



AT THE CENTRE
OF AN EVOLVING
**INDUSTRIAL
WORLD**

REGISTRATION
DOCUMENT **2011**



ERAMET
ALLOYS, ORES AND PEOPLE.

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ERAMET

Société anonyme
(French public limited company)
with registered capital of €80,883,303.80

Registered office:
Tour Maine-Montparnasse,
33, avenue du Maine, 75015 Paris,
France.

Registration number 632 045 381
in the Paris trade and corporate register.

REGISTRATION DOCUMENT

2011

This document, prepared on the basis of the 2011 financial statements, includes the material information subsequent to the approval of those financial statements as obtaining at the date of its filing.



This Registration Document was filed with the AMF on 29 March 2012, pursuant to Article 212-13 of its General Regulation. It may be used in support of a financial transaction if it is accompanied by a prospectus approved by the AMF. This document was drawn up by the Issuer on the liability of the persons signing it.

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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 employed close to 14,600 people in 2011 in some 20 countries, generated sales of €3,603 million.

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, and the world's leading producer of manganese chemical derivatives.
- 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 largest ferronickel producer, one of the 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 significance on the world market, could ultimately double the Group's nickel production. The final investment decision is expected in 2013 for the first phase (35,000 tonnes).
- The Alloys Division is the world's foremost producer of high-speed steels and the second-largest global producer of closed die-forged parts for aerospace and energy generation.

The Group has major competitive advantages:

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

The Group is implementing a growth strategy designed to strengthen and diversify its present positions:

- widening our world leadership positions in alloys (in present 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 geographical diversification and the diversification of its metals portfolio, in the aim of improving its risk profile and strengthening its financial resilience.

Concerning its development, the Group takes a long-term view. The Group acts responsibly towards its environment, employees and shareholders. It acts according to the principles of its Code of Conduct and its sustainable-development policy.

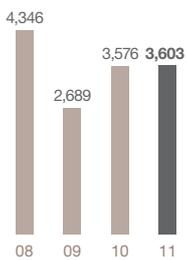
1.2. KEY FIGURES/COMMENTS ON THE FINANCIAL YEAR

1.2.1. Key business figures

1.2.1.1. BUSINESS ITEMS

Sales

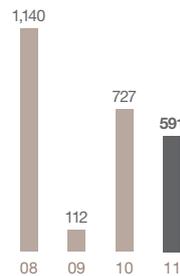
(in millions of euros)



Sales increased 1%.

Net cash generated by operating activities

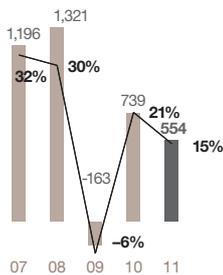
(in millions of euros)



Sizeable financing capacity.

Current operating profit

(in millions of euros)

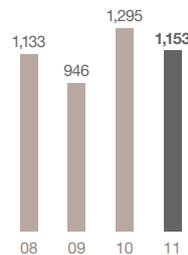


A current operating margin of 15%.

— Current operating margin as % of sales

Consolidated net cash

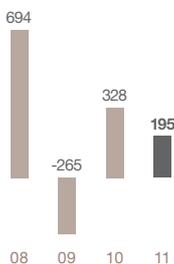
(in millions of euros)



A very sound financial position on which to finance a strategic development policy.

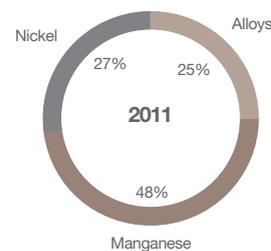
Profit (loss) for period, Group share

(in millions of euros)



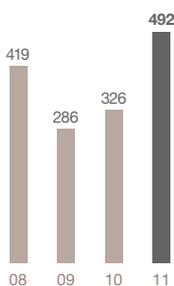
Group share of net profit: €195 million.

Breakdown of sales by business segment in 2011



Capital expenditure

(in millions of euros)



Industrial capital expenditure up 50%.

GROUP OVERVIEW

1.2. KEY FIGURES/COMMENTS ON THE FINANCIAL YEAR

	2011	2010	2009
Sales by Division			
Nickel	989	965	655
Manganese	1,713	1,858	1,289
Alloys	910	764	750
Holding co. and miscellaneous	(9)	(11)	(5)
TOTAL	3,603	3,576	2,689
Sales breakdown by geographic area			
Europe	1,598	1,598	1,270
North America	676	642	466
Asia	1,193	1,201	840
Other regions	136	135	113
TOTAL	3,603	3,576	2,689

1.2.1.2. SUMMARY OF CONSOLIDATED FINANCIAL STATEMENTS

(to IFRS, € million)	2011	2010	2009
Sales	3,603	3,576	2,689
Current operating profit (loss)	554	739	(163)
Operating profit/loss	491	721	(267)
Profit for the year—Group share	195	328	(265)
Net cash flow generated by operating activities	591	727	112
Capital employed ^(*)	2,699	2,554	2,391
Industrial capital expenditure	492	326	286
Average workforce	14,202	14,156	14,465

(*) Excluding the impact of current projects, mainly Weda Bay.

INCOME STATEMENT

Sales

ERAMET Group sales rose slightly in 2011 over 2010, to €3,603 million. This growth is mainly due to the activity of ERAMET Alliages, driven by accelerated demand from the aerospace sectors.

Current operating profit (loss)

Group current operating profit came to €554 million, compared with €739 million in 2010. External factors are mainly to account for this fall: lower manganese prices and the rise in external costs, particularly energy.

Operating profit/loss

At €491 million, this was €220 million down from 2010. This item prominently factors in new-project development costs (€29 million) and €18 million in impairment of assets, particularly in North America.

Profit for the year

Profit (loss) for 2011 was €303 million compared with €454 million in 2010, after the effect of:

- the €22 million positive net borrowing cost resulting from €1.3 billion invested at some 1.86% and average debt of €270 million, also allowing for currency translation differences;
- other financial income and expenses, turning out at a net income of €8 million, mainly consisting of €19 million in gains on the sale of the ERAMET Titan & Iron A/S shares, €11 million in accretion expenses and an expense of €3 million due to the measurement of financial instruments ineligible for hedging;
- a tax charge of €219 million, at an effective rate of 42%, compared with 36% in 2010 and 44% at 30 June 2011. The 2011 rate takes account of €60 million in withholding tax on an additional Comilog dividend payment in 2011 (of €15 million) and on dividend payments planned for 2012 (of €45 million) in accordance with applicable accounting principles.

CONSOLIDATED BALANCE SHEET

The Group Consolidated balance sheet total at 31 December 2011 was €6,301 million compared with €6,103 million at 31 December 2010.

The €198 million increase in this total chiefly results from the following:

- on the assets side: the increase in intangible assets and in property plant & equipment, particularly due to capital expenditure (of €492 million), the increase in inventories (€97 million) and in trade receivables (€22 million), both the latter increases being chiefly due to the business trend and the fall in cash assets (€202 million);
- on the liabilities side: the increase in equity (by €105 million), mainly attributable to the profit and to the strong increase in the liabilities components of Working Capital Requirement (€52 million).

1.2.2. Consolidated net cash position

The Group's net cash position ⁽¹⁾ was €1,153 million at 31 December 2011 compared with €1,295 million at 31 December 2010. This decrease results from the following flows:

- €591 million in net cash flows from operating activities (€727 million in 2010);
- €525 million of net cash outflows from capital expenditure operations, chiefly -€492 million in industrial capital expenditure and €52 million generated from disposals of financial securities (sale of Comilog shares) and -€58 million of financial investments connected with the TiZir operation;
- €187 million of cash outflows from equity capital transactions, of which €186 million paid out in dividends (€92 million to ERAMET shareholders and €94 million to non-controlling shareholders of consolidated companies);
- a negative (€21 million) impact from currency fluctuations.

(1) Net cash comprises cash and cash equivalents and other financial assets less short and long-term borrowings.

BREAKDOWN OF CAPITAL EXPENDITURE BY DIVISION AND MAJOR PROJECT TYPE

Nickel Division

Nickel Division	2008	2009	2010	2011
Investments recognised	€189 million	€107 million	€124 million	€141 million

Modernisation of the Le Nickel-SLN production facilities

The latest capital-expenditure projects planned under the programme to upgrade the production facilities at Doniambo and at the mines were initiated in 2011 and for the most part completed that year.

At Doniambo, the major new developments in 2011 under the modernisation programme which began in 2006 were the reconditioning of the second drier and of an electrical-furnace vault,

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 exhibiting 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 and €492 in 2011.

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 4 and 5 to the consolidated financial statements.

Current capital expenditure is generally funded from own resources.

and the launch of the drive to increase the ore-drying filtration capacity. Several health, safety and environment issues were also addressed, together with several lesser concerns of consolidating production capacity.

At the mines, the renewal of the mobile equipment is progressing, with modernisation of the fixed plant at the SLN sites. The main capital expenditures this year benefited all the mining centres.

● GROUP OVERVIEW

1.2. KEY FIGURES/COMMENTS ON THE FINANCIAL YEAR

At Doniambo, the remaining planned capital expenditures will focus on optimising the production facilities, particularly from the standpoint of energy performance and environmental footprint. Capital expenditure at the mines will maintain production capacity and improve environmental performance.

Study for a new electric power plant for Le Nickel SLN

Preliminary Project studies continued on the construction of a new electrical generating plant at Doniambo, with particular emphasis on the study of the LNG (liquefied natural gas) solution. Towards the close of the year, studies for an alternative coal-fired generating plant were also taken up afresh for an economic comparison of the two scenarios. The final investment decision is expected in 2012.

Manganese Division

Manganese Division	2008	2009	2010	2011
Investments recognised	€145 million	€110 million	€130 million	€245 million

In 2011, the Manganese Division stepped up its capital expenditure, with particular emphasis on strategic projects.

- metallurgy complex at Moanda (Gabon);
- New Guilin plant (China);
- increased capacity (4 Mt) at Comilog (Gabon);
- continued renovation works at Setrag (Gabon).

The Metallurgy Complex project at Moanda

At this stage in the project, most of the plant and equipment have been ordered and the ground preparation works completed. The (civil engineering) construction work began in November 2011.

New Guilin project

The construction of the plant was very actively pursued in 2011. Even so, the project has been slightly delayed and construction will be completed in the first quarter of 2012. The objective is to start production of ferromanganese and silicomanganese and the production of refined alloys at the end of the second quarter in 2012.

Project to increase Comilog capacity

The focus of the increased-capacity investment was on two points:

- the sands beneficiation workshop, which will generate a better return from the Moulili sediment, and will increase the capacity by 100,000 tonnes per year. This workshop is currently being commissioned;

Eurotungstène and Le Havre-Sandouville

At Sandouville and Eurotungstène, several items of expenditure or designed to maintain the production facilities and improve health, safety and working conditions.

Weda Bay project

The Detailed Preliminary Project for the banking feasibility study was carried on throughout the year and is continuing in 2012. Applications for administrative authorisation were made in accordance with Indonesian regulations. Work continued on the environmental impact study. The final investment decision is expected in 2013.

- the purchase of 50 wagons and 6 locomotives, with delivery scheduled in 2012. The acceptance and commissioning of this plant and equipment will mark the completion of the increased-capacity investment programme.

Renovation of the Setrag railway line

The largest portion of the investment, decided-on in 2010, is to acquire 6 new locomotives and a complete train of passenger carriages. The whole of the rolling stock was delivered at end 2011, except for two locomotives which will be delivered in the second quarter of 2012.

Renovation of the track will continue at an annual pace of 30 km of rail and 65,000 sleepers.

Besides the pursuit of these major projects, necessary investment was carried out for maintaining production capacity. Note that no furnace reconditioning was programmed for any alloy production plant in 2011.

In the recycling activity, efforts focus on improving the environmental performance (of SOx) at the Freeport plant (in progress) and the development of plant for processing the Valdi catalysts.

Alloys Division

Alloys Division	2008	2009	2010	2011
Investments recognised	€83 million	€67 million	€69 million	€100 million

In 2011, the Alloys Division completed its programme of strategic investment in its subsidiaries:

Aubert & Duval

- Increasing the vacuum-processing capacity at the Les Ancizes site: plant operation began in October 2011, allowing the start of the manufactured-product qualification phase.
- Forging press at the Issoire site: plant operation began in February 2011.
- UKAD (titanium ingot processing plant): plant operation began in June 2011, allowing the start of the product qualification phase.

Erasteel

- Powder metallurgy production tower at the Söderfors site in Sweden: plant operation began in November 2011, with atomisation tests.

In addition to the strategic investment programme, the Alloys Division has continued to modernise its plant and equipment and increase its capacity at different sites, chiefly in the areas of heat treatment, finishing (machining and testing) to meet increased production requirements, particularly due to growth in the aerospace market.

1.2.5. Recent trends and outlook

1.2.5.1. INFORMATION AT THE DATE OF THE BOARD OF DIRECTORS MEETING ON 15 FEBRUARY 2012

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

1.2.5.2. OUTLOOK FOR THE FULL YEAR 2012

In an uncertain economic context, nickel and manganese prices have begun the year below the average prices in 2011. Even so these pricing levels appear to be causing some competitors to adjust their production.

Medium- and long-term prospects remain favourable, particularly in the emerging countries where demand for the Group's metals and alloys remains well below their full potential.

The ERAMET Group should maintain in 2012 and industrial investment programme comparable to that of 2011 if the world economic situation remains in line with current forecasts. At the same time, work will continue on the study or development of major forward-looking projects and the implementation of programmes to improve competitiveness.

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 19th 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 thereafter holding the remaining 50% in Société Métallurgique Le Nickel-SLN.

1983 – As part of an industrial, shareholding and financial restructuring programme, ERAP, a French state-owned company, acquired a 70% stake in the Company's share capital. Imétal and Elf Aquitaine's stakes were reduced to 15% each.

