	45.83%	15,342,929	46.20%
FSI Equation (1)	6,810,317	25.66%	6,810,317	20.34%	6,810,317	20.51%
Total concert party (SORAME/CEIR/FSI) (1)	16,646,151	62.71%	22,153,246	66.17%	22,153,246	66.71%
Carlo Tassara France (Romain Zaleski group company) <sup>(2)</sup>	3,394,146	12.79%	3,394,146	10.14%	3,394,146	10.22%
STCPI	1,070,586	4.03%	2,141,172	6.40%	2,141,172	6.45%
BRGM (3)	356,044	1.34%	356,044	1.06%	356,044	1.07%
Blackrock Investment Management UK Ltd (3)	1,280,694	4.82%	1,280,694	3.83%	1,280,694	3.86%
Employees (ERAMET share fund)	52,373	0.20%	83,511	0.25%	83,511	0.25%
Corporate officers	17,560	Not significant	33,506	Not significant	33,506	Not significant
ERAMET treasury shares	270,499	1.02%	270,499	0.81%	0	0.00%
Other	3,455,165	13.02%	3,765,958	11.25%	3,765,958	11.34%
TOTAL SHARES	26,543,218	100.00%	33,478,776	100.00%	33,208,277	100.00%
TOTAL REGISTERED SHARES	18,434,261	69.45%	25,369,819	75.78%	25,099,320	75.58%
TOTAL BEARER SHARES	8,108,957	30.55%	8,108,957	24.22%	8,108,957	24.42%

(1) SORAME, CEIR and FSI Equation are party to a Shareholders' Agreement constituting a concert party, subject of the AMF decision and notification No.212C0486.

(2) Since the latest declaration by Carlo Tassara France of its crossing a significant-shareholding threshold, No.207C0134 of 17 January 2007.

(3) Estimate on the basis of the most recent Thomson Reuters survey. Blackrock Investment Management (UK) Ltd stated that BlackRock Global Funds controlled 1,303,888 shares (4.92% of the capital) as from 13 March 2012.

## 7.2.5.4. As at 31 December 2011 (including shareholders holding – or potentially holding – at least 1% of the share capital or voting rights and of which the Company is aware)

		Percentage	Theoretical voting	Percentage of theoretical voting	Voting rights exercisable	Percentage of voting rights exercisable
Main shareholders	Equities	of capital	rights	rights	at GSM	at GSM
SORAME (1)	8,027,095	30.27%	15,849,106	35.66%	15,849,106	35.87%
CEIR <sup>(1)</sup>	1,783,996	6.73%	3,567,992	8.03%	3,567,992	8.07%
Other individuals in the concert party (Cyrille, Georges, Édouard and Patrick Duval)	2,289	Not significant	4,512	Not significant	4,512	Not significant
Total for the SORAME/CEIR <sup>(1)</sup> concert sub-group	9,813,380	37.00%	19,421,610	43.69%	19,421,610	43.95%
AREVA (1)	6,810,317	25.68%	13,567,594	30.52%	13,567,594	30.70%
Total concert party (SORAME/CEIR/FSI) (1)	16,623,697	62.69%	32,989,204	74.22%	32,989,204	74.65%
Carlo Tassara France (Romain Zaleski group company) <sup>(2)</sup>	3,394,146	12.80%	3,394,146	7.64%	3,394,146	7.68%
STCPI	1,070,586	4.04%	2,141,172	4.82%	2,141,172	4.85%
BRGM <sup>(3)</sup>	356,044	1.34%	356,044	0.80%	356,044	0.81%
Blackrock Investment Management UK Ltd (5)	1,161,174	4.38%	1,161,174	2.61%	1,161,174	2.63%
M&G Investment Management Ltd. (4)	353,627	1.33%	353,627	0.80%	353,627	0.80%
Employees (ERAMET share fund)	33,854	0.13%	56,464	0.13%	56,464	0.13%
Corporate officers	15,087	Not significant	18,010	Not significant	18,010	Not significant
ERAMET treasury shares	259,546	0.98%	259,546	0.58%	0	0.00%
Other	3,251,355	12.26%	4,074,582	9.17%	4,074,582	9.22%
TOTAL SHARES	26,519,116	100.00%	44,450,342	100.00%	44,190,796	100.00%
TOTAL REGISTERED SHARES	18,350,116	<b>69.20</b> %	36,281,342	81.62%	36,021,796	81.51%
TOTAL BEARER SHARES	8,169,000	30.80%	8,169,000	18.38%	8,169,000	18.49%

(1) SORAME, CEIR and AREVA are party to a Shareholders' Agreement constituting a concert party, which was the subject of notice No.199C0577 from France's Financial Markets Board on 18 May 1999.

(2) Since the latest declaration by Carlo Tassara France of its crossing a significant-shareholding threshold, No.207C0134 of 17 January 2007.

(3) Estimate on the basis of the most recent identifiable bearer share (TPI) survey.

(4) Estimate on the basis of the most recent Thomson Reuters survey. M&G Investment Management Ltd, a subsidiary of Prudential plc, stated that Prudential plc controlled 524,779 shares as from November 2011.

(5) Estimate on the basis of the most recent Thomson Reuters survey. Blackrock Investment Management (UK) Ltd stated that BlackRock Global Funds controlled 816,868 shares as from 29 November 2011, and that BlackRock Inc. controlled 1,357,908 shares (5.12% of the capital) as from 16 February 2012 and 1,303,888 shares (4.92% of the capital) as from 13 March 2012.

To the best of the Company's knowledge, no other shareholders directly or indirectly hold more than 1% of the share capital or voting rights in the Company and there are no pledged shares. Apart from the treasury shares referred to in the above table, the Company does not own any other of its own shares. The shareholdings of corporate officers are detailed in the chapter on Corporate Governance.

#### 7.2.5.5. Foreseeable changes in voting rights

At 31 December 2013, a total of 11,300,000 registered shares, which were registered for less than two years, did not have double voting rights. If those shares were to enjoy double voting rights, the total of double voting rights would be increased to 36,500,000 plus the single voting rights of bearer shares, making 8,108,957 additional rights at 31 December 2013.

## 7.2.6. Stock option plan and bonus shares

At the time this registration document was submitted, the Company had issued no dilutive instrument (no convertible or exchangeable security or security with warrants).

The bonus shares granted and still open at 31 December 2013, whose plan details are given in Note 16.2 to the ERAMET consolidated financial statements set out in Chapter 6 of this document, are shares in existence. There are no current stock options.

### 7.2.7. Summary table of financial authorisations \_\_\_\_\_\_

#### Summary table of existing financial authorisations

### Share-capital increases authorised

A. By issuing shares, various transferable securities and/or subscription warrants, with shareholders' preferential subscription rights. Art. L. 225-129 of the French Commercial Code	
By the EGM for an amount of €24,000,000	15 May 2013 (Resolution 16)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
B. By issuing shares, various transferable securities and/or subscription warrants, with waiver of shareholders' preferential subscription rights, in connection with a public offer	
By the EGM for an amount of €16,000,000	15 May 2013 (Resolution 17)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
C. By issuing shares, various transferable securities and/or subscription warrants, with waiver of shareholders' preferential subscription rights, in connection with an offer specified in section II of Article L. 411-2 of the French Monetary and Financial Code	
By the EGM for an amount of €16,000,000	15 May 2013 (Resolution 18)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
D. By issuing shares, with waiver of preferential shareholder rights, resulting from the issue, by subsidiaries, of marketable securities granting access to the Company's share capital	
By the EGM for an amount of €16,000,000	15 May 2013 (Resolution 19)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
E. By capitalising reserves, earnings, premiums or other capitalisable items	
By the EGM for an amount of €24,000,000	15 May 2013 (Resolution 15)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
F. By issuing shares or miscellaneous marketable securities, in consideration of non-cash transfers of assets to the Company, without shareholders' preferential subscription rights. Art. L. 225-147, sub-paragraph 6 of the French Commercial Code	
By the EGM for 10% of the share capital, in an amount of €8,086,607.	15 May 2013 (Resolution 20)
Term of powers delegated	26 months until 14 July 2015
Use of the authorisation	None
Total issues limit (total A+B+C+D+F)	
By the EGM	15 May 2013 (Resolution 21)
Maximum amount	€24,000,000
Use of the authorisation	None
Share capital increase reserved for employees	
G. By the EGM	15 May 2013 (Resolution 23)
Term of powers delegated	26 months until 14 July 2015
Maximum amount	€500,000
Use of the authorisation	None
Share capital reduction	None
H. By the EGM	15 May 2013 (Resolution 24)
Term of powers delegated	26 months until 14 July 2015
Maximum amount	10% of share capital
Use of the authorisation	None
	None
Bonus share awards (Art. L. 225-197-1 and L. 225-197-2 of the French Commercial Code)	15 May 2012 (Papalutian 10)
I. By the EGM Maximum total number	15 May 2012 (Resolution 10) 550,000 shares
	38 months until 14 July 2015
Length of authorisation Used in 2013	173,746
Balance available	376,254
	010,204

7.2. SHARE CAPITAL

#### 7.2.8. Description of the share buyback programme \_\_\_\_\_

## 7.2.8.1. Report on the 2013 share buyback programme

The Combined Ordinary and Extraordinary General Meeting of Shareholders on 15 May 2013 authorised the Company to buy back its own shares representing up to 10% of the share capital, for a maximum purchase price of €500 per share, thereby authorising a maximum total expenditure of €1,327,160,500 by the Company. This authorisation expires at the Ordinary General Shareholders' Meeting called to approve the financial statements for the 2013 financial year and was granted for the following purposes:

 support the share price via a liquidity contract with an investment services provider, in accordance with the AMAFI code of conduct recognised by AMF;

- retain or deliver them (by way of exchange, in payment or otherwise) in connection with external-growth transactions;
- deliver shares upon the exercise of rights attached to marketable securities giving access to capital by redemption, conversion, exchange or otherwise;
- implement any purchase options plan concerning the Company's shares under the terms of Articles L. 225-177 et seq. of the French Commercial Code;
- award bonus shares under the terms of Articles
   L. 225-197-1 et seq. of the French Commercial Code;
- grant 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 them, in accordance with the 24<sup>th</sup> resolution put to the Shareholders' General Meeting of 15 May 2013 authorising a reduction in the Company's capital for a period of 26 months.