1985 – The assets located in New Caledonia were grouped together as Société Métallurgique Le Nickel-SLN, a wholly owned subsidiary of a new parent company called ERAMET-SLN, in which the shareholders continue 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 aim 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 – A long-term commercial and financial partnership with Nisshin Steel (a major Japanese stainless steel producer) resulted 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 – A 51% stake was acquired in Eurotungstène, a cobalt and tungsten powder producer.

A private placement was followed by ERAMET's 30% listing 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) contributed its Cofremmi subsidiary, owning nickel ore reserves in New Caledonia, in return for a grant of shares representing 2.34% of ERAMET's new share capital.

1995 – The ERAMET stock was transferred 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 – Under an agreement with GenGabon, this Gencor group company sold ERAMET a 15% interest in Comilog. ERAMET now holds 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 S.I.M.A. (Duval family), a leading global producer and processor of high-performance special steels and nickel alloys;
- a 30% interest in Le Nickel-SLN was sold to ERAP in exchange for ERAMET shares; ERAP then transferred that interest to a New-Caledonian State-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.

These transactions have resulted in a radical transformation of the ERAMET Group. Its businesses are now 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 (Gabon): this new manganese ore beneficiation and sintering plant enhances Comilog's product range and extends the lifespan of its reserves.

2001 – Launch of a capital investment project for a new forging and closed die-forging plant in France with a 40,000-tonne press.

Closure of a ferromanganese blast furnace in Boulogne-sur-Mer (France) and a silicomanganese electric furnace in Italy.

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 – Launch of a restructuring programme in the Alloys and Manganese Divisions, as a result of heavy losses:

- closure of the Boulogne-sur-Mer ferromanganese plant and the Shaoxing (China) manganese alloys plant;
- disposal by Comilog of Sadaci (molybdenum roasting) and the Noir de Carbone (carbon black) business, both based in Belgium;
- launch of a capital expenditure programme for a new high-speed steel plant in China, as a joint venture with the Chinese company Tiangong.

100% controlling interests were acquired in both the Trappes research centre (France) and Eurotungstène.

2004 – New Caledonia: commissioning of the new furnace.

Launch of a capital expenditure programme for a 50% expansion in manganese ore production by Comilog.

Launch of a capital expenditure programme in China for a new manganese derivatives plant serving the alkaline battery market.

Buyout of the AREVA group's non-controlling 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 – Decision to expand Comilog's ore production capacity to 3.5 million tonnes by 2008. Oil catalyst recycling business strengthened through two projects by ERAMET's Gulf Chemical and Metallurgical Corporation subsidiary (GCMC): acquisition of a 100% interest in Bear Metallurgical and launch to the construction of a new oil catalyst recycling unit in Canada.

In November 2005, ERAMET was granted the concession to operate the "Transgabon" railway for 30 years.

Erasteel: Joint venture with China's Tiangong called off.

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

Acquisition of Weda Bay Nickel.

Manganese ore production reaches 3 million tonnes.

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

2007 – EMD (electrolytic manganese dioxide) plant in China: the Chongzuo plant started up in the south of the country.

Tiébaghi (New Caledonia): opening of the nickel ore beneficiation plant in the second half of the year, at reduced operating levels.

Erasteel in China: construction of a drawing plant in Tianjin. The first deliveries were made in November 2007.

July 2007 – shares in ERAMET were swapped for those in SLN for STCPI as part of the SLN shareholders' agreement.

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

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

October: agreement on the acquisition of a purchase option with the shareholders in Otzondou Mining (Pty) with a view to studying the feasibility of developing Namibia's Otzondou manganese deposit.

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

March: Tinfos: New agreement allowing ERAMET to raise its stake in Eralloys (the company housing the business lines of the former Tinfos excluding the Nottoden electricity plant) from 56 to 94.3% while reducing its interest in Nottoden from 56 to 34%.

April: Construction work 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), a business recycling 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 Alliances.

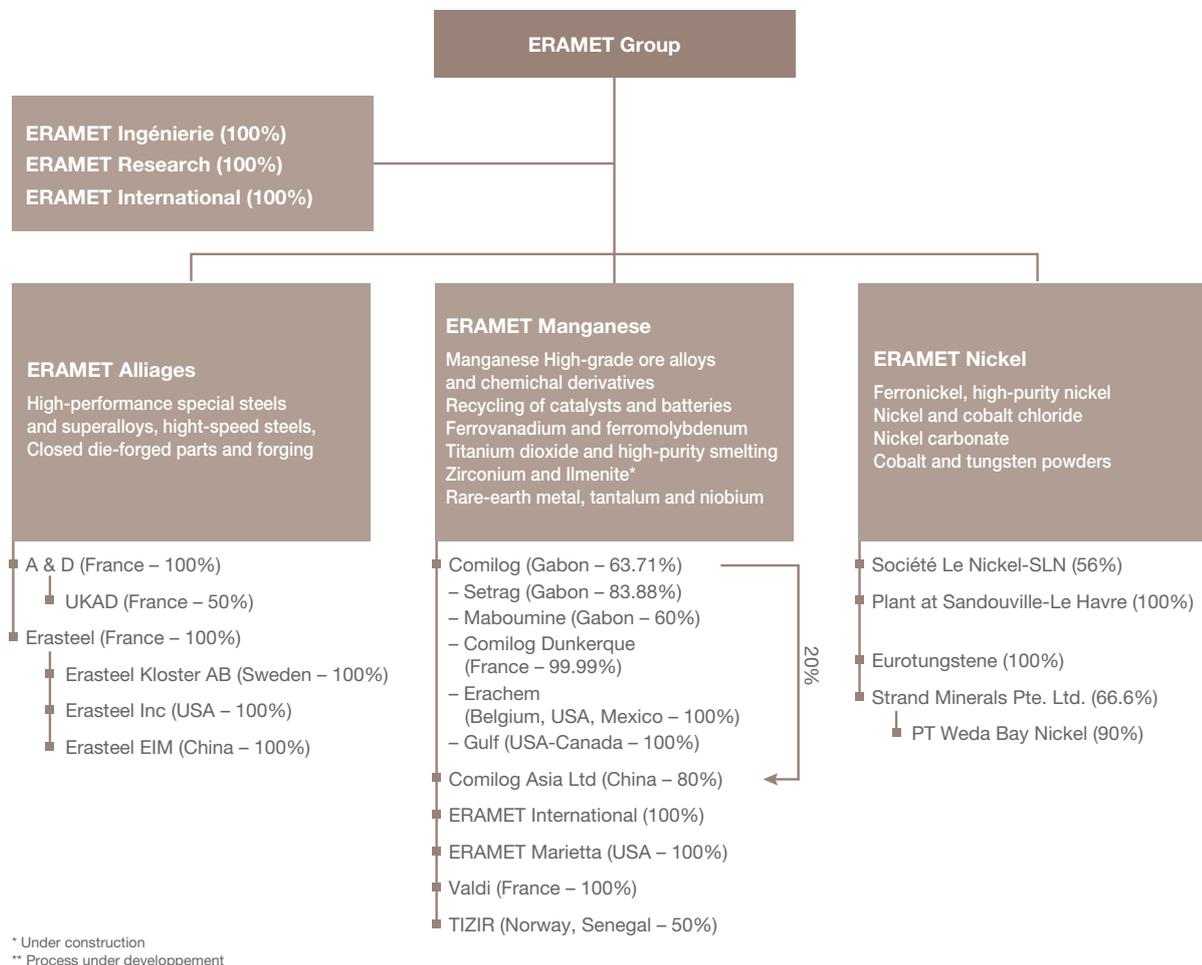
October: Creation of TiZir, a joint venture in mineral sands with Mineral Deposits Ltd.

2

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2.1. GROUP STRUCTURE



2.2. THE NICKEL DIVISION

2.2.1. The nickel market

2.2.1.1. NICKEL DEMAND

PROPERTIES OF NICKEL

Nickel is a metal that is little known to the general public, as it is generally used with other products in alloys. Nevertheless, nickel's rich array of properties makes it a key material for modern living especially given the fact that it can be recycled.

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 (easy to process);
- mechanical strength;
- electrical resistance;
- magnetic properties.

It possesses electrochemical properties: it can be deposited electrochemically in a thin layer, and is used in rechargeable batteries. Nickel also has catalytic properties.

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

USES OF NICKEL

Stainless steel is by far the world's biggest-consuming sector for nickel. Global nickel consumption in 2011 broke down as follows:

Stainless steel (8-12% nickel) ⁽¹⁾	65%
Nickel-based alloys (25-100% nickel)	12%
Electroplating (nickel plating)	9%
Casting and alloy steels (less than 4% nickel)	7%
Rechargeable batteries	3%
Coins	1%
Other uses (including catalysis)	3%

(1) Austenitic grades, including low-nickel "200 series" grades.

Sources: ERAMET estimates.

END USES OF NICKEL

End uses are highly varied and essential to modern life. Nickel is difficult to replace in its various applications.

Stainless steel

Food safety, hygiene

This is one of the major uses of stainless steel. Stainless steel has outstanding hygienic properties that are crucial to consumer safety, particularly when used in the following forms: household equipment (sinks, cutlery, saucepans, dishes, etc.); domestic appliances (washing machines, microwave ovens, catering kitchen ranges); food industry and pharmaceutical production tools; surgical equipment, etc. Its properties often make stainless steel legally prescribed in developed countries.

Heavy industries

Chemicals, petrochemicals, paper, power generation.

Building, construction

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 reliant on superalloys, which have high nickel content (over 45%) combined with other metals (particularly cobalt and chromium). Superalloys can ensure good mechanical performance despite the increasingly high operating temperatures of jet engines. They 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, TV screens and semiconductors.

Corrosion-resistant nickel alloys

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

Electroplating (coating with pure metal)

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

Casting and alloy steels

Automobiles 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 (the one- and two-euro coins).

Other uses

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

NICKEL AND SUSTAINABLE DEVELOPMENT

In all its applications, nickel imparts durability to the components containing it. In addition to Nickel's intrinsic qualities, analysis of the component life cycles clearly points to the economic rationale for using nickel in preference to other materials.

Nickel can be recycled indefinitely and its high economic value makes it worthwhile to collect and recycle. 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 customers: stainless-steel producers. In 2010, recycled nickel accounted for approximately 42% of the nickel used in producing stainless steel worldwide. Nickel is used in a great many environmental-protection applications (gas and effluent treatment, etc.).

THE NICKEL MARKET

Thanks to a high and growing number of applications, nickel has historically averaged 4% annual growth since 1950, comparing very favourably with the market for other industrial products. Stainless steel, the leading use of nickel, has itself grown 5% a year on average.

As a growing share of the population in newly industrialised countries achieves higher living standards, the nickel demand in these countries is accelerating sharply. Historically, Japan, and later the Asian “tigers” bear witness to this. The current focus of development is China, where a middle class of several hundred million people is emerging. Nickel consumption in China rose threefold in the last five years to close upon 40% of world consumption in 2010. This firm uptrend will continue for the next decade, while other countries such as India or Brazil also possess enormous growth potential.

More recently, substitution has begun between stainless steel grades. The rise in nickel prices from 2002 to 2007 and the increasing significance of China, which has less firmly-established quality standards, gave rise to the development of ferritic (nickel-free) grades and low-nickel “200 series” grades with 1% to 4% of nickel content, while at the same time, austenitic “300 series” stainless steel with approximately 8% to 10% of nickel content lost 17 percentage points of world market share from 2002 to 2007. This trend towards substitution has sharply declined since 2008, with the “300 series” even stabilising around 58-60%. Furthermore the properties of these different stainless-steel families differ widely and a number of industrial applications rule out any substitution for austenitic stainless steel.

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 nickel content of ores mined today typically varies from 1% to 3% for the richest.

There are three types of ore:

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

The different ore types have specific characteristics that determine the manner in which they are mined and their production cost structure.

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.). These ores often contain other metals associated with nickel: copper, cobalt, gold, silver and often platinumoids.

The ore can be concentrated physically, increasing its nickel content to between 10% and 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 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, generally around 1%. Oxide ores contain cobalt.

These ores cannot usually be beneficiated. They are put through hydrometallurgical processes (dissolving in ammonia or sulphuric acid) to separate out the nickel and recover the cobalt.

Oxide ores: garnierites, from the 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 content (approx. 1.5 to 3%). These ores 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.

Since 2006, China has imported large quantities of low-grade nickel garnierites and laterites to produce low-grade nickel cast iron (called nickel pig iron or nickel basic feed) by converting old blast furnaces for smelting. This type of processing has a strong environmental impact, and is technically less efficient in terms of yield and quality. Production using electrical furnaces is also developing.

The Hydro metallurgy process developed by ERAMET has the advantage of simultaneously processing the laterites and the low-grade garnierites.

MINING PRODUCTION BROKEN DOWN BY COUNTRY IN 2011

2011 mining production (in thousands of tonnes of nickel content)

Indonesia	283.2	14.9%
Russia	270.0	14.2%
Philippines	243.6	12.8%
Canada	211.5	11.2%
Australia	186.1	9.8%
Brazil	148.8	7.8%
New Caledonia	122.9	6.5%
China	91.1	4.8%
Colombia	74.4	3.9%
Cuba	67.2	3.5%
South Africa	43.7	2.3%
Finland	33.0	1.7%
Botswana	32.4	1.7%
Macedonia	24.0	1.3%
Greece	21.3	1.1%
Venezuela	14.2	0.7%
Dominican Republic	13.0	0.7%
Serbia	8.4	0.4%
Zimbabwe	4.8	0.3%
Zambia	3.0	0.2%
Albania	0.4	0.0%
WORLD	1,897.0	100%

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

NICKEL INDUSTRY INVESTMENT COSTS

Capital expenditure levels are particularly high in the nickel industry.

On average, capital-expenditure costs doubled in the recent years before the crisis, because of both price inflation driven by high demand and the increasing complexity of deposits to process (locations, ore contents and analyses, depths, etc.), as well as the need to take environmental aspects fully into account.

INTEGRATED PROJECT DEVELOPMENT TIMELINES IN THE NICKEL INDUSTRY

New integrated projects (mine + plant) entail long development timelines.

Several stages are essential:

- geological surveys: 3 to 7 years;
- pre-feasibility study: 1 to 2 years;
- pilot plant for any new process: 2 years;
- banking feasibility study: 1 to 2 years;
- construction (mine and plant): 3 to 4 years.

The minimum time to allow is thus 10-15 years, but it can sometimes take several more years if there are difficulties in negotiating the tax and environmental terms and obtaining the necessary finance.

NICKEL PROCESSING

Acid leaching technology is now the favoured avenue for working new nickel deposits, since it allows processing of both laterites not exploited pyrometallurgically and low-grade garnierites. Furthermore, this process is not very energy-intensive and allows extraction of the ore's cobalt content. ERAMET has developed a proprietary hydrometallurgy process which could be introduced industrially for its Weda Bay Nickel project in Indonesia; it would be particularly suited to the New-Caledonian ore that cannot be processed pyrometallurgically at Doniambo.

Acid leaching technology now emerges as a critical adjunct to delivering the nickel quantities the market needs.

2.2.1.3. NICKEL PRODUCERS

Year 2011 <i>(nickel content, in thousands of tonnes)</i>		Metallurgical production Finished products	
Norilsk	Russia/Finland	282.9	18.0%
Vale	Canada/GB/Japan/New Caledonia	208.9	13.3%
Jinchuan	China	129.3	8.2%
Xstrata (Falconbridge)	Canada/Dominican Republic	104.1	6.6%
BHP Billiton	Australia/Colombia	85.1	5.4%
Sumitomo Metal Mining	Japan	61.7	3.9%
ERAMET	France/New Caledonia	54.2	3.4%
Anglo-American	Brazil/Venezuela/South Africa	47.4	3.0%
Yabulu	Australia	34.4	2.2%
Sherritt	Canada	34.1	2.2%
Minara	Australia	30.0	1.9%
Cunico	Macedonia/Kosovo	28.5	1.8%
Pamco	Japan	28.2	1.8%
Others		445.2	28.3%
TOTAL		1,574.2	100%

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

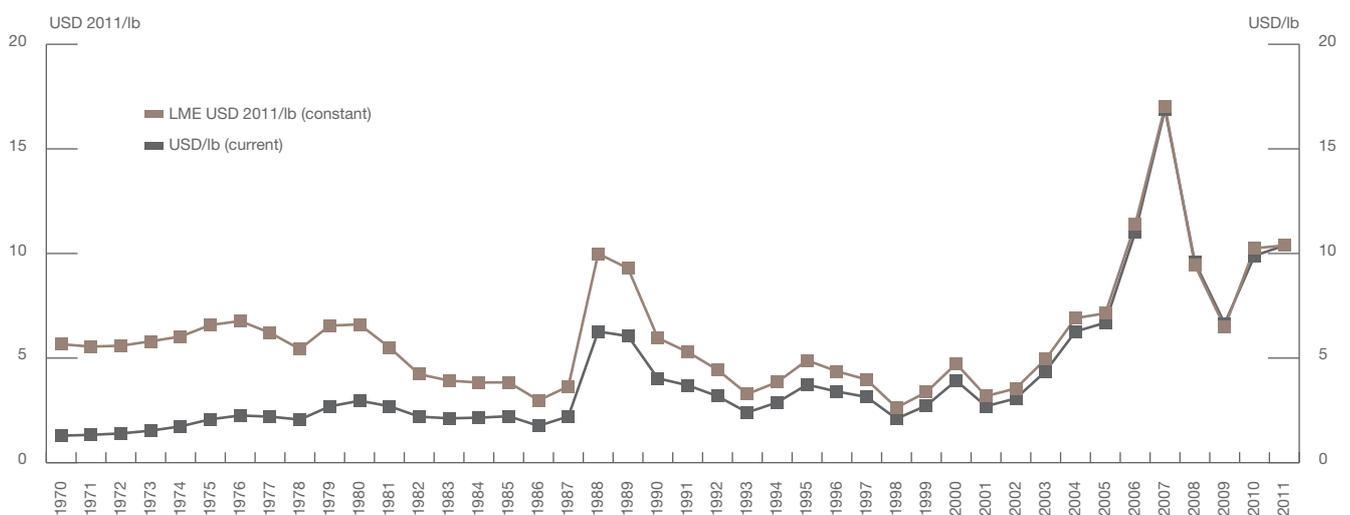
2.2.1.4. NICKEL PRICES

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 take futures and options positions 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 among financial institutions.

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

The significance of financial operators on the LME is reflected in high short-term volatility and effects of speculating on future trends in the physical market.

The chart below illustrates historical trends in nickel prices (in USD/lb at current parity and 2011 USD/lb at constant currency parity):



Source: London Metal Exchange – Thomson Financial.

Nevertheless, over the long term the physical market remains the main factor governing nickel price fluctuations.

When the nickel price drops below critical profitability thresholds, the less competitive nickel producers are forced to cut production. Conversely, high nickel prices encourage the reopening of older, less competitive mines, as well as exploration and funding for new projects.

After reaching a high in 2007, above USD17/lb, followed by a low in 2009 at USD6.7/lb—equivalent to just below USD15,000/t, the nickel price recovered in 2010 at USD9.9/lb, equivalent to USD22,000/t. In 2011, the nickel price reached USD10.4/lb, equivalent to USD22,830/t. The steep rise in prices over the last ten years reflects both heavy demand and radical changes in product-cost and capital-expenditure components.

2.2.1.5. STATE OF THE NICKEL MARKET

The average annual nickel price in 2011 was USD10.6/lb, 5% lower than the 2010 average. The nickel price reached a high in April (USD13.2/lb), supported by sound fundamentals early in the year, before undergoing a series of downward adjustments. These staged corrections took hold despite the decline in LME stocks by more than 46,000 tonnes in 2011. This is because, as with most base metals, nickel prices showed sensitivity to geopolitical developments (the “Arab Spring”) and macro-economic trends (the lowering of the US rating in late July, and the European debt crisis).

Following on a sharp rebound in 2010, the stainless-steel market continued to grow in 2011, with production rising 5%. World stainless-steel production established a new record at 8.6 million tonnes in the first quarter, before easing slightly over the rest of the year to reach an annual total of 32.3 million tonnes.

At 13.0 million tonnes, Chinese production climbed 16%, thus accounting for 40% of world production. India and South Korea also scored positive growth of some 7% whereas production in Europe and the USA declined from 2010, by 0.5% and 5% respectively. Japanese production also fell (by 3%) in the wake of the tsunami.

Demand for primary nickel in stainless steel rose 6% in 2011 (by 56,000 tonnes), slightly exceeding world stainless steel production growth (of 5%). This is because the proportion of austenitic grades in stainless steel production increased slightly whereas the proportion of scrap in nickel consumption retreated somewhat.

Demand in non-stainless steel sectors (nickel alloys and superalloys, electroplating, batteries, etc.) continued to grow in 2011, although less firmly than in 2010 (+7%, +35,000 tonnes). Nickel alloys and superalloys were boosted by heavy demand in aerospace, growing by some 11%, while growth in electro-plating was limited to 4% owing to the slowdown in the automotive industry.

Actual world demand for primary nickel grew 6% overall, with total consumption of over 1,560,000 tonnes.

Alongside this, the nickel supply rose 10% in 2011, with an additional 140,000 tonnes. Chinese production of nickel pig iron, estimated at 220,000 tonnes in 2011 (increasing 62,000 tonnes), contributed significantly to this increase; growth was very firm in the first half-year, before falling sharply from the mid-third quarter onwards, with a nickel price no longer covering the costs of the less competitive producers. Regarding “conventional” supply, Vale produced an additional 57,000 tonnes of nickel, with Canadian operations returning to normal following the end of the strike which had heavily affected production volumes in 2009-2010.

The new projects started up during the year (Onca Puma, Barro Alto, Vale New Caledonia and the FeNi plant in Myanmar) contributed 13,000 tonnes of the additional refined-nickel supply. This figure was well below the estimates of numerous analysts at the start of the year, and it should increase significantly in 2012 with the gathering pace of production at new plants and the start to the Ambatovy project.

Despite production incident at some “conventional” producers, the nickel supply reached a new record in 2011 at more than 1,570,000 tonnes, causing a very slight surplus for the year as a whole (12,000 tonnes).

Nickel demand and supply summary

<i>(nickel content, in thousands of tonnes)</i>	2004	2005	2006	2007	2008	2009	2010	2011 estimate
Stainless steel production	27,712	23,920	27,951	28,095	26,021	25,030	30,905	32,342
Austenitic stainless steel production	18,243	17,580	21,233	19,942	18,812	18,746	22,517	23,693
Primary nickel (in %)	54.3%	52.4%	53.3%	53.7%	52.9%	58.6%	58.0%	58.2%
Primary nickel in stainless steel	842	812	892	792	732	807	960	1,016
Nickel, other industrial uses	416	470	500	524	530	449	512	547
Visible nickel consumption	1,257	1,256	1,381	1,370	1,252	1,324	1,447	1,562
Nickel supply	1,259	1,283	1,355	1,433	1,377	1,314	1,434	1,574
Balance	+1.6	+247	-27	+62	+124	-10	-13	+12
Inventory in weeks' consumption (year-end) ⁽¹⁾	7.4	8.8	6.7	9.5	18.6	14.3	12.1	12.1

(1) Producer and LME stocks.

Sources: INSG, Producers, ERAMET estimates.

2.2.2. Nickel Division overview

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.
- ERAMET operates high-quality mines from the standpoint of both grade and reserves.
- 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

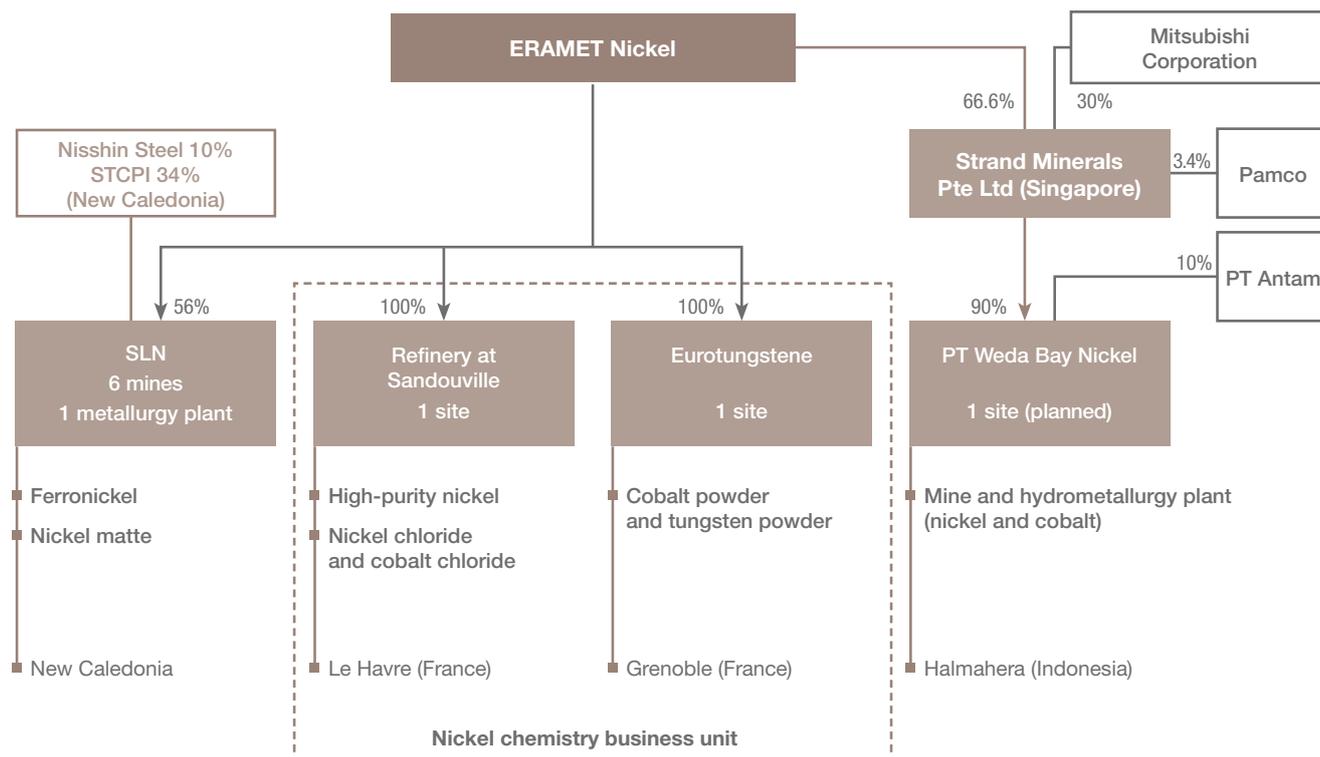
Le Nickel-SLN (SLN) and to increase its production capacity in order to offset the effects of certain technical changes in its deposits.

- The aim is to produce 60,000 tonnes annually at the end of 2012 or beginning of 2013, then to expand production to 65,000 tonnes in the future.
- ERAMET is examining the development of the Weda Bay project at Halmahera in Indonesia, with its partners, Mitsubishi and Antam. The final investment decision for the first phase is scheduled for 2013. This two-phase project will ultimately lead to annual production of 65,000 tonnes (35,000 tonnes for the first phase).