## 7.2.8.2. Details of treasury shares traded over the year (Article L. 225-211 of the French Commercial Code)

The following table summarises treasury share transactions carried out by the Company between 1 January and 31 December 2013.

	Shares in the share capital	Price support	Awards to employees	Total
Position at 31 December 2012		62,554	207,945	270,499
As a percentage of share capital	26,543,218	0.24%	0.78%	1.02%
Bonus share awards				
• 2009 award plan			(38,495)	(38,495)
• 2010 award plan			(13,097)	(13,097)
2011 and 2012 award plans			(16,191)	(16,191)
Purchases		235,693	37,747	273,440
Sales		(191,295)	-	(191,295)
POSITION AT 31 DECEMBER 2012	26,543,218	106,952	177,909	284,861
As a percentage of share capital		0.40%	0.67%	1.07%

Over the course of the year, 235,693 shares were purchased at an average share price of  $\notin$ 78.85 and 191,285 shares were sold at an average price of  $\notin$ 79.49.

The carrying amount of the portfolio of 284,861 shares with a par value of  $\in$ 3.05 each, held at 31 December 2013, was  $\in$ 44,214,778.88, with a market value at that same date of  $\in$ 70.29 per share, representing a total of  $\in$ 20,022,879.69.

The Company did not use any derivatives during the year.

#### 7.2.8.3. Liquidity contract

In order to ensure minimum liquidity levels for its stock at all times, the Company implements a liquidity contract with Exane BNP Paribas as of 18 July 2003. This liquidity contract complies with the Amafi charter. A summary of share price support transactions can be found in the details of trading set out above. At the settlement date of 31 December 2013, the following resources were available on the liquidity account: 110,202 ERAMET shares and €1,425,167.

## 7.2.8.4. Description of the 2014 share buyback programme

#### Legal framework

In accordance with the provisions of Article 241-2 of the general regulations of the AMF and European Regulation No.2273/2003 of 22 December 2003, the purpose of this section is to describe the terms and goals of the Company's share buyback programme. This programme, which falls within the scope of Article L. 225-209 of the French Commercial Code, shall be put to the General Shareholders' Meeting of 14 May 2014, deliberating under the quorum and majority requirements for Ordinary General Shareholders' Meetings.

### Number of shares and proportion of capital held by the Company

At 31 December 2013, the Company's capital comprised 26,543,218 shares.

On that date, the Company held 284,861 treasury shares, equivalent to 1.07% of the share capital.

#### Breakdown by purpose of the equity securities held by the Company

As at 31 December 2013, the 284,861 treasury shares held by the Company were allocated as follows, by purpose:

- share price support (liquidity contract): 106,952 shares;
- grants to employees: 177,909 shares.

#### Goals of the new buyback programme

The intended goals of this programme are to:

- support the share price via a liquidity contract with an investment services provider, in accordance with the Amafi code of conduct recognised by AMF;
- retain or deliver them (by way of exchange, in payment or otherwise) in connection with external-growth transactions;
- deliver shares upon the exercise of rights attached to marketable securities giving access to capital by redemption, conversion, exchange or otherwise;
- implement any purchase options plan concerning the Company's shares under the terms of Articles L. 225-177 et seq. of the French Commercial Code;
- award bonus shares under the terms of Articles
   L. 225-197-1 et seq. of the French Commercial Code;
- grant 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 them, in accordance with the 24<sup>th</sup> resolution put to the Shareholders' General Meeting of 15 May 2013 authorising a reduction in the Company's capital for a period of 26 months.

#### Maximum portion of the capital, maximum number and characteristics of the equity securities

10% of the registered capital at 31 December 2013, representing 2,654,321 shares, before deduction of the treasury shares held by the Company.

ERAMET shares are listed in segment A of Euronext Paris (ISIN code: FR0000131757).

The intended maximum purchase price is €500 per share.

The intended maximum total amount to be used in these purchases is  $\in$ 1,327,160,500 for 2,654,321 shares representing 10% of the Company's share capital.

#### **Buyback terms**

Share purchases, sales and transfers may be carried out by any means in the market or over the counter, including share block transactions or via derivatives, on the understanding that the resolution put to shareholders does not limit the portion of the programme that can be carried out via share block purchases.

The Company notes that if derivatives are used, the Company's goal would be to cover the option positions taken by the issuer (share purchase or subscription options granted to Group employees, debt instruments granting equity rights). More specifically, the use of derivatives shall consist of buying call options and the Company should not have occasion to sell put options.

#### Length of the buyback programme

The validity of the programme is limited to a period that will end at the Shareholders' General Meeting approving the financial statements for the 2014 financial year.

### 7.3. COMPANY INFORMATION

## 7.3.1. Company name (Article 2 of the Articles of Association) \_\_\_\_\_

ERAMET. In this document, the company is referred to as "the Company" or "the Issuer"; the group formed by ERAMET and its subsidiaries is referred to as "the Group".

#### 7.3.2. Company registration number \_\_\_\_

The Company is registered in the Paris trade register under number 632 045 381 and under SIRET business identification number 632 045 381 000 27. Its business is exploring for and operating mining deposits of any kind, metallurgy of all metals and alloys and trading in them.

# 7.3.3. Date of incorporation and term of the Company (Article 5 of the Articles of Association) \_\_\_\_\_

The Company was incorporated for a term of 99 years from 23 September 1963, expiring on 23 September 2062, except in the event of early dissolution or extension.

## 7.3.4. Registered office (Article 4 of the Articles of Association) \_\_\_\_\_

Tour Maine-Montparnasse

33, avenue du Maine

75015 Paris, France

Telephone: + 33 (0)1 45 38 42 42

Fax: + 33 (0)1 45 38 41 28

Website: www.eramet.com

## 7.3.5. Legal form and applicable legislation \_\_\_\_\_

ERAMET is a French public limited company (société anonyme) managed by a Board of Directors, governed by Articles L. 224-1 *et seq.* of the French Commercial Code (legislative and regulatory part) and by its Articles of Association.

#### 7.3.6. Statutory auditing of the Company (Article 19 of the Articles of Association) \_\_\_\_

As required by law, the Company is audited by two Incumbent Statutory Auditors and two Alternate Statutory Auditors.

Pursuant to Article 19 of the Articles of Association, the statutory auditors must be nationals of one of the Member States of the European Union.

## 7.3.7. Corporate object (Article 3 of the Articles of Association) \_\_\_\_\_

"The object of the Company, in all countries, is exploring for and operating mining deposits of all kinds, the metallurgy of all metals and alloys and trading in them.

For this purpose, it is involved in the following activities, whether directly, or indirectly through investments:

- the exploration for, acquisition, leasing, disposal, concession and operation of all mines and quarries of any kind whatsoever;
- the processing, transformation and trading of all ores, mineral and metal substances and their by-products, alloys and any derivatives;
- the manufacture and marketing of all products in which the abovementioned materials or substances are components;
- more generally, any transactions directly or indirectly related to the above objects or that may aid the development of the Company's business.

To achieve this object, the Company may, in particular:

- create, acquire, sell, exchange, take on lease or lease-out, with or without a purchase option, manage and operate directly or indirectly any industrial or commercial establishments, plants, construction sites and premises whatsoever, and any movable and tangible objects;
- obtain or acquire any patents, licences, processes and trademarks, operate, transfer or contribute them, and grant all manner of operating licences in any country;
- and, in general, carry out any commercial, industrial, financial, property or chattel transactions that may directly or indirectly relate or contribute to the corporate object or that may facilitate the achievement thereof. The Company may directly or indirectly act on its own behalf or on behalf of third parties, whether alone or via a partnership, joint venture or company, with any other company or person, and carry out, directly or indirectly, in France or abroad, in any form whatsoever, all transactions or other operations that are within the scope of its corporate object. It may take any interest or stake, in any form and in any French or foreign company that may aid the development of its own business."

## 7.3.8. Financial year (Article 23 of the Articles of Association) \_

The financial year runs for 12 months, beginning on 1 January and ending on 31 December of each year.