ERAMET/SLN is examining the possibility of developing new-Caledonian oxide ore using the process developed by the ERAMET Group for Weda Bay.

2.2.2.2. STRUCTURE

ORGANISATIONAL STRUCTURE AT 31 DECEMBER 2011



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 continuously mining nickel deposits in New Caledonia 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% part-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 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).

ERAMET

ERAMET owns and operates a nickel refinery in Sandouville, mainland France, and markets all Le Nickel-SLN'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 Le Nickel-SLN.

Le Nickel-SLN sells all Doniambo's metallurgical production 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.

Le Nickel-SLN is 56% owned by ERAMET, 34% by STCPI (Société Territoriale Calédonienne de Participation Industrielle, which is jointly owned by the three Provinces of New Caledonia) and 10% by Nisshin Steel (Japan), as a result of the following transactions:

1991: ERAMET entered into a long-term cooperation agreement with Japanese stainless steel producer Nisshin Steel, resulting in:

- Nisshin Steel taking an interest in the capital of Le Nickel-SLN: the initial 5% interest (resulting from a reserved capital increase) was raised to 6% in 1992, 8% in 1993 and reached its definitive 10% level at end 1994 following sales of shares by ERAMET;

- the signing of a contract for the ERAMET Group to supply ferronickel to Nisshin Steel. The agreement, which was entered into in 1991 and renewed in 2001 and subsequently in 2007, provides for ferronickel shipments over several years.

1999: In parallel to the S.I.M.A. share contribution transaction, the ERAMET Group restructured the capital of Le Nickel-SLN, resulting in a 30% stake for STCPI, a New-Caledonian state-owned special-purpose entity. STCPI simultaneously received a 5.1% stake in ERAMET's share capital.

2006: In December, STCPI exercised a call option enabling it to increase its stake in Le Nickel-SLN to 34%. The transaction was completed on 23 July 2007 via the swapping of ERAMET and SLN stock, with STCPI thereafter holding only 4.1% of ERAMET's share capital.

Eurotungstène

Since 21 August 2003, ERAMET also wholly owns Eurotungstène S.A., a company based in Grenoble, France (ERAMET had held a 51% interest in this company since July 1994).

Eurotungstène Poudres is specialised in the production of extra-fine cobalt powders and tungsten powders. These products are used, in particular, to make hardened carbides for machining metal and for diamond tools used to cut stone 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:

- extensive garnierite reserves and resources;
- high nickel content (approximately 2.6%) with an ore-processing unit for two mines;
- in-depth knowledge of the geology and mining methods developed by Le Nickel-SLN; and
- environmentally friendly mining techniques.

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.

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
- Poupou: 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 the New-Caledonian deposits. 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-long conveyor or, as at Népoui or Tiébaghi, in the form of slurry. At the port, the ore is stored and standardised before being loaded onto ships for transfer to the Doniambo plant.

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

The 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 grades. 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.

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

<i>('000 wet tonnes)</i>	2011	2010	2009
Direct production	2,533	2,567	2,520
Outsourced production	710	735	432
TOTAL	3,218	3,224	2,925
Laterites	550	624	256

Doniambo metallurgical plant

The Doniambo plant produces directly-marketable ferronickel (typically 80% of its output), and nickel matte (20% of output) which is entirely consumed 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 the addition of a reducing agent. After this, the ore is melted in three Demag electric furnaces. The resulting product is 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 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. Thus, in 2007, two calcination furnaces were renovated and in 2008 one of the three electric furnaces was rebuilt.

Metallurgical production (ferronickel and matte) at the Doniambo plant *(in 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

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 attacked by an iron chloride solution in the presence of chlorine. Several successive extraction stages in mixer-settlers allow iron and cobalt to be separated out in the form of iron chloride and cobalt chloride, respectively. 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 ferric chloride.

NICKEL DIVISION MARKETING POLICY AND PRODUCTS

The Group has a global sales network, ERAMET International, which 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 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 mainly annually or quarterly.

Ore

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

Ferronickel: the world's number one producer

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

The Group has entered into medium- or long-term contracts with some Japanese and European 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 associated products: one of just three high-purity 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 workshop.
- 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_3 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.

NICKEL DIVISION RESEARCH AND DEVELOPMENT POLICY

The Nickel Division's research and development policy has made for major developments over the past 30 years. The Group has extensive research facilities at 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 the phased expansion in the capacity of the three Demag furnaces.

More recently, the Group passed another major milestone in its development by establishing 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.

NICKEL DIVISION RETURN ON CAPITAL EMPLOYED (ROCE)

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 the Poum/Koniambo mining indemnity, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets, and excluding the Weda Bay investment).

Nickel ROCE (before tax)

(in %)	2007 ⁽¹⁾	2008 ⁽¹⁾	2009 ⁽¹⁾	2010 ⁽¹⁾	2011 ⁽¹⁾
Nickel	120	23	(7)	26	24

(1) IFRS.

2.3. THE MANGANESE DIVISION

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. For this, however, some 9 to 10 kg of manganese content in ore need 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 disposable alkaline batteries. A smaller percentage continues to be used in saline batteries, which are less efficient. Manganese derivatives are also used in rechargeable lithium batteries;
- ferrites: used in electronic circuits;
- agriculture: fertiliser and animal feed;
- miscellaneous chemical uses: pigments, fine chemicals;
- another metallurgical use: 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.

From 1998 to 2008, there was strong average growth in global carbon steel consumption. This is due to the end of the downturn in steel consumption by the former soviet bloc, the slight upturn of 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 year.

During the fourth quarter of 2008 and throughout 2009, effective steel consumption was sharply impacted by the crisis; a widespread and deep inventory reduction at steel consumers and producers amplified the effects of the economic crisis. World production fell 8% from 2008, but the pattern varied according to zone. The developed countries produced only 60-70% of their 2008 output, whereas in the second quarter of 2009, India and China recovered their pre-crisis production levels.

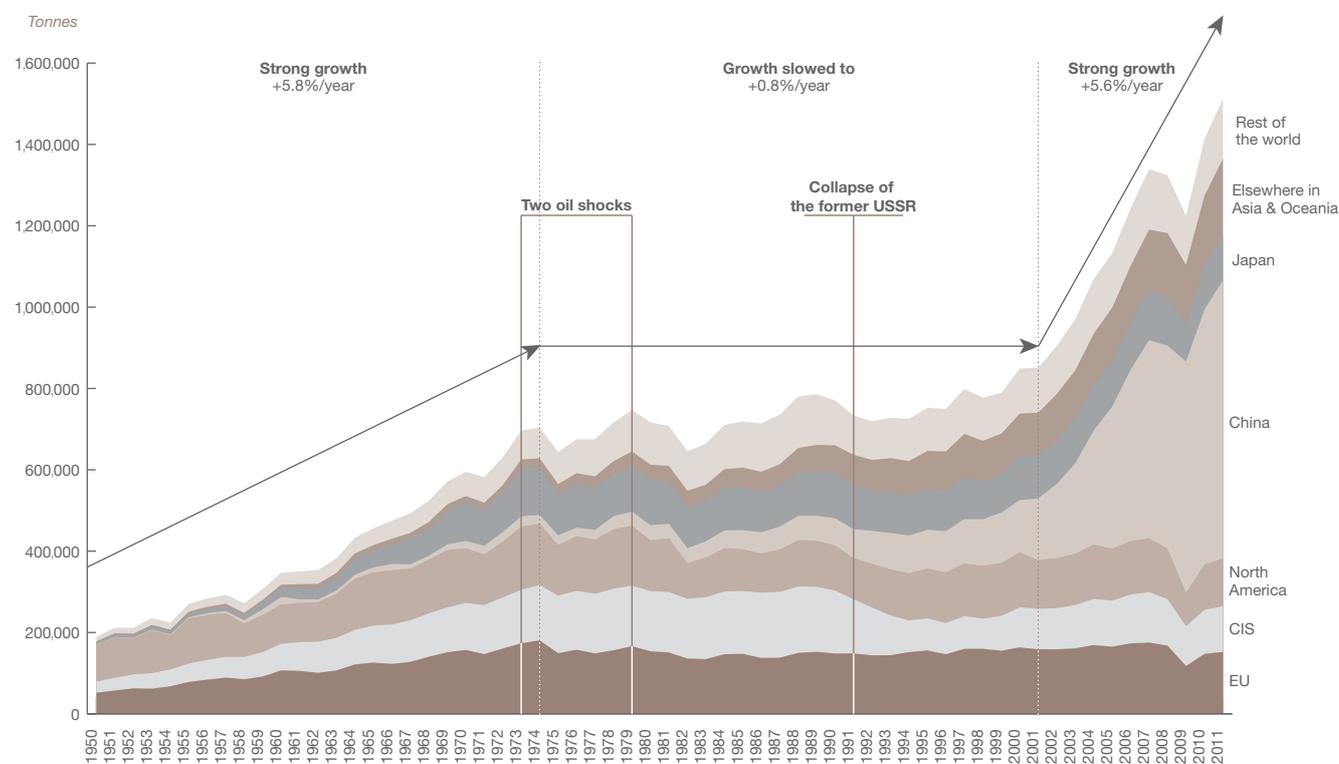
Steel consumption staged a significant rebound in 2010, rising 17% over 2009. This is mainly due to an improvement in the developed countries which had suffered worst in 2009. Even so, growth slowed in 2011, chiefly in North America and Western Europe, owing to the debt reduction measures in these regions, while steel demand remained virtually steady, at levels remaining 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.

The decline in world demand and the related price falls significantly impacted steel production in the second half of 2011, with certain regions of Europe and Japan actually returning negative growth over the year. 2011 steel production in China exhibited a highly contrasting pattern: 10% quarter-on-quarter growth in Q1 brought the country to a monthly record of 60 million tonnes in May, in contrast to a pronounced slowdown in the second half-year, with annual-basis steel production falling from 700 million tonnes per year in the first half-year of 2011 to below 600 million tonnes per year in November.

This end-of-year slowing in 2011 must not distract from annual steel production growth of 6% worldwide, with annual growth reaching 7% in China.

Medium- and long-term prospects are favourable beyond the crisis, since growth in world demand will continue to be driven by the development of emerging countries, whose potential remains considerable. The urbanisation of world populations is a prominent feature of a fundamental trend: some 20 million inhabitants in China and in India, and 60 million worldwide, move to the cities every year. As it happens, construction accounts for 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.

Carbon steel production by geographic zone (in millions of tonnes)



Source: WSA, ERAMET.

Global carbon steel production by geographic area

(in millions of tonnes)	2009	%	2010	%	2011	%
Europe	142.5	11.6%	177.3	12.5%	181.3	12.0%
Former USSR	97.5	8.0%	108.6	7.7%	112.4	7.4%
NAFTA (Canada/USA/Mexico)	81.5	6.7%	110.6	7.8%	117.4	7.8%
Japan	87.5	7.1%	109.6	7.7%	107.7	7.1%
China	568.9	46.6%	626.5	44.3%	683.5	45.2%
India	62.8	5.1%	66.8	4.7%	72.3	4.8%
Elsewhere in Asia & Oceania	86.9	7.1%	103.4	7.3%	119.2	7.9%
Others	96.6	7.9%	111.10	7.9%	118.3	7.8%
TOTAL	1,224.2	100.0%	1,413.5	100.0%	1512.1	100.0%

Source: WSA, ERAMET estimates

2.3.1.2. MANGANESE SUPPLY

MANGANESE ORE

The supply of manganese ore is made up of many types of ore of differing quality. For manganese as for iron ore, a distinction is made between high-grade 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 for 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 2011 was estimated to be 14.5 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 2011

(manganese content, in thousands of tonnes)

China*	1,997
Australia	2,929
South Africa	3,583
Brazil	1,116
Gabon	1,498
India*	930
Kazakhstan*	397
Ukraine*	578
Ghana*	556
Mexico*	153
Georgia*	115
Elsewhere*	675
WORLDWIDE	14,527

* 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 ores 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: most producers using this process are based in China, owing 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 an electric furnace using ore with the possible addition of FeMn slag;
- Refined ferromanganese (MC FeMn, etc.): this higher value-added product contains less carbon. It is mainly made 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 (SiMnLC): with the acquisition of Tinfos, ERAMET Comilog Manganèse has strengthened its presence in the refined manganese alloy market, particularly in low-carbon silicomanganese. Tinfos has developed unique expertise in this alloy, which is used mainly in the production of stainless steel, one of the ERAMET Group's main markets.

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

Breakdown of global manganese alloy production in 2011

Silicomanganese	62%
High-carbon ferromanganese	27%
Refined ferromanganese and refined silicomanganese	11%

Sources: ERAMET estimates.

Global manganese alloy production in 2011

(alloys, in thousands of tonnes)

Europe	1,170
CIS	1,692
North America	211
China	8,845
Elsewhere in Asia and Oceania	3,396
Elsewhere	1,602
WORLD TOTAL	16,916

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. 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 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, sharp bursts of market tension in manganese alloys. In 2011, the sizeable ore supply generated an excess supply of alloys.

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 as the automobiles and shipbuilding.

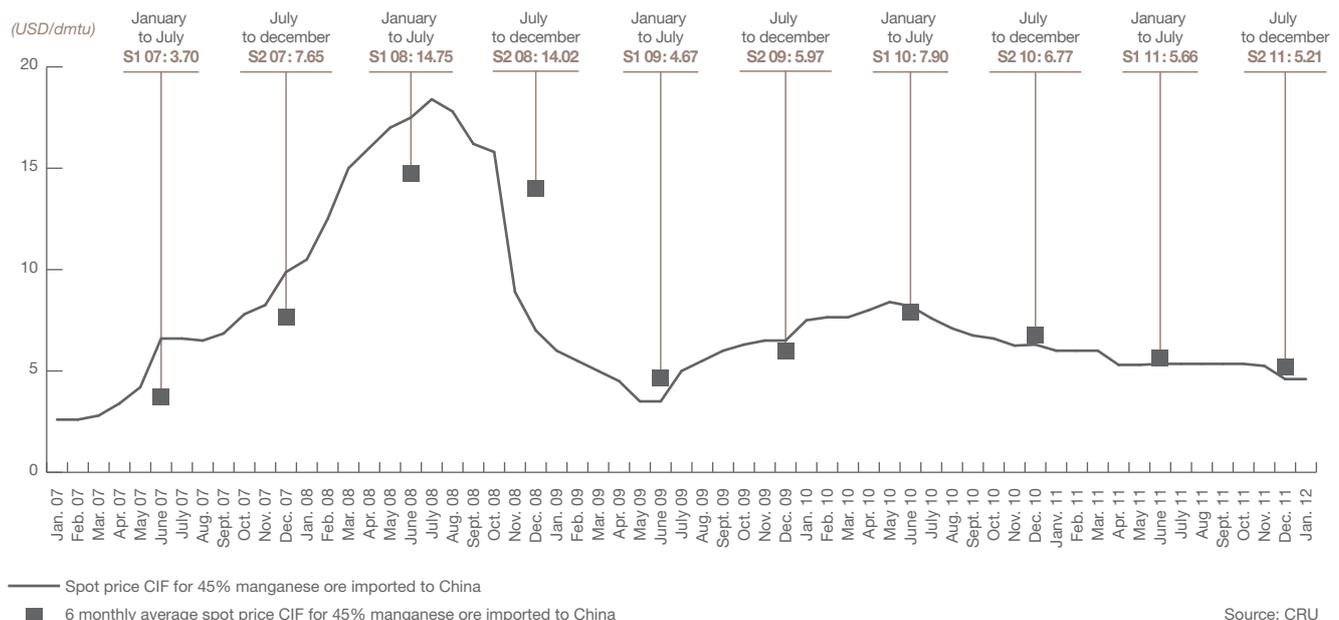
The producers are scattered among a large number of countries, even though China accounts for approximately half of world production.

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 caused a retreat in the Chinese supply of manganese alloys for export, as well as accentuating production overcapacity for alloys 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.

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 stated 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 the granularity and the presence or absence of impurities.



Whereas previously, the high-grade ore price was set for one year, the term of validity of contract prices has shortened since 2009, increasing the volatility of manganese ore prices. This trend further accelerated from 2010 onwards, 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 scheduled sales, alloy prices are often negotiated on a quarterly basis. Non-scheduled sales are negotiated on the basis of spot prices.

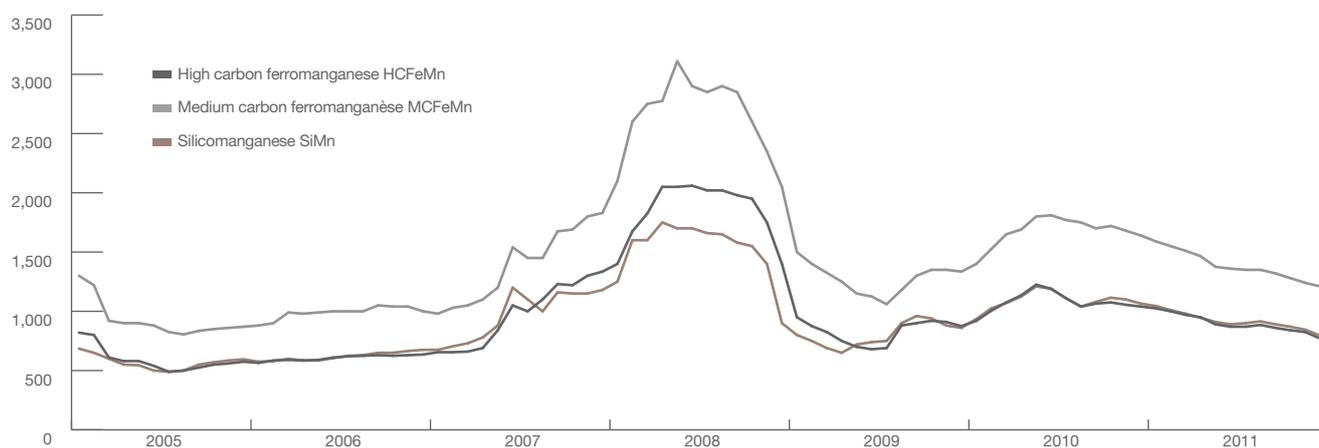
The manganese market is above all global and highly competitive. However, prices can sometimes vary between geographic areas (Europe, North America and Asia) because of exchange-rate movements or disparities in economic cycles. These differences are usually only temporary.

The situations in the various alloy families may also differ 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: euros/t)



Source: CRU.

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

2.3.1.4. RECENT MARKET CONDITIONS

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

This resulted in sizeable structural 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, which accelerated in 2008, to reach record levels.

Manganese ore supply has been faced with logistical bottlenecks in the railways and 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 resumption of Chinese ore demand was accentuated by the expansion of demand in India, causing ore prices to increase in January 2010, reaching a peak in May 2010. The high price levels encouraged the development of new manganese sources, and spurred existing producers to produce at full capacity, resulting in increased ore imports into China, and thus causing stocks to increase at Chinese ports until mid-2011.

From mid-2011 to the end of that year, this stock level remained relatively stable above 3.5 million tonnes, as did price levels. In late 2011, the slowing production of steel in China, and hence the slowing of demand for manganese ore, combined with a persistently abundant supply, led in January 2012 to a fall in the ore price.

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 Eurozone debt crisis, the tsunami in Japan, etc. All these factors exerted downward pressure on non-Chinese steel production, thus making for greater uncertainty in alloys demand, 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 also knocked on to cause a fall in 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.

2012 promises to be a period of stabilisation, with no sharp fall in industrial activity expected, and with a slight adjustment of the equilibrium in the alloys market likely during the year: the American economy shows some signs of recovering, while the post-tsunami reconstruction in Japan should work in favour of demand for alloys, etc.

Although China's steel-production growth should be more moderate than at times in recent years, it should grow once again in 2012 at a significant pace, like all the emerging countries, which account for an increasingly large proportion of world manganese alloy consumption.

In the medium term, the manganese ore supply capacity will be heavily dependent on South Africa's logistical capacities. Furthermore, Chinese ore production is struggling to cope with increased demand, and ore grades (content) are tending to fall; this is increasing pressure to turn to higher-grade imported products.

2.3.2. Nickel Division overview

2.3.2.1. KEY POINTS

The Group 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 boasting mines with high-quality grades and reserves.

The Group undertook a programme to expand manganese ore production capacity, which it aimed to increase to 3 million tonnes in 2006 and to 3.5 million tonnes in 2008. The Group's production target is 4 million tonnes on an annual basis, at the end of 2012 or beginning of 2013.

2.3.2.2. MANGANESE DIVISION HISTORY

1957: Founding of Comilog.

1962: Mining of the Moanda deposit begins in Gabon.

1986: Start-up of the "Transgabon" railway to carry 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 Boulogne-sur-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 became Comilog's main shareholder.

1999: ERAMET acquired the Elkem group's manganese businesses, structured within ERAMET Manganèse Alliages.

2000:

- Acquisition of the Mexican company Sulfamex, which produces manganese-based agrochemicals.
- Opening of the Moanda industrial complex (Gabon), a new manganese ore beneficiation and sintering plant, enhancing Comilog's product range and extends the lifespan of its reserves.

2001: Closure of a ferromanganese blast furnace in Boulogne-sur-Mer (France) and a silicomanganese electric furnace in Italy.

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

2003: Implementation of a restructuring programme in the Manganese Division:

- closure of the Boulogne-sur-Mer ferromanganese plant and the Shaoxing (China) manganese alloy plant. Manpower reductions at most other ERAMET Manganèse sites;
- disposal by Comilog of Sadaci (molybdenum roasting) and the Noir de Carbone (carbon black) business, both based in Belgium;
- provisional agency management contract for the "Transgabon" train granted to Comilog by the Gabonese government.

2004: Launch of a capital expenditure programme for a 50% expansion in Comilog's manganese ore production at Moanda to 3 million tonnes.

Launch of a capital expenditure programme in China for a new manganese derivative plant to serve the alkaline battery market.

With effect from 1 July 2004, the Group acquired the 30% and 7% interests held by Cogema (AREVA group) in ERAMET Manganèse Alliages and Comilog, respectively. Following this transaction, the business activities of ERAMET Manganèse Alliages were split into two companies: ERAMET Norway and Marietta.

2005: Decision to expand Comilog's ore production capacity to 3.5 million tonnes by 2008. Oil catalyst recycling business strengthened through two projects by ERAMET's Gulf Chemical and Metallurgical Corporation subsidiary. (GCMC): acquisition of a 100% interest in Bear Metallurgical and launch to the construction of a new oil catalyst recycling unit in Canada.

In November 2005, ERAMET was granted the concession to operate the "Transgabon" railway for 30 years.

2006: Comilog production succeeded its increase to 3 Mt.

2007: In January, the Chongzuo (China) plant started producing Manganese chemical derivatives for the alkaline battery market.

2008:

- Acquisition of 58.93% of Tinfos, a Norwegian group (equivalent to a 56% economic interest).
- Start-up of the new Canadian catalyst recycling plant.
- Agreement with the shareholders in Otjozundu Mining (Pty) Ltd (Namibia) to study the development of a manganese deposit in Otjozundu.

2009:

- Acquisition of the remaining non-controlling interests in the former Tinfos (excluding the 34%-held Nottoden power plant).
- Construction starts on the Moanda metallurgy complex (Gabon).

2010:

- Acquisition of Valdi, a business specialising in recycling oil-industry catalysts, batteries and waste from steelworks.
- Disposal of the international trading businesses acquired from Tinfos (Tinfos Nizi).
- Agreement for the Gabonese government to increase its investment in Comilog (increasing to 35% in 2015)

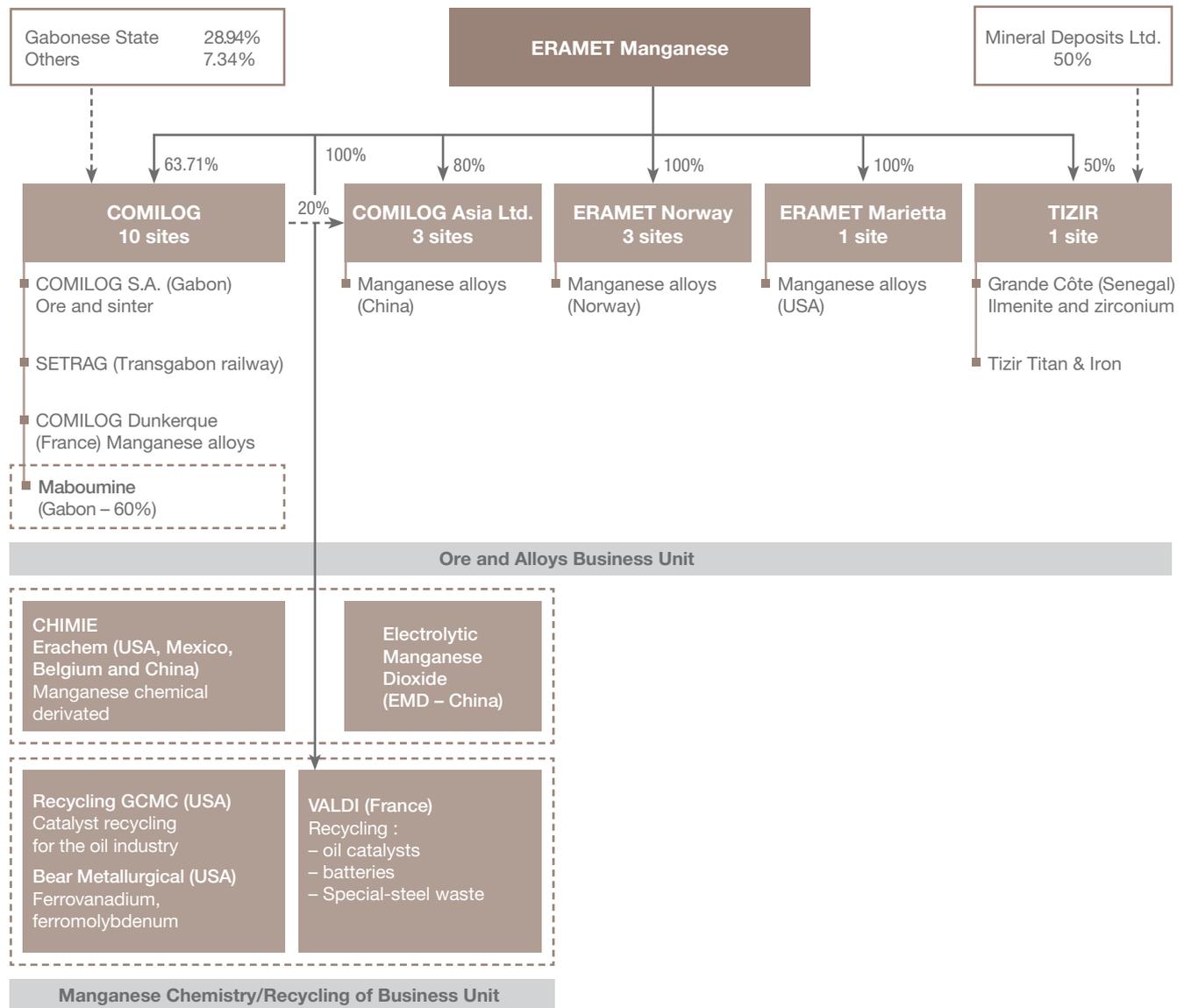
2011:

October: Creation of TiZir, a 50/50 joint venture in mineral sands (ilmenite and zircon notably) with the company Mineral Deposits Ltd.