#### 7.3.9. Shareholders' General Meeting \_

# **7.3.9.1.** Calling of meetings and terms of admission (Articles 20 to 22 of the Articles of Association)

#### Composition

Shareholders' General Meetings comprise all shareholders in the Company, regardless of the number of shares they hold.

#### **Meeting notice**

Shareholders' General Meetings are called and held pursuant to the provisions of the French Commercial Code and Articles 20 to 22 of the Articles of Association.

Meetings are held either at the registered office or at any other venue in the same French Department specified in the meeting notice.

#### Terms of admission

All shareholders are entitled to take part in Shareholders' General Meetings, subject to proof of their identity, either in person or by

proxy through another shareholder or their spouse, the partner with whom they have concluded a civil-union pact or by any other individual or legal entity they choose under the conditions prescribed by current regulations.

Holders of registered shares and holders of bearer shares must carry out the formalities provided for in the applicable regulations. In both cases, these formalities must be completed by midnight, Paris time, at least three business days prior to the Meeting. Shareholders may also vote by correspondence pursuant to the provisions of Article L. 225-107 and R. 225-75 *et seq.* of the French Commercial Code, using a form that must reach the Company at least three days prior to the date of the Meeting.

Where the Board of Directors so resolves when calling the Meeting, shareholders may participate in the Meeting using video-conferencing or any other means of telecommunications or remote transmission, including the Internet, in accordance with the provisions of applicable regulations. Where applicable, mention of this decision is included in the meeting notice published in the BALO (*Bulletin des annonces légales obligatoires* – French official bulletin of legal notices).

#### Shares that are jointly-owned, split, pledged or under escrow

In the absence of specific provisions of the Articles of Association, and pursuant to the provisions of Article L. 225-110 of the French Commercial Code, any holder of a jointly owned share, a split share – bare ownership and usufruct, a pledged share or a share under escrow, is invited to the Meeting and may attend, subject to compliance with the following legal provisions or provisions of the Articles of Association with regard to the exercise of voting rights.

# 7.3.9.2. Terms of exercise of voting rights (Articles 8 and 20 of the Articles of Association)

Shareholders have the same number of voting rights as the shares they own or represent, subject to the double voting rights attached to some shares. The Extraordinary General Shareholders' Meeting of 21 July 1999 granted a double voting right, with effect from 1 January 2002, to every fully paid-up share for which it can be demonstrated that it has been registered in the name of the same shareholder for more than two years.

Bonus shares granted through the incorporation of reserves, earnings or issue premiums on the basis of old shares benefiting from double voting rights, also gain such rights after two years.

Double voting rights cease for any shares that are converted to bearer shares or transferred, except, in accordance with the law, any transfer by succession, settlement of communal property between spouses or family gift, or through the merger or demerger of the shareholder company.

In accordance with the law, double voting rights may only be cancelled by a decision of the Shareholders' Extraordinary General Meeting and following approval by the Special Meeting of Beneficiary Shareholders. 7.3. COMPANY INFORMATION

#### **Electronic voting**

Shareholders may also, where the Board of Directors so resolves when calling the Meeting, vote by correspondence or appoint a proxy using any means of remote transmission, including the Internet, in accordance with the regulatory provisions applicable when used.

Where an electronic form is used, the shareholder's signature may take the form of either a secure digital signature or a reliable identification process that provides a failsafe link with the instrument in question, possibly consisting of a username and a password. Where applicable, mention of this decision is included in the meeting notice published in the BALO (*Bulletin des annonces légales obligatoires* – French official bulletin of legal notices).

The proxy given or vote cast electronically prior to the meeting, as well as the acknowledgement of receipt given, shall be deemed irrevocable written instruments that are binding on all parties, it being noted that where the shares are sold at least three business days prior to midnight (00:00) on the date of the meeting, Paris time, the Company shall cancel or, as the case may be, amend accordingly the proxy given or vote cast prior to that date and time.

#### Shares that are jointly-owned, split, pledged or under escrow

In the absence of specific provisions of the Articles of Association and pursuant to Article L. 225-110 of the French Commercial Code, the voting right is exercised by the usufructuary at Shareholders' Ordinary General Meetings, by the bare owner at Shareholders' Extraordinary General Meetings, by one of the joint owners or by a sole proxy in the case of shares jointly owned *in indivisum*, and by the owner of pledged shares or shares under escrow.

#### 7.3.10. Transfer of shares \_\_\_\_\_

Since the removal of the approval clause by the General Meeting of 15 June 1994, shares may be traded freely, subject to compliance with the rules applicable to companies whose shares are listed for trading on regulated markets.

#### 7.3.11. Identification of shareholders \_\_\_\_

## 7.3.11.1. Crossing significant-shareholding thresholds/Declaration of intent

#### Legal declarations

Pursuant to Articles L. 233-7 to L. 233-11 of the French Commercial Code, any individual or legal entity, whether acting alone or in concert, acquiring ownership of 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 share capital and/or voting rights, must inform the AMF and the Company within the prescribed period, by registered letter with acknowledgement of receipt, of the total number of shares and/or voting rights owned. The same persons or entities are also required to inform the Company whenever their interest falls below any of the above-mentioned thresholds.

Finally, in addition to this legal duty of disclosure, any person crossing above or below the abovementioned thresholds of one-tenth, three-twentieths, one-fifth or one-quarter of the share capital is legally required to declare within the prescribed period, their intentions for the coming six months.

In the event of non-compliance with these disclosure obligations, the provisions of Article L. 233-14 of the said Commercial Code shall apply.

### Additional disclosures in accordance with the Articles of Association

Since the amendment of Article 9 of the Articles of Association by the General Meeting of 15 June 1994, any individual or legal entity, whether acting alone or in concert, acquiring or ceasing to own a fraction equal to 1% of the share capital and/or voting rights, or any multiple of that percentage, must inform the Company within ten days, by registered letter with acknowledgement of receipt, sent to the Company's registered office, stating the number of shares and voting rights held.

Failure to make this disclosure shall result in a loss of voting rights for the shares or voting rights in excess of the fraction that should have been disclosed, for a period of two years from the date when the situation is rectified and upon the mere request of one or more shareholders holding 5% of the share capital or voting rights, at a General Meeting.

#### 7.3.11.2. Identifiable bearer shares

Pursuant to Article L. 228-2 of the French Commercial Code and Article 9 of the Articles of Association, the Company may at any time ask Euroclear SA to carry out the "identifiable bearer share" (IBS) procedure to identify the holders of such shares.

Date	AMF Decision No.	Object
03/08/1999	199C1045	Declaration of the crossing of a significant-shareholding threshold (ERAP-CEIR-SORAME). Declaration of intent.
		Appointment of five qualified persons as directors. Reminder: dispensation from obligation to file an intended public offer.
29/12/1999	199C2064	Declaration of the crossing of a significant-shareholding threshold. Cogema substituted for ERAP.
30/12/1999	199C2068	Declaration of the crossing of a significant-shareholding threshold. AFD substituted for ERAP.
25/07/2001	199C0921	Proposed amendment to shareholders' agreement: assigning ERAMET shares held by Cogema to CEA Industrie.
12/09/2001	201C1140	Declaration of the crossing of a significant-shareholding threshold. Amendment to the shareholders' agreement following the substitution of AREVA for Cogema.
20/12/2004	204C1559	Declaration of the crossing of a significant-shareholding threshold and declaration of intent Substitution of Carlo Tassara International for Maaldrift BV.
14/02/2006	206C0296	Declaration of the upward crossing of a significant-shareholding threshold by M&G Investment Management Limited to 5.0034% of the share capital and 2.98% of the voting rights.
17/01/2007	207C0134	Declaration of the upward crossing of a significant-shareholding threshold, to 13.16% of the share capital and 7.74% of the voting rights, and declaration of intent by Carlo Tassara France.
18/01/2007	207C0137	Declaration of crossing below a significant-shareholding threshold (0%) by Carlo Tassara France.
24/07/2007	207C1569	Declaration of crossing below a significant-shareholding threshold to 4.14% of the share capital and 4.81% of the voting rights by STCPI.
30/05/2008	208C1042	Amendment to the (CEIR-SORAME-AREVA) shareholders' agreement of 17 June 1999.
03/06/2008	208C1083	Declaration of crossing below a significant-shareholding threshold by M&G Investment Management Limited to 4.95% of the share capital and 2.93% of the voting rights.
21/07/2009	209C1013	Amendment to the SORAME-CEIR shareholders' agreement of 19 July 1999.
20/03/2012	212C0416	Declaration of crossing above a significant-shareholding threshold and then below, by BlackRock Inc. (4.92% of the share capital and 2.94% of the voting rights).
12/04/2012	212C0486	Advertisement of the SORAME-CEIR-FSI shareholders' agreement clauses.
21/05/2012	212C0634	Declaration of crossing below a significant-shareholding threshold by AREVA – End of the SORAME-CEIR-AREVA shareholders' agreement.
23/05/2012	212C0647	Declaration of crossing above a significant-shareholding threshold by FSI.
22/07/2013	213C1027	Declaration of crossing above a significant-shareholding threshold by BPI Groupe via Bpifrance Participations (formerly FSI)
22/07/2013	213C1028	Statement of shareholding by Caisse des Dépôts et Consignations via BPI Groupe