2.3.2.3. STRUCTURE

ORGANISATIONAL STRUCTURE AT 31 DECEMBER 2011

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



- Comilog is a company operating under Gabonese law and 63.71% owned by ERAMET. Its business activities include:
 - operation of the Moanda Manganese mine and sintering plant,
 - operation of Setrag ("Transgabon" railway),
 - production of manganese alloys in Dunkerque (France),
 - production of manganese-based chemical derivatives,
 - recycling of metals contained in catalysts and electronic industry products (copper),
 - production of ferrovanadium and ferromolybdenum;

- Comilog Asia has the two manganese alloy plants at Guilin and Guangxi, as well as the manganese chemical derivatives plant at Chongzuo;
- ERAMET Norway has three Norwegian alloy plants at Porsgrunn, Sauda and Kvinesdal;
- ERAMET Marietta (US) produces manganese alloys;
- TiZir and the joint venture with MDL in mineral sands and titanium dioxide and zircon production.

ORE AND ALLOYS BUSINESS UNIT

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 extracted by draglines. The run-of-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 undergo 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 "Transgabon" railway runs from Franceville to Libreville over more than 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 "Transgabon" by the Gabonese government, after the previous operator was stripped of its concession. The move considerably improved maintenance and traffic reliability, thereby increasing shipped quantities of manganese ore.

In February 2004 the Gabonese government extended the management contract for a term of 18 months.

Finally, from November 2005 Comilog was granted a 30-year concession to operate the "Transgabon" railway. Thus, it has secured its logistics and can 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 capacity for storing approximately 3 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—enabling it both to better serve its customers and to protect itself from market and currency fluctuations.

The Group produces a very wide range of alloys: high-carbon ferromanganese, silicomanganese, medium and low-carbon ferromanganese and low-carbon silicomanganese. The Group has its own production units in China, which is the fastest-growing market. ERAMET Manganese is gradually increasing the proportion of refined alloys in its production.

In Gabon, ERAMET has begun construction of the Moanda metal-lurgy complex which, in 2013, will start producing silicomanganese and metallic manganese.

Production of manganese alloys for the steel industry

(in thousands of tonnes)	2011	2010	2009	2008	2007	2006	2005
High-carbon ferromanganese (including China)	235	256	246	287	299	279	290
Standard silicomanganese	198	196	197	172	191	201	185
Refined alloys	372	327	174	249	270	271	252
TOTAL MN ALLOY PRODUCTION	805	779	617	708⁽¹⁾	760	751	727

(1) Excluding Tinfos.

Manganese alloy production sites

Sites	Country	Production capacity	Furnace type	Products
Dunkerque	France	70 kt	Electric furnace	SiMn
Sauda	Norway	180 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Porsgrunn	Norway	150 kt	Electric furnace	HC, MC, LC FeMn, SiMn, LC SiMn
Kvinesdal	Norway	180 kt	Electric furnace	SiMn, LC SiMn
Marietta	United States	180 kt	Electric furnace	HC, MC, LC FeMn, SiMn
Guangxi Province	China	95 kt	Blast furnaces	HC FeMn
Guilin	China	140 kt	Blast furnaces and 1 electric furnace	HC FeMn, SiMn

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

In China, the Guilin and Shaoxing plants are both located in Guangxi Province, close to local manganese mines, enabling them to optimise the balance of their ore supply between Comilog and local sources.

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

MANGANESE CHEMISTRY BUSINESS

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

Location	Products
Tertre (Belgium)	Manganese salts and oxides
Baltimore (USA)	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.

RECYCLING BUSINESS

This is currently carried on at four sites:

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.
Fort Saskatchewan (Canada)	Catalyst recycling for the oil industry
Valdi – Le Palais-sur-Vienne (France)	Catalyst recycling for the oil industry Processing of other metallic waste
Valdi – Feurs (France)	Recycling of rechargeable and disposable batteries Alloy refining

TiO₂ BUSINESS

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

Sites	Country	Products
Tyssedal	Norway	Titanium dioxide (pigments industry) High-purity smelting for the foundry industry
Grande Côte	Senegal	Project in progress for the mining of titanium ore (ilmenite, rutile, leucosene) and zirconium ore

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, at which production is scheduled to start at end 2013 (see below).

MANGANESE DIVISION MARKETING POLICY

Thanks to its industrial network and very broad product range, the Manganese Division is able to provide a comprehensive product offer and a flexible response to its customers' varied needs for manganese.

The Group takes a partnership approach to working with its customers and provides significant technical support to help them derive maximum benefit from its products in their own production processes. Marketing policy is managed by ERAMET Comilog Manganèse, using the ERAMET Group worldwide marketing network, ERAMET International, which markets 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 and development facilities at 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 depend to a very large extent on the joint development of new products with customers, particularly in the electronics sector.

TIZIR

In 2011, ERAMET and the Australian company, Mineral Deposit Limited ("MDL") formed a joint venture investing in 100% of the titanium dioxide and high-purity nickel plant at Tyssedal in Norway, previously operated by ERAMET Titanium & Iron ("ETI"), and 90% of the Grande Côte mineral sands project in Senegal, which were owned by MDL. The Republic of Senegal holds remaining 10% interest.

In combination, these two assets will constitute a vertically-integrated entity, and a key player in mineral sands: the Tyssedal plant will enjoy a new source of high-quality ilmenite—a titanium ore—supplied from the Grande Côte project, which thus assures the sale of a large proportion of its production.

Mineral sands, an attractive market for ERAMET

Mineral sands are mineral commodities in which heavy minerals have become highly concentrated over time in alluvial areas (river plains, sea coasts or lake shores) or windswept areas (dunes). Mineral-sand deposits were thus formerly beaches, dunes or river beds. The main products from these sands are titanium dioxide—chiefly in the form of ilmenite (FeTiO_3), but also as rutile (TiO_2) and to a lesser extent as leucoxene ($\text{FeTiO}_3 \cdot \text{TiO}_2$)—and zircon (ZrSiO_4).

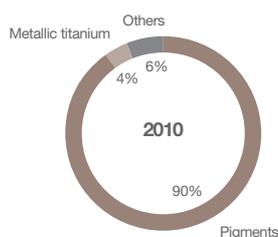
The content of these ores in the sand is often of the order of a few per cent. Accordingly, they must be concentrated first by gravimetric separation, then by magnetic or electrostatic separation. Zirconium and titanium ores are separated at the mine and are routed along separate logistical paths.

The mineral sand deposits mainly exploited today chiefly lie 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 market: high growth potential, driven by the emerging countries

Titanium dioxide is mainly used in the pigment industry, which accounts for 90% of demand, as well as being used to manufacture welding electrodes and to produce metallic titanium, which is particularly used in alloys for aerospace applications.

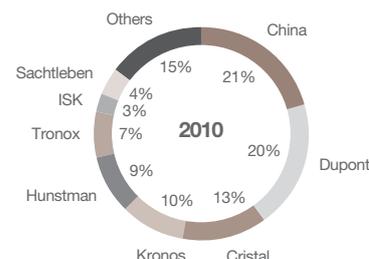
Titanium consumption – 2010



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. Demand for pigments increased from 2.7 million tonnes in

1990 to 5.3 million tonnes in 2010, mainly driven by the buoyant Asiatic economies, which accounted for 40% of 2010 demand compared with 21% 20 years earlier. The main pigment producer is the American DuPont, boasting 20% of the market, followed by Cristal, Kronos and Huntsman. The multiplicity of Chinese producers accounts for 21% of supply in 2010, whereas they represented only 7% of the market in 1990.

Main pigment producers – 2010

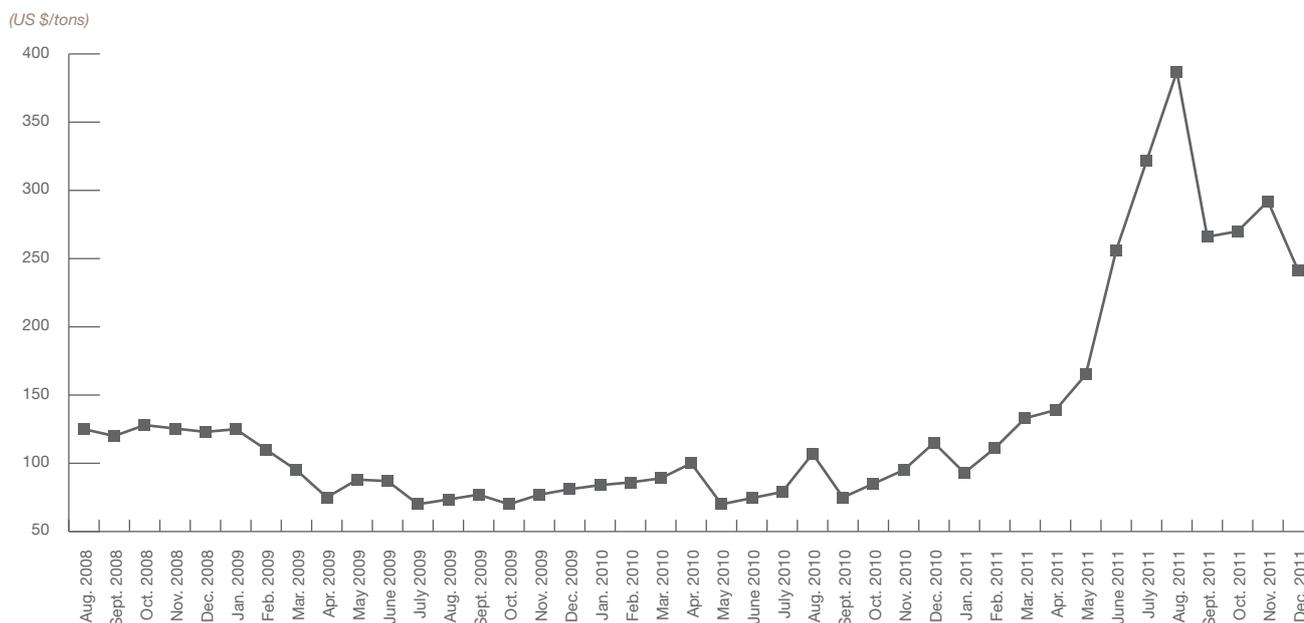


Pigment producers need a raw material rich in TiO_2 : rutile contains over 95% of TiO_2 ; synthetic rutile is produced from high-grade ilmenite; TiO_2 slag is obtained by melting ilmenite, and is produced among others by the Tyssedal plant, which is now part of TiZir. Melting/production of ilmenite is also a smelting production method of which, if the process is properly controlled, may constitute a valuable by-product: this is the case for the Norwegian plant, which is a supplier of high-purity smelted products used by foundries and in applications such as wind turbine hubs.

Metallic titanium business, although of smaller volume than pigments, is a segment with high growth potential, particularly in the aerospace and medicine markets: titanium in metallic form exhibits an excellent strength/density ratio and outstanding corrosion resistance at high temperatures, making it particularly attractive for aerospace, defence and certain industrial applications. Titanium is also biocompatible, and is used for the manufacture of certain prostheses. ERAMET produces titanium forged and closed die-forged parts, and has developed a joint venture with the Kazakh titanium sponge and ingot producer, UKTMP, leading to the creation of an ingot processing plant in France at Saint Georges-de-Mons.

The titanium market is relatively tight and titanium prices have increased sharply. As an example, the spot price for ilmenite sulphate grade produced in Western Australia rose from less than USD100 per tonne in September 2010 to over USD200 per tonne at end 2011.

Ilmenite for sulphate process - Western Australia - indicative FOB prices



Source : TZMI

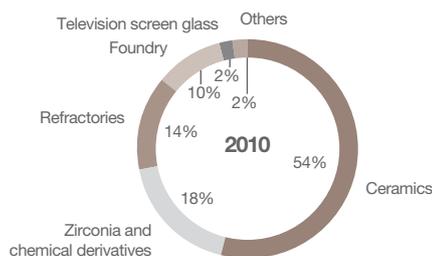
The zircon market

Zircon is particularly used in ceramics (55% of demand in 2010) 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).

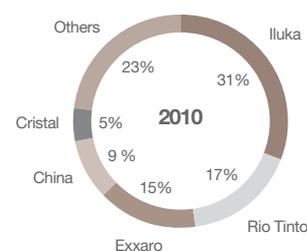
Demand for Zircon has risen from some 1.2 million tonnes in 2006 to close upon 1.4 million tonnes in 2010, increasing almost 15%, also strongly impelled by growth in emerging countries and urbanisation.

Zircon consumption – 2010



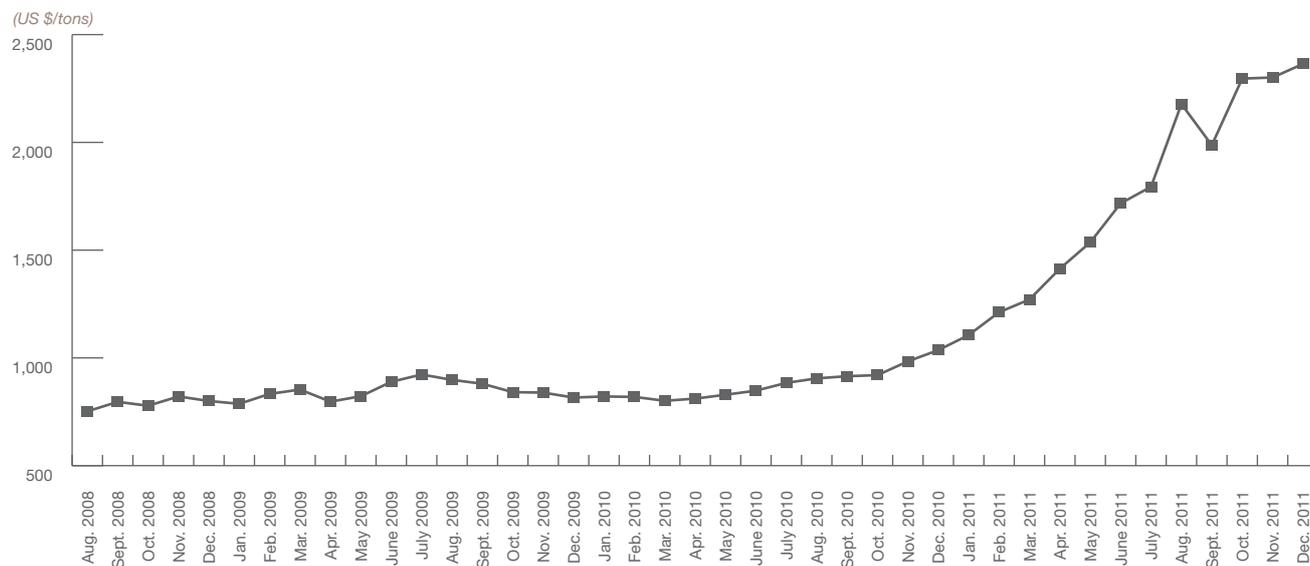
Zircon production is concentrated in Australia and South Africa, which account for 70% of supply. In 2010, the 5 leading zircon producers accounted for over 70% of world production (Iluka, Rio/BHP, Exxaro, Bemax and DuPont).

Main zircon producers – 2010



Today, the zircon market is under tension between on the one hand, growing demand driven by China and the other fast-urbanising emerging countries, and on the other, the near-depletion of several mines, with no short-term projects to make good the supply shortfall. Spot zircon prices moved up from USD900/tonne in 2010 to more than USD2,000/tonne in mid-2011.

Bulk zircon from Australia - indicative FOB prices



Source: TZMI

The need to develop mining projects in order to satisfy demand with high growth potential:

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 satisfied a large portion of demand are becoming depleted and the new mining projects will not suffice to satisfy demand for zircon and titanium, both fuelled by the urbanisation and growth of the emerging countries.

TiZir will be a key player in this new sector and will constitute for the ERAMET Group a workable avenue for both sectoral and geographical diversification, since the various applications of mineral sands provide new outlets for the Group, thus widening its exposure outside the steel industry. This will also give ERAMET 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 in connection 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 makes 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, expected 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 remarkable level of profitability. Work began on the project in the third quarter of 2011 and production is expected to start at end 2013, for a total estimated investment cost of some USD500 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 will also be constructed in time for the start of production, and the main permissions required have been obtained from the local authorities.

MANGANESE DIVISION RETURN ON CAPITAL EMPLOYED (ROCE)

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 long-term debt, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets).

Manganese ROCE (before tax)

(in %)	2007 ⁽¹⁾	2008 ⁽¹⁾	2009 ⁽¹⁾	2010 ⁽¹⁾	2011 ⁽¹⁾
Manganese	76	145	(3)	49	35

(1) IFRS.

2.4. ALLOYS DIVISION

2.4.1. Alloys Division businesses

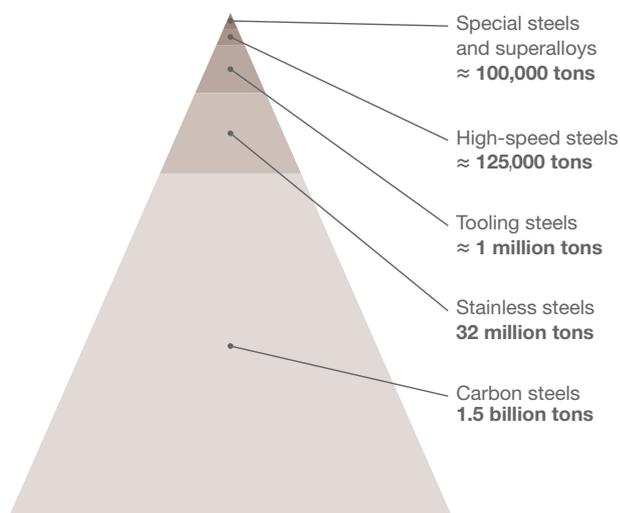
The Alloys Division makes special steels, tool steels, high-speed steels and superalloys and works them by forging, rolling and drawing. It has developed a thriving activity in the special field of closed die-forging which it uses to work special steels, superalloys and, additionally, titanium and aluminium. This process involves hot-shaping metal with a press or a ram, using specially-produced tooling for each part to be manufactured.

The Group is the global leader in high-speed steels through its Erasteel subsidiary. Through its Aubert & Duval subsidiary, it is the world's second-largest producer of closed die-forged parts for aerospace and one of the main suppliers of special steels for high-technology applications.

2.4.2. Alloys Division markets

The materials and products marketed by the Alloys Division sell for far higher prices than products in carbon steel or even stainless steel. Market volumes, and hence market size, are also far smaller.

World steel production by main product family in 2011



Eramet estimates.

2.4.2.1. HIGH-SPEED STEELS

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 discs and industrial cutters.

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

Western consumption of high-speed steels has been affected by competition from tungsten carbide. Another development in recent years is the emergence of industries consuming high-speed steel in countries such as China and, to a lesser extent, Brazil, particularly for less technically-intensive applications. This has set the Western high-speed steel market on a downward trend.

However, in China, demand for tools containing high-speed steels is growing fast as a result of the country's rapid economic and industrial development (vehicle manufacturing, etc.).

2.4.2.2. TOOL STEELS

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

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, resistance to wear and tear 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 application families:

- Cold working (manufacturing of tools for cutting and stamping);
- Hot working (manufacture of tools for embossing, extrusion and light alloy injection);
- Plastic injection moulds.

2.4.2.3. ALLOYS WITH HIGHLY ADVANCED CHARACTERISTICS AND NICKEL ALLOYS

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

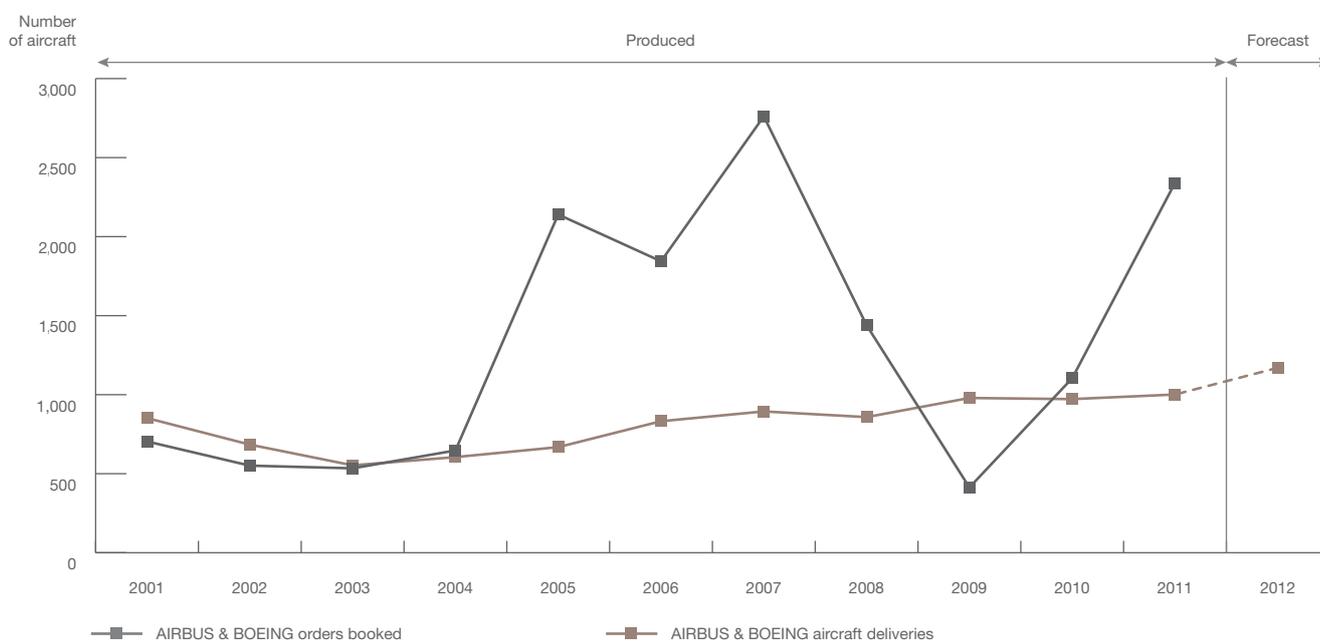
- Alloys with special physical properties: low-expansion alloys, alloys with magnetic properties mainly for electronics industries, electrical elements (for industrial heating and domestic appliances) and alloys for the transportation of liquefied natural gas;
- Corrosion-resistant alloys (chemistry,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

- Alloys with 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, 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 sector does, however, experience marked cyclical patterns. 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

2.4.3.1. PRODUCTION OF STEELS WITH HIGHLY ADVANCED CHARACTERISTICS AND SUPERALLOYS

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 and 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 containing nitrogen- and oxygen-reactive alloying elements). It is carried out in vacuum induction melting-type (VIM) furnaces.

REMELTING

Remelting takes place under slag (ESR—Electro Slag Remelting—furnace) or in a vacuum (VAR—Vacuum Arc Remelting—furnace). 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

After an alloy has been made, various techniques are used to shape the material by mechanical and, in most cases, 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 Alliances competitors

The table below lists the main producers in the Alloys Division's main business activities. It highlights the special nature of ERAMET's Alloys Division, which has the advantage of being present in every high-value-added segment.

The Division's special nature is built on:

- 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.

Companies	Worked metals					Method of working			High-power closed die-forging				Open forging
	High-speed steels	Tool steels	High-performance special steels	Super-alloys	Titanium	Air	Vacuum	Powder	High-performance special steels	Super-alloys	Aluminium	Titanium	
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 ALLIAGES													
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)													
Shanghai Baosteel (China)													
Schmolz & Bickenbach (Germany & USA)													
Snecma (France)													
Thyssen Krupp (Germany)													
Tiangong (China)													
Valbruna (Italy)													
VSMPO (Russia)													

2.4.5. Alloys Division structure

2.4.5.1. KEY POINTS

The key facts on the Alloys Division are as follows:

- global leadership in a number of respects: the leading global producer of high-speed steels (Erasteel) and the second-largest 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 specialist markets;
- the commissioning in 2011 of a new titanium press (UKAD), a new powder-metallurgy atomising tower (Erasteel), a new VIM furnace for vacuum alloy production and an aluminium press (Aubert & Duval);
- new partnerships in China and India.

2.4.5.2. ALLOYS DIVISION HISTORY

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 Alliances 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 manufacture).

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

1956: Founding of Commentryenne des Aciers Fins Vanadium Alloys.

1982: Kloster Speedsteel was founded in Sweden by merging the high-speed steel divisions of Uddeholm 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 incorporating special steels.

1945/1960: The Group positioned itself in cutting edge sectors, the development of which played an important role in the 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 specialist production primarily for high-tech markets.

1977: Founding of Interforge (with a 13% stake for Aubert & Duval).

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

1987: Stake taken in Special Metals Corporation (SMC).

1989: The Aubert & Duval holding company was renamed S.I.M.A.

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

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

1997: Dilution of S.I.M.A.'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 S.I.M.A., which thereafter held 95%. FISID, the holding company for Tecphy and Fortech, was renamed HTM.

1999: S.I.M.A.'s businesses were incorporated into the ERAMET Group, in which the shareholders of S.I.M.A. 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.

ALLOYS DIVISION HISTORY

2001: Launch of capital expenditure on a new forging and closed die-forging plant with a 40,000-tonne press in Pamiers.

The Group's interest in SMC was fully impaired.

2002: Erasteel acquired a controlling interest (78%) in Peter Stubs (UK).

2003: A major restructuring programme was announced at Aubert & Duval.

2004: The stake in Peter Stubs was increased to 100%. Implementation of the restructuring and industrial reorganisation programme at Aubert & Duval. The merger of Aubert & Duval Holding, Fortech and Tecphy into a single company, Aubert & Duval, was completed on 1 July 2004, backdated to 1 January 2004 (merging under the preferential regime provided by Article 210-A and B of the French General Tax Code).

2006: Aubert & Duval—Opening of the new closed die-forging plant in Pamiers (40,000-tonne press).

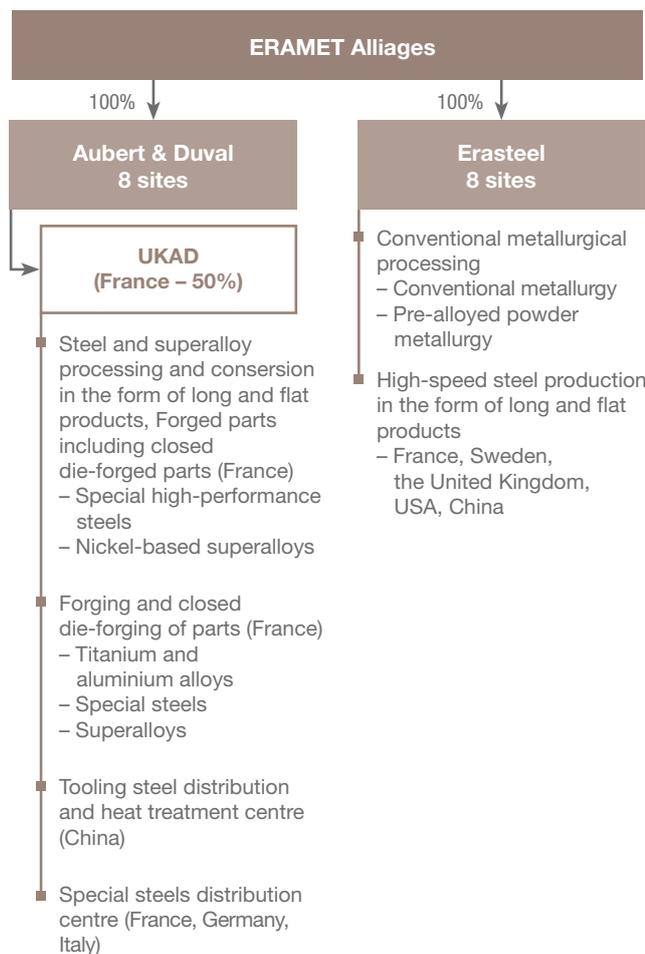
Aubert & Duval—Opening of the tool steels distribution centre in Wuxi (China).