## 7.3.12. Factors likely to influence a public offer \_\_\_\_\_

In addition to the information relating to significant-shareholding threshold crossing, double voting rights, shareholders' agreements and undertakings detailed in this Chapter, the following factors should be noted:

## Possibility of using capital increase authorisations during a public offer

In its 22<sup>nd</sup> resolution, the Shareholders' General Meeting on 15 May 2013 gave the Board discretion, for the period laid down by law, to make use, within the statutory provisions, namely in the event that the reciprocity clause in Article L. 233-33 of the French Commercial Code were to apply, of the various powers delegated to it under resolutions 15 to 21 of the General Meeting of 15 May 2013, to issue shares, miscellaneous marketable securities and/ or subscription warrants with or without shareholders' preferential subscription right, "in the event that one or more takeover bids or public exchange offers are made for the securities issued by the Company". The renewal of this authorisation shall be put to the vote at the General Meeting on 14 May 2014. 7.4. SHAREHOLDERS' AGREEMENTS

### 7.4. SHAREHOLDERS' AGREEMENTS

Pursuant to a shareholders' agreement signed on 16 March 2012, which entered into force on 16 May 2012 and will expire on 31 December 2016, subject of the AMF decision and notification No. 212C0647, the Company, as of 16 May 2012, is under the majority control of a declared concert party of shareholders comprised of:

- a concert sub-group comprised of SORAME and CEIR, companies controlled by the Duval family, pursuant to a simultaneous shareholders' agreement of 19 July 1999, that came into effect on 21 July 1999, and was amended by a rider on 13 July 2009;
- Bpifrance Participations (formerly FSI), via its subsidiary, FSI Equation.

In a rider dated 21 March 2013, the parties to the shareholders' agreement agreed that as from the 2013 General Shareholders' Meeting, the Board of Directors shall comprise five directors proposed by SORAME/CEIR, three directors proposed by Bpifrance Participations, five directors who must be individuals, of which three are proposed by the SORAME-CEIR concert sub-group and two are proposed by Bpifrance Participations on the grounds of their competence and their independence, two directors proposed by SORAME/CEIR and Bpifrance Participations, and one director to chair the ERAMET Board of Directors.

The provisions of the aforementioned shareholders' agreement and those of the concert sub-group are contained in the main extracts of the texts of the AMF decision and notification No.212C0486 and No.209C1013 (amendment of 13 July 2009) given below (the full version of these texts is available on the AMF website).

#### 7.4.1. Decision and notification No.212C0486 of 12 April 2012 \_\_\_\_

The main clauses of the shareholders' agreement are as follows: Composition of the ERAMET Board of Directors

The Board of Directors shall comprise five directors proposed by SORAME/CEIR, three directors proposed by FSI, four directors who must be individuals, of which two are proposed by the SORAME-CEIR concert sub-group and two are proposed by FSI on the grounds of their competence and their independence, two directors proposed by Société Territoriale Calédonienne de Participation Industrielle (hereinafter "STCPI"), and one director to chair the ERAMET Board of Directors. This composition shall be maintained except in the event of (i) a change by more than 10% in ERAMET's share capital or in the interests held at the time of the signing of the shareholders' agreement, either by SORAME and CEIR, or by FSI, or (ii) a material change in the capital interest held by STCPI in ERAMET, resulting in a reduction to under 635,372 ERAMET shares.

#### Chairmanship, Board of Directors committees

The parties (namely SORAME, CEIR and FSI) intend to consult each other before the appointment of a Chairman of the Board of Directors, a Chief Executive Officer, or a Deputy CEO, or the appointment of the Division managers of each of the ERAMET group's three business Divisions. The membership and workings of the Board of Directors' committees are also set out, namely the selection committee, the remuneration committee and the audit committee. If the consultation were to be unsuccessful, the rules of ordinary law shall apply.

#### **Concert stability**

#### Covenant to consult

The parties undertake to consult each other prior to the Board of Directors' meeting and the ERAMET General Shareholders' Meeting, to ensure the concordant exercise of their voting rights and to implement a joint policy with respect to the Company, and lays down that if it fails to reach an agreement on any matter brought before the Board of Directors, it shall ensure that its decision is deferred to the very next meeting <sup>(1)</sup>.

#### Commitment to hold

SORAME and CEIR undertake to hold, at least 70% for the former and up to 30% for the latter, of the overall interest in ERAMET, and so long as FSI does not increase its overall interest in ERAMET, to hold 2% more of ERAMET's capital than FSI, so that the overall concert party holds 51% of voting rights in ERAMET, provided that FSI's stake in ERAMET remains equal to 25.68% of the capital. The SORAME-CEIR concert sub-group however remains free to transfer at least 80% of its interest in ERAMET, and its commitment to hold shall lapse if FSI were to exercise its option to purchase ERAMET shares from SORAME.

#### Obligations in the event of a public bid or offer

Each party undertakes to file the reports or perform the obligations required of it within the prescribed period, to solely bear any sanctions arising from the failure to do so, and to file and singly undertake the public bid or offer that would have become mandatory owing to its acquisition, if any, of ERAMET shares, or any of its actions, or the failure to fulfil any of its obligations.

(1) It is stated that, in this event, the parties are not required to reach an agreement and can exercise their voting rights freely, and notably that the parties have not laid down any power of veto.

#### ERAMET stock options granted by SORAME and CEIR

SORAME grants FSI a stock purchase option on its ERAMET shares which shall be indivisible, exercisable in the event of a transfer of shares or of one or more general partner shares or any transaction involving SORAME that would result in the Duval family's losing its control over SORAME. CEIR grants FSI a stock purchase option of all of its ERAMET shares which will be indivisible, and FSI grants CEIR a stock sale option of all of its ERAMET shares, which shall be indivisible. These two options can be exercised in the event that FSI exercises its purchase option on the ERAMET shares held by SORAME.

#### Reciprocal pre-emptive right

The parties agree to a reciprocal right of first refusal, (i) in the event of a firm intention to sell a specified number of ERAMET shares on the market to unidentified third parties, piecemeal or by accelerated bookbuilding (ABB) or through a fully marketed offering (FMO); (ii) in the event of a proposed sale of one or more blocks of ERAMET shares to one or more identified third parties, by matched bids or off-market; and in the event of an intended contribution as capital of all or part of its interest in ERAMET, in consideration for shares in the transferee company.

The right of first refusal does not apply to:

- transfers under the agreement: for SORAME and CEIR as long as they comply with their commitment to hold, and for FSI provided that it retains 20% of ERAMET capital;
- transfers to one or more identified third parties or for an intended contribution as capital: for SORAME and CEIR, as long as they comply with their commitment to hold, and that no block of shares representing over 5% of the capital is transferred to any one investor group, and for FSI, provided that it retains 20% of ERAMET capital and that no block of shares representing over 5% of the capital is transferred to any one investor group.

The notification requirements and rights of refusal generally do not apply to (i) transfer without charge to natural persons, *mortis causae* or *inter vivos;* (ii) transfers within the SORAME-CEIR concert sub-group, subject to the former's holding at least 70% and the latter's holding not more than 30% of their overall interest in ERAMET; (iii) in the event of a merger between SORAME and CEIR, if SORAME is the acquiring company and remains under the Duval family's control; and (iv) in the event of transfer of its ERAMET shares by FSI to one of its subsidiaries, or by way of a capital contribution in one of its subsidiaries, provided that the transferee enters the shareholders' agreement and takes over FSI's rights and duties resulting from the transfer.

#### Term

The shareholders' agreement shall enter into force when the transfer by AREVA to FSI of its interest in ERAMET takes effect. It is entered into for a fixed term expiring on 31 December 2016, and may be extended thereafter by tacit renewal for one year periods, unless terminated by means of a notice served by any party to the other no less than one month before the expiration of the current period. The agreement shall cease immediately and as of right in the event of (i) a change of predominance within the overall concert party owing to acquisitions or share subscriptions

by FSI; (ii) the disposal or contribution or transfer by any of the parties of over 80% of its interest in ERAMET; or (iii) FSI's direct or indirect interest in ERAMET capital falls below 15%.

SORAME and CEIR therefore decided to sign the amendment No.2 on 16 March 2012 to the term clause of the shareholders' agreement signed on 17 June 1999 and amended earlier by amendment No.1 on 13 July 2009.

It is noteworthy that SORAME and CEIR have given a commitment to FSI to convert the required number of ERAMET shares into bearer shares so that the SORAME-CEIR concert sub-group's current interest is not accretive by more than 2% owing to the loss of double voting rights attached to the ERAMET shares transferred to FSI. Once the ERAMET shares have been transferred, SORAME, CEIR and FSI shall request ERAMET to re-enter all of their ERAMET shares as registered shares in order to recover their double voting rights two years later.

#### 7.4.2. Decision and notification No.209C1013 of 21 July 2009 \_\_\_\_

Under cover of a letter dated 16 July 2009, the AMF (French Financial Markets Authority) was sent a shareholders' agreement entitled "Amendment No.1 to the agreement of 19 July 1999 among the shareholders in ERAMET between SORAME and CEIR", concluded on 13 July 2009 between SORAME being a partnership limited by shares and the simplified joint-stock corporation, CEIR.

A/ It is hereby recalled that on 19 July 1999, SORAME and CEIR (being companies controlled by the Duval family) concluded a shareholders' agreement instituting a concert party between them for a term of 10 years as from 21 July 1999.

This shareholders' agreement provided notably for the following:

- the non-transferability of their ERAMET shares for five years, except within a maximum 1.5% of ERAMET's share capital for each of them;
- full freedom for them to transfer their ERAMET shares among themselves provided SORAME continues to hold not less than 70% of the ERAMET shares held by their concert party, and CEIR continues to hold a maximum of 30%, with the undertaking to maintain this distribution among them in the event that their interests increase;
- reciprocal rights of pre-emption over their ERAMET shares;
- an undertaking to consult before any Shareholders' General Meeting, to ensure concordant exercise of their voting rights for the implementation of a common policy as regards ERAMET.

#### (...)

C/ On 13 July 2009, SORAME and CEIR signed an amendment to the shareholders' agreement of 19 July 1999 described in point A above, extending their concert agreement until 21 July 2014 with various amendments, accordingly substituting as from 13 July 2009 a redrafted version for the earlier version of their shareholders' agreement of 19 July 1999.

#### **CORPORATE AND SHARE-CAPITAL INFORMATION**

7.4. SHAREHOLDERS' AGREEMENTS

The following are the main terms of the amendment concluded between SORAME and CEIR:

stability of the SORAME-CEIR concert party: except in the event of a disposal of not less than 80% of the interest of their concert party in ERAMET, and for as long as AREVA does not increase its interest in ERAMET by more than 2%, the parties undertake to maintain the number of shares and voting rights in ERAMET required for the concert sub-group to remain predominant in the overall concert party;

transfer of ERAMET shares between SORAME and CEIR: the parties may freely transfer ERAMET shares among themselves, provided SORAME continues to hold not less than 70% of the ERAMET shares held by the concert sub-group and CEIR continues to hold a maximum of 30%;

 increase of SORAME and CEIR shareholdings in ERAMET: the parties may freely increase their interest in ERAMET, provided they do not increase the interest by more than 2% of the capital or voting rights within less than twelve months;  an undertaking to consult before any Shareholders' General Meeting, to ensure concordant exercise of their voting rights for the implementation of a common policy as regards ERAMET.

This agreement supersedes the shareholders' agreement signed on 19 July 1999. It is concluded for a term expiring on 21 July 2014, renewable thereafter by tacit extension for successive two-year periods, unless terminated by either party serving notice one month before the expiration of the current period.

It shall cease, as shall the concert party between the parties, in the event that either party disposes of more than 80% of its interest in ERAMET.

The distribution of the directors on the Board of Directors and on the committees is further detailed in Chapter 4 of this document, entitled Corporate Governance.

#### 7.4.3. Commitment to hold \_

	Dutreil 2012 agreement
Taxation	Article 787-B of the General Tax Code
Signature date	18/04/2012
Joint covenant term	2 years from 18 April 2012
Contractual term of the agreement	2 years from 18 April 2012
Renewal terms	Signature of a new agreement
Percentage of capital referred to by the agreement on the agreement signature date	9,665,917 shares
Percentage of voting rights referred to by the agreement on the agreement signature date	36.46% of voting rights
Names of signatories who are senior managers	SORAME, CEIR, Georges Duval, Édouard Duval, Cyrille Duval, Patrick Duval
Names of signatories who hold at least 5% of the capital and/or voting rights of the Company	SORAME, CEIR

To the best of ERAMET's knowledge, there are no other shareholders' agreements.

## GENERAL SHAREHOLDERS' MEETING – WORDING OF DRAFT RESOLUTIONS

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### **8.1.** EXPLANATORY NOTE

We have set out below, for your attention, an explanatory note regarding the resolutions proposed for voting at your General Meeting.

The **1**<sup>st</sup> **and 2**<sup>nd</sup> **resolutions** concern the approval of the individual and consolidated financial statements. The financial statements are set out in detail in the documents submitted to shareholders and are also commented on in the management report.

In the **3**<sup>rd</sup> **resolution**, 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. This report provides an account of related-party agreements previously authorised by a General Shareholders' Meeting which were ongoing in 2013. Having already received approval from a General Shareholders' Meeting, those agreements will not be submitted to a vote at this Meeting.

The purpose of the 4<sup>th</sup> **resolution** is to propose that the losses for the 2013 financial year be carried forward to retained earnings.

The **5**<sup>th</sup> **resolution**, pursuant to 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, pursuant to legal and regulatory conditions, allowing the repurchase of shares, by any means, including during a public offer period. The maximum amount of the share buyback is 10% of the share capital and the maximum purchase price is €500 per share. What is at issue here is the annual renewal of that authorisation. The purpose of this authorisation is to allow the existing liquidity contract to continue and to implement bonus share awards to employees through the allocation of existing shares.

Pursuant to recommendation 24.3 of the Afep/Medef code dated June 2013 which, in accordance with article L. 225-37 of the French Commercial Code is the code of reference applicable to the Company, remuneration items falling due or granted to each Executive Corporate Officer of the Company for the financial year ended are subject to shareholder approval:

- the fixed portion;
- the annual variable portion and, as the case may be, the multi-year variable portion, with the targets used to determine that variable portion;
- exceptional remuneration items;
- stock options, performance shares and any other long-term remuneration item;
- compensation related to taking up or leaving a post;
- the Supplementary Pension Plan; and
- benefits of any kind.

Shareholders are asked to approve the remuneration items falling due or granted to each Executive Corporate Officer, for the financial

year ended 31 December 2013, by voting on the  $6^{\rm th}, 7^{\rm th}, 8^{\rm th}$  and  $9^{\rm th}$  resolutions.

Consequently, in the **6**<sup>th</sup> **resolution** you are asked to approve the remuneration items falling due or granted in the past financial year to Patrick Buffet, Chairman and CEO.

Furthermore, in the  $7^{\text{th}}$  resolution you are asked to approve the remuneration items falling due or granted in the past financial year to Georges Duval, Deputy CEO.

In the 8<sup>th</sup> **resolution** you are asked to approve the remuneration items falling due or granted in the past financial year to Bertrand Madelin, Deputy CEO.

Finally, in the **9**<sup>th</sup> **resolution** you are asked to approve the remuneration items falling due or granted in the past financial year to Philippe Vecten, Deputy CEO.

In the 10<sup>th</sup> resolution, it is proposed that the capital increase authorisations specified in the 15<sup>th</sup> to 21<sup>st</sup> resolutions approved by the General Shareholders' Meeting of 15 May 2013, namely, the authorisations to increase share capital by the incorporation of reserves (15<sup>th</sup>), with preferential subscription rights (16<sup>th</sup>), with no preferential subscription rights by a public offer (17th) or by a private placement (18th), by subsidiaries (19th) or as consideration for capital contributions in kind (20th), up to a par value limit of €24 million for resolutions 16 to 20 (that is, slightly less than one third of share capital), may be used during a public offer for purchase or share swap in the event that the reciprocity clause provided by law is applicable (article L. 233-33 of the French Commercial Code when the Company is the subject of a public offer undertaken by entities of which at least one does not apply the provisions related to approval or confirmation by a General Shareholders' Meeting of defence measures during an offer period and the suspension of authorities granted prior to the start of the offer period). Scope for such use of those authorisations is limited to eighteen months, and accordingly, it is proposed to renew authorisation of that use until the General Shareholders' Meeting called to approve the financial statements for the year ending 31 December 2014.

In the **11**<sup>th</sup> **resolution**, you are asked to approve the amendment of Article 10 of the Articles of Association, regarding the composition of the Board of Directors, in order to establish the procedure for appointing Directors representing employees, in accordance with the law of 14 June 2013 related to job security. The amended article would stipulate that the first Director representing employees be appointed by the Company Works Council, operating at national level, and the second would be appointed by the European Works Council, operating at European level. Upon consultation, as prescribed by law, the Company Works Council issued a favourable opinion, on 12 February 2014, concerning the proposed appointment procedures. 8.2. WORDING OF DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE ORDINARY GENERAL SHAREHOLDERS' MEETING

As the Company satisfies the criteria established by law, its Board of Directors comprising 17 members, two Directors representing employees will be appointed and should take up their duties within six months, at most, following the date of this General Shareholders' Meeting.

In the **12**<sup>th</sup> **resolution**, you are asked to approve the amendment to Article 18 of the Articles of Association removing the option currently offered to the Board of Directors to appoint Observers. The terms of office of the two Observers currently in office will continue to run until their expiry.

Since 2000, drawing on the option provided for in Article 18 of the Articles of Association, the Board of Directors has resolved to provide two Observer posts on the Board and to appoint Group employees to that role, in addition to Works Council representatives who also attend Board meetings. In practice, the two Observers are appointed at the recommendation of the European Works Council; if an Observer quits his/her membership of the Council, the Board will end his/her term of office as an Observer forthwith. In view of the new provisions of the law of 14 June 2013 which stipulate the appointment of Directors representing employees, the appointment of Observers no longer appears necessary. You are therefore asked to approve the removal of the Works Council's option to appoint Observers in future.

The **13<sup>th</sup> resolution** authorises fulfilment of the formalities involved in implementing the other resolutions passed by combined Ordinary and Extraordinary General Shareholders' Meeting.

### 8.2. WORDING OF DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE ORDINARY GENERAL SHAREHOLDERS' MEETING

#### **First resolution**.

#### (2013 Annual Financial Statements)

Having heard the Report from the Board of Directors and the Report from the Statutory Auditors on the financial statements for the year ended 31 December 2013, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves the financial statements for said financial year as presented to it and the transactions reflected in those financial statements or summarised in those reports.

#### Second resolution.

#### (2013 Consolidated Financial Statements)

Having heard the Report from the Board of Directors and the Report from the Statutory Auditors on the consolidated financial statements for the year ended 31 December 2013, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves the consolidated financial statements as presented to it and the transactions reflected in those financial statements or summarised in those reports.

#### Third resolution.

#### (Related-party Agreements)

Having heard the special report of the Statutory Auditors on the agreements covered by Articles L. 225-38 *et seq.* of the French Commercial Code and commenting on the absence of new agreements of the kind referred to in articles L. 225-38 *et seq.* of the French Commercial Code, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves that report and the agreements referred to therein.

#### **Fourth resolution**

#### (Allocation of earnings)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, resolves to allocate the losses for the past financial year, amounting to  $\in$ 133,005,970.87, to retained earnings, thus reducing the amount of that account from  $\in$ 1,028,965,856.21 <sup>(1)</sup> to  $\in$ 895,959,885.34.

The General Shareholders' Meeting, acting as an Ordinary General 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:

	2010	2011	2012	2013
Number of shares subject to dividends	26,513,466	26,519,116	26,543,218	26,543,218
Dividend	€3.50	€2.25	€1.30	€0

(1) The retained earnings include €408,331.30 corresponding to the amount of the dividend voted by not paid, in respect of ERAMET's treasury shares on the date of payment of the dividend in 2013.

8.2. WORDING OF DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE ORDINARY GENERAL SHAREHOLDERS' MEETING

#### **Fifth resolution** -

#### (Authorisation to trade in the Company's shares)

Having familiarised itself with the report from the Board of Directors and the description of the Company's share buyback programme, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings and making use of the powers provided by 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 contract with a market maker, in accordance with the AMAFI code of conduct recognised by the AMF;
- retain or contribute them (by way of a swap, against payment, or otherwise) in connection with acquisition transactions;
- provide shares upon the exercise of rights attached to marketable securities granting access to the share capital by redemption, conversion, stock swap or by any other manner;
- implement any purchase options plan concerning the Company's shares within the terms 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 and following of the French Labour Code;
- cancel those shares, in accordance with the 24<sup>th</sup> resolution of the General Shareholders' Meeting of 15 May 2013, authorising a reduction of the Company's share capital for a period of 26 months.

Such shares may be purchased, sold, transferred or swapped, by any means, in the market or over the counter, including, where appropriate, by means of derivatives and the whole of the authorised share buyback programme may be acquired or transferred in the form of share blocks.

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 €500 per share.

This authorisation will expire at the General Shareholders' Meeting called to approve the 2014 financial statements.

Based on the number of shares comprising the Company's share capital at **31 December 2013**, assuming a price of  $\notin$ 500 per share, the maximum theoretical investment would amount to  $\notin$ 1,327,160,500.

The Board of Directors is granted full powers for the purposes of implementing this resolution, which it may sub-delegate, in order to:

- place all stock market orders, enter into all agreements, particularly with regard to the keeping of share purchase and sale records;
- lodge all filings with the AMF;
- assign or reassign the acquired shares to various objectives in line with the applicable legal or regulatory provisions;
- complete all formalities and, in general, do whatever may be necessary.

#### Sixth resolution \_

#### (Approval of remuneration items falling due or granted to Patrick Buffet, Chairman and CEO, for the financial year ended 31 December 2013)

Adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, the General Shareholders' Meeting, consulted pursuant to recommendation 24.3 of the June 2013 Afep-Medef Code which, in accordance with article L. 225-37 of the French Commercial Code, is the code of reference applicable to the Company, approves the remuneration items falling due or granted for the financial year ended 31 December 2013 to Patrick Buffet, Chairman and CEO, as set out in the 2013 registration document in Section 4 "Corporate Governance", under the paragraph heading "Remuneration of corporate officers", on pages 107 to 109 of the French version of this document.

#### Seventh resolution \_\_\_\_

#### (Approval of remuneration items falling due or granted to Georges Duval, Deputy CEO, for the financial year ended 31 December 2013)

Adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, the General Shareholders' Meeting, consulted pursuant to recommendation 24.3 of the June 2013 Afep-Medef Code which, in accordance with article L. 225-37 of the French Commercial Code, is the code of reference applicable to the Company, approves the remuneration items falling due or granted for the financial year ended 31 December 2013 to Georges Duval, Deputy CEO, as set out in the 2013 registration document in Section 4 "Corporate Governance", under the paragraph heading "Remuneration of corporate officers", on pages 110 to 112 of the French version of this document.

8.3. WORDING OF THE DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE EXTRAORDINARY GENERAL SHAREHOLDERS' MEETING

#### **Eighth resolution**

#### (Approval of remuneration items falling due or granted to Bertrand Madelin, Deputy CEO, for the financial year ended 31 December 2013)

Adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, the General Shareholders' Meeting, consulted pursuant to recommendation 24.3 of the June 2013 Afep-Medef Code which, in accordance with article L. 225-37 of the French Commercial Code, is the code of reference applicable to the Company, approves the remuneration items falling due or granted for the financial year ended 31 December 2013 to Bertrand Madelin, Deputy CEO, as set out in the 2013 registration document in Section 4 "Corporate Governance", under the paragraph heading "Remuneration of corporate officers", on pages 113 to 115 of the French version of this document.

#### Ninth resolution \_

#### (Approval of remuneration items falling due or granted to Philippe Vecten, Deputy CEO, for the financial year ended 31 December 2013)

Adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, the General Shareholders' Meeting, consulted pursuant to recommendation 24.3 of the June 2013 Afep-Medef Code which, in accordance with article L. 225-37 of the French Commercial Code, is the code of reference applicable to the Company, approves the remuneration items falling due or granted for the financial year ended 31 December 2013 to Philippe Vecten, Deputy CEO, as set out in the 2013 registration document in Section 4 "Corporate Governance", under the paragraph heading "Remuneration of corporate officers", on pages 116 to 118 of the French version of this document.

### 8.3. WORDING OF THE DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE EXTRAORDINARY GENERAL SHAREHOLDERS' MEETING

#### **Tenth resolution** .

### (Entitlement to use authorisations during public offer periods)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, expressly authorises the Board of Directors to make full or partial use, pursuant to legal provisions, of the various authorisations granted under resolutions 15 to 21 of the General Shareholders' Meeting of 15 May 2013, in the event that one or more public offers, including those involving stock swaps, were to be made with regard to securities issued by the Company.

This authorisation will expire at the General Shareholders' Meeting called to approve the 2014 financial statements.

#### **Eleventh** resolution \_

#### (Amendment of Article 10 of the Articles of Association)

Having noted the report from the Board of Directors and the favourable opinion of the Company Works Council, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Extraordinary General Shareholders' Meetings, resolves to add a new paragraph to Article 10 of the Articles of Association concerning the Board of Directors, paragraph 10.9, which contains the text set out here below.

"In addition to the Directors, whose number and method of appointment are stipulated in articles L. 225-17 and L. 225-18 of the French Commercial Code, when the Company satisfies the criteria established under paragraph I of article L. 225-27-1 of the French Commercial Code, the Board of Directors shall include, in accordance with article L. 225-27-1 of the French Commercial Code, Directors representing employees.

The number of Directors representing employees shall be 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 when the latter is equal to or less than twelve there shall be one Director representing employees.

Directors representing employees shall be appointed according to the following procedures:

- a) when two Directors are to be appointed, one of the Directors is appointed by the Company Works Council as stipulated in articles L. 2327-1 et seq. of the French Labour Code, and the other Director is appointed by the European Works Council;
- b) when a single Director representing employees is to be appointed, he/she shall be designated by the Company Works Council as stipulated in articles L. 2327-1 et seq. of the French Labour Code.

If the number of Directors referred to in articles L. 225-17 and L. 225-18 of the French Commercial Code, having been equal to or less than twelve should increase in number above twelve, the Chairman of the Board of Directors shall refer to the European Works Council, in a timely manner, so that it may proceed to appoint a second Director representing employees.

If the number of Directors referred to in articles L. 225-17 and L. 225-18 of the French Commercial Code, having been greater than twelve should fall in number to twelve or less, the Directorship of the Director representing employees appointed by the European Works Council shall continue to conclusion of the term of office, but shall not be renewed if the number of Directors remains twelve or fewer on the date of reappointment.

#### **GENERAL SHAREHOLDERS' MEETING – WORDING OF DRAFT RESOLUTIONS**

8.3. WORDING OF THE DRAFT RESOLUTIONS – WITHIN THE REMIT OF THE EXTRAORDINARY GENERAL SHAREHOLDERS' MEETING

Article 10.7 of these Articles of Association is not applicable to Directors representing employees. The Directors representing employees are not taken into account to determine the maximum number of Directors stipulated in Article 10.1 of these Articles of Association.

The term of office of Directors representing employees is four years counting from the date of their appointment. Newly appointed Directors representing employees take up their duties upon expiry of the term of office of the outgoing Director(s) representing employees.

The term of office of Directors representing employees shall automatically come to an end if their contract of employment with the Company, or with one of its direct or indirect subsidiaries, is breached or if the term of office is cancelled pursuant to article L. 225-32 of the French Commercial Code or in the event of legal incompatibility as stipulated in article L. 225-30 of the French Commercial Code.

In the event that a Directorship pertaining to a Director representing employees should fall vacant, for any reason whatsoever (particularly in the event of death, resignation, its cancellation or a breach of the employment contract), the vacant Directorship shall be filled following the appointment procedures set out in the third paragraph of this article 10.9. The term of office of a Director appointed in this way shall end upon conclusion of the regular term of office applicable to his predecessor. The Board of Directors may meet and deliberate, with full effect, while and until the Director representing employees is replaced.

The provisions of this paragraph 10.9 shall cease to apply if, at the end of a financial year, the Company no longer satisfies the requisite conditions for the appointment of Directors representing employees, while it is specified that the Directorship of all Directors representing employees appointed pursuant to this Article 10.9 shall expire upon conclusion of the term of office."

The rest of Article 10 remains unchanged.

#### Twelfth resolution \_\_\_\_

#### (Amendment of Article 18 of the Articles of Association)

Having noted the report from the Board of Directors, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Extraordinary General Shareholders' Meetings, resolves to amend Article 18 of the Articles of Association, with the following text:

#### Current version New version Article 18 – Panel of Observers Article 18 – Panel of Observers The Board of Directors may appoint up to four Observers. As from 14 May 2014, the Board of Directors may no longer The Observers may be selected from amongst the Company's appoint Observers. employees. The terms of office of the two Observers in that post at the

They are appointed for a period concluding at the Board of Directors meeting date closest to the fourth anniversary of their appointment, unless their resignation or early termination of their term of office is pronounced by the Board of Directors.

#### They may be reappointed.

In the event that one or more Observer posts should fall vacant as a result of death or resignation, the Board of Directors may proceed to appoint a replacement/replacements for the remaining term of office of the post holder(s).

The Observers are invited to attend meetings of the Board of Directors and take part in deliberations in an advisory capacity, although their absence from Board meetings does not affect the validity of these deliberations.

present time shall continue for the remaining term, unless their resignation or early termination of their term of office is pronounced by the Board of Directors.

The Observers are invited to attend meetings of the Board of Directors and take part in deliberations in an advisory capacity, although their absence from Board meetings does not affect the validity of these deliberations.

### Thirteenth 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.

## ADDITIONAL INFORMATION

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### 9.1. PERSONS RESPONSIBLE FOR THE REGISTRATION DOCUMENT

#### 9.1.1. Name and positions of persons responsible \_\_\_\_\_

Patrick Buffet Chairman and CEO of ERAMET. Jean-Didier Dujardin Chief Financial Officer.

#### 9.1.2. Declaration by the persons responsible for the Registration Document \_

We declare that to the best of our knowledge, and after 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 declare that to our knowledge the financial statements have been prepared in accordance with applicable accounting standards and give a true and fair view of the assets and liabilities, financial position and earnings of the Company and of all the companies within the scope of consolidation, and that the Management Report (as set out in Sections 1 – Group overview, 2 – Activities, 3 – Risk factors, 4 – Corporate Governance, 5 – Sustainable development and 7 – Corporate and share-capital information) presents a true and fair view of the business developments, earnings and financial position of the Company and of all companies within the scope of consolidation as well as a description of the main risks and uncertainties they face.

The Statutory Auditors have provided us with a letter of completion of assignment in which they state that they checked the information relating to the financial position and the financial statements presented in this Registration Document and that they read the document in its entirety.

The 2013 consolidated statements presented in the Registration Document have been subject to a report from the statutory auditors, as outlined on page 260 of this document, which contains comments in Note 4 "2012 Restated Financial Statements" addressing the effects of the amendments to the revised IAS 19 rule (Employee Benefits) implemented as of 1 January 2013. The 2011 and 2012 consolidated statements were not subject to any reservations or observations.

Paris, 26 March 2014

Jean-Didier Dujardin Chief Financial Officer Patrick Buffet Chairman and CEO

### **9.2.** STATUTORY AUDITORS

The Company's individual and consolidated financial statements are audited by the Statutory Auditors listed below:

#### 9.2.1. Incumbent Statutory Auditors \_\_\_\_\_

#### 9.2.1.1. Ernst & Young et Autres

Address: Tour First – 1, place des Saisons 92400 Courbevoie.

Entry No.438 476 943 in the Nanterre Trade and Corporate Register (RCS).

Partner responsible for the audit: Aymeric de la Morandière.

Date of appointment: Shareholders' General Meeting of 13 May 2009.

Term expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

#### 9.2.1.2. Deloitte & Associés

Address: 185, avenue Charles-de-Gaulle, 92254 Neuilly-sur-Seine Cedex.

Entry No.572 028 041 in the Nanterre Trade and Corporate Register (RCS).

Partner responsible for the audit: Alain Penanguer.

Date of appointment: Shareholders' General Meeting of 11 May 2005, for renewal at the Shareholders' General Meeting of 13 May 2009.

Term expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

#### 9.2.2. Alternate Statutory Auditors \_\_\_\_\_

#### 9.2.2.1. Auditex

Address: Tour First - 1, place des Saisons 92400 Courbevoie.

Entry No.377 652 938 in the Nanterre Trade and Corporate Register (RCS).

Date of appointment: Shareholders' General Meeting of 13 May 2009.

Term expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

#### 9.2.2.2. Cabinet BEAS (Bureau d'Études Administratives Sociales et Comptables)

Address: 7/9, villa-Houssay - 92524 Neuilly-sur-Seine Cedex.

Entry No.315 172 445 in the Nanterre Trade and Corporate Register (RCS).

Date of appointment: Shareholders' General Meeting of 11 May 2005, for renewal at the Shareholders' General Meeting of 13 May 2009.

Term expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

### **9.3.** FINANCIAL INFORMATION

#### 9.3.1. Name of the person responsible for information release \_

Person responsible:	Philippe Joly
Position:	Group Director of Financial Communication and Economic Studies
Address:	ERAMET
	Tour Maine-Montparnasse
	33, avenue du Maine
	75755 Paris Cedex 15
	Telephone: 33 (0) 1 45 38 42 02

## 9.3.2. Terms and timetabling of information release \_

Frequency: in line with regulations, ERAMET publishes its halfyearly and annual results and releases its quarterly sales.

Distribution: in addition to 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.fr – Investors section), and released in accordance with the AMF regulations.

The Articles of Association, Meeting minutes, separate and consolidated financial statements, reports of the Statutory Auditors and all documents made available to shareholders can be consulted at the Company's registered office.

All data indicated in this document for which no source is specifically indicated are from the Company's internal reporting and data.

All copies of documents included in this Registration Document may be viewed on ERAMET's Website (http://www.eramet.fr) or consulted on request to the Company's Director of Legal Affairs at its registered office: Tour Maine Montparnasse – 33, avenue du Maine, 75015 Paris.

#### 2014 Calendar

Publication of the 2013 annual sales and results:	Friday, 21 February 2014	(before trading)
Publication of first-quarter sales:	Tuesday, 29 April 2014	(before trading)
Shareholders' General Meeting:	Wednesday, 14 May 2014	
Publication of first half-year sales and results:	Tuesday, 29 July 2014	(before trading)
Publication of third-quarter sales:	Wednesday, 29 October 2014	(before trading)

information.

## 9.3.3. List of financial-information releases including press releases

21 February 2014: 2013 annual results.

5 November 2013: €400 million 7-year bond issue.

21 October 2013: 2013 3rd-quarter sales.

1 August 2013: Publication of half-yearly financial report for 2013.

29 July 2013: Results for 1<sup>st</sup> half-year 2013.

15 May 2013: General Shareholders' Meeting on 15 May 2013.

**7 May 2013:** Judgment from the Administrative Court of Appeal of Lyon, 7 May 2013, regarding establishing the Ancizes.

#### Publications in the BALO compulsory legal notices bulletin

29 March 2013: Publication of 2012 Registration Document.
21 March 2013: Two new Board members proposed at the 2013
Shareholders' General Meeting.

30 April 2013: 2013 1st-quarter sales.

**19 March 2013:** Judgment from the Court of Appeal of Paris, 19 March 2013.

24 April 2013: Publication of 2013 Shareholders' General Meeting

22 February 2013: 2012 annual results.

Announcement of the Shareholders' General Meeting:	29 March 2013
Notice calling the Shareholders' General Meeting:	26 April 2013
Notice of approval of financial statements without amendment:	27 May 2013

9.4. LIST OF REPORTS

### 9.4. LIST OF REPORTS

#### Financial year ended on 31 December 2013

#### Internal reports

	Section
Report by the Chairman of the ERAMET Board of Directors – Financial Year 2013	4.1

#### **External reports**

	Section
Statutory Auditors' Report on the 2013 consolidated financial statements	6.1.3
Statutory Auditors' Report on the 2013 annual financial statements	6.2.4
Statutory Auditors' Special Report on related-party agreements and regulated commitments in 2013	6.2.5
Statutory Auditors' Report drawn up pursuant to Article L 225-235 of the French Commercial Code on the report of the Chairman of the ERAMET Board of Directors – 2013 Financial Year	4.2
Statutory Auditors' Report on the resolutions submitted to the Shareholders' General Meeting	None

# 9.5. TABLE OF CORRESPONDENCE 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.	Annual financial report information	Registration document
1	Senior managers' declaration attesting to the truthfulness and accuracy of information	Section 9.1
2	Consolidated financial statements	Section 6.1
3	Report by the Statutory Auditors on the consolidated financial statements – Financial year ended 31 December 2013	Section 6.1.3
4	Separate parent-company financial statements – Financial Year ended 31 December 2013	Section 6.2
5	Statutory Auditors' Report on the annual financial statements – Financial year ended 31 December 2013	Sections 6.2.4 and 6.2.5
6	Management report:	
	Business activities	<ul> <li>Sections 1 and 2</li> </ul>
	Financial commentary	Section 1
	Research and Development	Section 2
	Organisation chart	Section 2
	Information on workforce and management remuneration	Sections 4 & 5
	Environmental information	Section 5
	Table of delegations of powers to increase share capital	Section 7
	Factors likely to influence a public offer	Section 7
	Share buybacks	Section 7
7	Fees paid to the Statutory Auditors	Section 6.1
8	Report by the Chairman of the ERAMET Board of Directors – Report of the Statutory Auditors drawn up pursuant to Article L 225-235 of the French Commercial Code on the report of the Chairman of the ERAMET Board of Directors	Section 4

### 9.6. TABLE OF CONCORDANCE WITH EUROPEAN REGULATION 809-2004

The following correspondence table identifies the main sections required under European Regulation No.809-2004, implementing the "Prospectus" directive.

Section	Information	Registration document
1	Persons responsible	9.1
1.1	Persons responsible	9.1
1.2	Declaration by the persons responsible	9.1
2	Statutory auditors	9.2
2.1	Information on the statutory auditors	9.2
2.2	Changes	not applicable
3	Selected financial information	1
3.1	Selected financial information	1
3.2	Interim periods	not applicable
4	Risk factors	3
5	Information concerning the issuer	
5.1	History and development of the Company	1.3
5.2	Capital expenditure	1.2.4
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 structure	
7.1	Group	2.1
7.2	Major subsidiaries	2.1
8	Real property, production sites, plant and equipment	
8.1	Property, plant and equipment	2.7
8.2	Environmental aspects of such plant and equipment	5.4
9	Examination of financial position and earnings	
9.1	Financial position	1.2
9.2	Operating profit	1.2
10	Cash, cash equivalents and capital	
10.1	Capital	1.2
10.2	Cash flows	1.2
10.3	Financing structure	1.2
10.4	Any restrictions on the use of capital	1.2
10.5	Sources of financing	1.2
11	Research and development – Patents and licences	2.8

#### **ADDITIONAL INFORMATION**

9.6. TABLE OF CONCORDANCE WITH EUROPEAN REGULATION 809-2004

Section	Information	Registration document
12	Information on trends	
12.1	Trends	1
12.2	Any likely influence	1
13	Profit forecasts or estimates	
13.1	Assumptions	not applicable
13.2	Report	not applicable
13.3	Comparison	not applicable
13.4	Updating	not applicable
14	Administrative, managerial and supervisory bodies, and General Management	
14.1	Information on members	2
14.2	Conflicts of interest	2
15	Remuneration and benefits	
15.1	Remuneration	4
15.2	Pensions and other retirement schemes, other benefits	4
16	Functioning of administrative and management bodies	4
16.1	Term of office expiry date	2
16.2	Service contracts	2
16.3	Committees	2
16.4	Corporate governance declaration	2
17	Employees	
17.1	Employee information	5.9
17.2	Profit sharing and options to subscribe shares	5.9
17.3	Employee profit sharing	5.9
18	Principal shareholders	
18.1	Shareholders	7.2
18.2	Voting rights	7.2
18.3	Shareholding and control	7.2
18.4	Control-related agreements	7.4
19	Related-party transactions	6.2
20	Financial information concerning the Issuer's net assets, financial position and results	
20.1	Historic financial information	6
20.2	Pro forma financial information	not applicable
20.3	Financial statements	(
20.4	Checking of historic financial information	
20.5	Date of latest financial information	
20.6	Interim and other financial information	not applicable
20.7	Dividend distribution policy	6.
20.8	Judicial and arbitration proceedings	3 and
20.9	Significant changes in the Issuer's financial or commercial situation	not applicable

#### **ADDITIONAL INFORMATION**

9.6. TABLE OF CONCORDANCE WITH EUROPEAN REGULATION 809-2004

Section	Information	Registration document
21	Additional information	
21.1	Registered capital	7.2
21.1.1	Subscribed capital	7.2
21.1.2	Other non-equity shares	7.2
21.1.3	Treasury shares	7.2
21.1.4	Convertible or exchangeable securities, or securities with subscription warrants	7.2
21.1.5	Acquisition conditions	7.2
21.1.6	Options or agreements	4.5
21.1.7	Record of changes in share capital	Note 16 Consolidated financial statements
21.2	Certificate of incorporation and articles of association	7.3
21.2.1	Corporate object	7.3
21.2.2	Corporate-governance bye-laws	4.2
21.2.3	Rights and privileges attaching to shares	7.2
21.2.4	Changes to the rights of shareholders	7.3
21.2.5	General Meetings	7.3
21.2.6	Change of control	7.3
21.2.7	Significant-shareholding thresholds	7.3
21.2.8	Conditions governing the amendments to the Articles of Association	7.3
22	Significant contracts	3
23	Third-party information, statements by experts and declarations of interest	
23.1	Declarations of interest	not applicable
23.2	Certificate	not applicable
24	Public-access documents	9
25	Information on equity investments	2 and 6

# **9.7.** LABOUR, ENVIRONMENTAL, AND SOCIAL INFORMATION TABLE OF CONCORDANCE

The following correspondence table cross-references the main headings dealing with labour, environmental and social information pursuant to Decree No.2012-557 of 24 April 2012, which modifies Articles L. 225-102-1, R. 225-104 and R. 225-105-1 of the French Commercial Code.

	Sections
Labour Information	
Workforce	
Total workforce (breakdown by gender, age, and geographic area)	5.9.2.1 à 5.9.2.6
New hires	5.9.2.8
Terminations	5.9.2.8
Remuneration and its evolution	5.9.3.5
Work Organisation	
Organisation of working time	5.9.3
Absenteeism	5.9.3
Employee Relations	
Organisation of social dialogue (information, consultation and negotiation procedures with personnel)	5.9.1
Collective bargaining agreements	5.9.4
Health, Safety and Security	
Workplace health and safety conditions	5.8
Agreements signed with trade unions or workforce representatives on workplace health, safety and security	5.8
Work accident frequency and severity and tracking of occupational illnesses	5.8
Training	
Total number of training hours	5.9.5
Training policies implemented	5.9.5
Diversity and equal opportunity (favourable policy implemented and measures taken)	
Gender equality	5.9.4.3
Employment and integration of persons with disabilities	5.9.2.7
Non-discrimination	5.9.4.3
Prevention and compliance with the provisions of key ILO conventions	5.9
Environmental Information	
General environmental policies	
Company organisation and assessment or certification	5.1/5.2
Training and information for employees on environmental protection	5.3.3
Resources allocated to preventing environmental risks and pollution	5.3.3
Amount of reserves and guarantees set aside for environmental risks	6.1 (Note 19.4)
Pollution and waste management	
Prevention, reduction or repair of releases to air, water, and land that seriously impact the environment	5.4.1
Prevention of the production, recycling and disposal of waste	5.4.1
Take account of noise pollution and any other form of pollution specific to an activity	5.4.1

#### **ADDITIONAL INFORMATION**

9.7. LABOUR, ENVIRONMENTAL, AND SOCIAL INFORMATION TABLE OF CONCORDANCE

	Sections
Sustainable use of resources	
Water use and supply, based on local restrictions	5.4.2
Consumption of raw materials and measures taken to improve the efficiency of their use	5.4.2
Energy consumption, measures taken to improve energy efficiency and use of renewable energy	5.4.2
Land use	5.4.4
Adapting to and combating climate global warming	
Greenhouse gas emissions	5.4.3
Adapting to the consequences of climate change	5.4.3
Protecting Biodiversity	
Measures taken to preserve and develop biodiversity	5.4.5
Social Information	
Territorial, economic and social impact of the activity	
Impact of activities on employment and regional development	5.5.7
Impact of activity on neighbouring or local populations	5.5.7
Relationship with stakeholders	
Dialogue conditions with stakeholders	5.5.2
Support, partnership or sponsorship actions	5.5.2
Subcontracting and suppliers	
Inclusion of social and environmental issues in the procurement policy	5.5.3
Importance of subcontracting	5.5.3
Social and environmental responsibility in relationship with suppliers and subcontractors	5.5.3
Fair practices	
Actions taken to prevent all forms of corruption	5.5.3
Measures taken to promote consumer health, safety and security	5.7
Other actions taken to promote human rights	5.9.7