2007: Erasteel—Opening of the high-speed steel drawing workshop at Tianjin in China.

2008: Signing of a titanium partnership agreement (UKAD).

2011: Signing of a partnership agreement in high-speed steels (HeYe, China), Acquisition of interests in powder metallurgy (Metallied, Spain) and in closed die-forging of small and medium-sized parts (SQuAD, India).

2.4.5.3. ORGANISATIONAL STRUCTURE AT 31 DECEMBER 2011



2.4.5.4. ALLOYS DIVISION PRODUCTION

ERASTEEL

Erasteel production

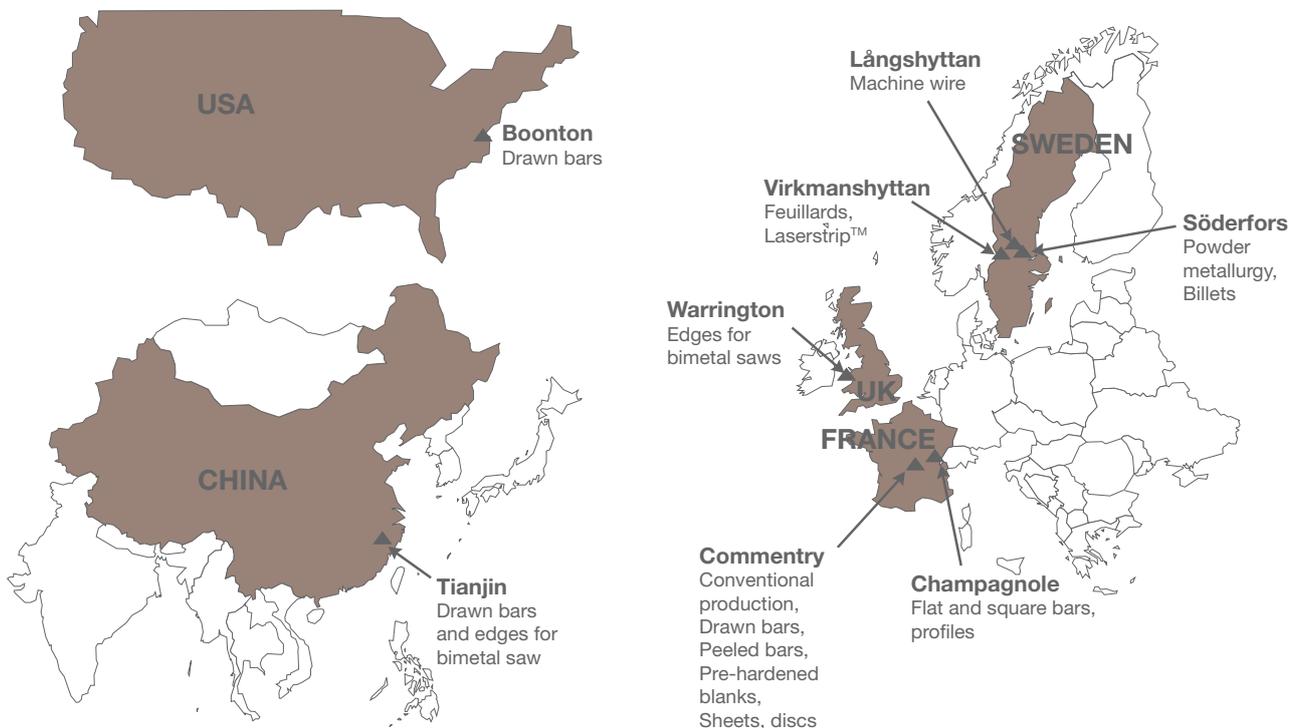
- Erasteel addresses the specialist market for high-speed steels of which it is the world's leading manufacturer. Its competitors are general steel companies: Böhler-Uddeholm (Austria), Carpenter/Latrobe (United States), Hitachi (Japan), HeYe (China), Tiangong (China).

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. Lastly, Erasteel is 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.

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 technically advanced speciality products that are intended for customers seeking high repeatability and reliability in terms 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;
- Long 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 highest-selling segment. Aubert & Duval is the world's second largest closed die-forging 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 die-forges all four types of material: steel, 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

This sector has the following equipment:

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

The Issoire site is specialised in 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 1970s around a 65,000-tonne press which 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 (namely 94% for Aubert & Duval and 6% for Snecma).

The press is a key strategic advantage, as it places the Aubert & Duval group favourably vis-à-vis 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 Rusal 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, Liebherr, 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 pace with growing equipment size (high-capacity aircraft, 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, etc.).

The closed die-forging business was strengthened in 2007 by the plant at Pamiers, France, featuring a 40,000-tonne press. On 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 (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, ATI-Ladish and the Austrian group Böhler.

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

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 up to 50 tonnes or 20 meters in length, as well as surface treatment equipment (case hardening or nitriding);
- non-destructive testing equipment (dye-penetrant testing, 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 high-technology markets (aerospace, energy, armaments, automotive, medical, etc.).

Long products sector

These are products with advanced characteristics and are intended for working or machining. Aubert & Duval focuses on critical applications in the aerospace, medical and automotive (engine valves, etc.) sectors.

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/Latrobe (US), Allvac (US), Tata Steel (UK) and Böhler Uddeholm (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, Schmolz & Bickenbach, Hitachi and Daido groups.

Aubert & Duval is specifically positioned uprange, providing significant levels of technical support. 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 specialities 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 disc closed die-forging and surfacing powders.

2.4.5.5. MARKETING POLICY AND PRODUCTS

ERASTEEL'S MARKETING POLICY AND PRODUCTS

Erasteel works in close partnership with its customers on a long-term basis. 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 products offer to respond to the needs of its markets.

Alloys ROCE (before tax)

(in %)	2007 ⁽¹⁾	2008 ⁽¹⁾	2009 ⁽¹⁾	2010 ⁽¹⁾	2011 ⁽¹⁾
Alloys	11	13	(14)	7	3

(1) IFRS.

AUBERT & DUVAL'S SALES POLICY: CLOSE RELATIONS WITH MAJOR BUYERS

Multi-year contracts (typically 3-10 years) with major aerospace buyers usually specifying the market shares to be ordered each year. Shipments are therefore tied to aircraft production rates and, consequently, to 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 (the case for closed die-forging) is usually financed by customers. This situation is a barrier to entry for new competitors once the initial contract has been awarded.

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

2.4.5.6. ALLOYS DIVISION 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 sales into R&D. Work is conducted both on process improvement and the development of new alloys and products.

2.4.5.7. ALLOYS DIVISION'S RETURN ON CAPITAL EMPLOYED (ROCE)

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 long-term debt, plus provisions for major disputes, redundancy plans and restructuring, less non-current financial assets).

2.5. ORGANISATIONAL STRUCTURE OF ERAMET SA/ ERAMET HOLDING COMPANY

ERAMET SA is the consolidating parent company, operationally bringing together under one roof 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 housing the research and development activities;

- ERAMET Ingénierie: a project and technologies company;
- ERAMET International: a company that pools 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 portion thus encompasses the holding role of ERAMET SA and its consolidated subsidiaries (Metal Securities, Metal Currencies and ERAS).

2.6. ACTIVITY OF THE DIVISIONS IN 2011

2.6.1. The Nickel Division in 2011

2.6.1.1. KEY FIGURES

(to IFRS, in millions of euros)

	2011	2010	2009
Sales	989	965	655
Current operating profit (loss)	189	194	(62)
Net cash flow generated by operating activities	206	176	104
Capital employed ⁽¹⁾	745	794	693
Industrial capital expenditure	141	124	107
Average workforce	3,035	3,022	3,106

(1) Excluding the impact of capitalised expenses on the Weda Bay project.

2.6.1.2. COMMENTS

ERAMET Nickel's current operating profit came to €189 million, compared with €194 million in 2010. In 2011, the stainless steel market experienced contrasting half-years, with firm world production in the first half, followed by a fall in the second half of the year. For the year as a whole, world stainless steel production rose 5%.

Nickel prices increased 5% on average in 2011 compared with 2010, to USD10.4/lb but, here again, with contrasting performance in the two half-years. The right to normal working pace of the new nickel production capacities was slower overall than forecast, buoying nickel prices in the first half of 2011. In the second half-year, falling demand engendered a slight market surplus with a retreat in nickel prices, which ended the year at some USD8/lb. This price level caused a downward adjustment in the production of nickel pig iron in China.

Metallurgy production at the Doniambo plant in New Caledonia slightly increased to over 54,000 tonnes, despite exceptionally heavy rainfall in the first half of 2011. The Group continued to invest in the modernisation of its mining and metallurgical plant,

particularly featuring the commissioning of an ore-drying furnace in the second half-year. Studies continued for the optimum solution to replace the Doniambo electric power generating station, for a decision in 2012.

Nickel deliveries remain stable in 2011 compared with 2010. ERAMET Nickel production costs were particularly impacted by the rising cost of energy and its operations suffered from the operating problems of certain sub-contractors.

Société Territoriale Calédonienne de Participation Industrielle (STCPI) and the ERAMET Group jointly decided to extend for a further period, until 31 December 2012, their agreement as shareholders in Le Nickel (SLN). The parties also agreed to continue their discussions to make adjustments to that agreement by 31 December 2012. While its guiding principles would remain unchanged, the adjustments would take account of the full array of industrial, commercial and technological changes both within SLN and in its environment since the conclusion of the original agreement. Moreover, in 2011, the ERAMET Group and SLN renewed their commercial and technical agreements.

2.6.2. The Manganese Division in 2011

2.6.2.1. KEY FIGURES

(to IFRS, in millions of euros)

	2011	2010	2009
Sales	1,713	1,858	1,289
Current operating profit (loss)	388	548	(27)
Net cash flow generated by operating activities	402	562	(28)
Capital employed	1,164	1,069	1,117
Industrial capital expenditure	245	130	110
Average workforce	6,418	6,433	6,604

2.6.2.2. COMMENTS

ERAMET Manganèse's current operating profit remained sound at €388 million in 2011, compared with €548 million in 2010. This lower figure is chiefly explained by the falling prices of manganese ore and alloys: spot ore prices CIF to China (Source: CRU) slumped 26% on average in 2011 compared with 2010, ending the year at below USD5/DMTU, while the average price of manganese alloys slipped more than 15%.

World production of carbon steel rose 6% in 2011 compared with 2010, although it slowed markedly in the second half-year, depressing manganese prices. For the world supply of manganese ore rose steadily until the third quarter of 2011 before starting to adjust downwards. Stocks of manganese ore at Chinese ports increased until June, then gradually adjusted, returning close to their start-of-the-year level.

For the year as a whole, ERAMET Manganèse increased its external manganese-ore deliveries by 4.5% compared with

2010. In Gabon, Comilog's manganese ore production rose 7% to 3.4 million tonnes. Progress continued on Comilog's major capital-expenditure programmes: increasing ore and sinter production capacity to 4 million tonnes; Moanda industrial complex; modernisation of the "Transgabon" railway line.

ERAMET's manganese-alloy production rose slightly, by 1%, despite a reduction in Europe in the fourth quarter and the closure of the former Guilin site in China, to make way for the commissioning of the new site, which will take place in the second quarter of 2012. This development will position ERAMET Manganèse on the Chinese market in refined manganese alloys, in which it currently leads the world outside China.

The ERAMET Group strengthened its strategic partnership with Gabon in 2011, through the staged increase in the Gabonese Republic's shareholding in Comilog, in line with the target interest of 35.4% in Comilog scheduled for 2015.

2.6.3. The Alloys Division in 2011

2.6.3.1. KEY FIGURES

(to IFRS, in millions of euros)

	2011	2010	2009
Sales	910	764	750
Current operating profit (loss)	16	29	(49)
Net cash flow generated by operating activities	(1)	43	93
Capital employed	745	647	578
Industrial capital expenditure	100	69	67
Average workforce	4,588	4,566	4,618

2.6.3.2. COMMENTS

ERAMET Alliages sales in 2011 were sharply up from 2010 (by 19% to €910 million), particularly owing to a very rapid recovery in the aerospace activity (up 33%).

The ERAMET Alliages current operating profit came to €16 million for 2011, reflecting the adverse impact of commodities prices and energy costs, as well as non-recurring expenses entailed in preparing for the future.

For, having to increase production drastically in order to meet customers' demand compelled ERAMET Alliages to take a series of measures of which some temporarily impacted performance in 2011: recruitment and training of new personnel, building up stock levels, etc.

In 2011, ERAMET Alliages also commissioned four strategic industrial investments, designed to reinforce its position in high-growth materials with greater technological differentiation: powder metallurgy, vacuum processing of alloys, forging of titanium and aluminium, etc.

The ERAMET Alliages teams also worked hard on preparing strategic partnerships in China and India, which in the long run will offer sizeable potential for expanding this subsidiary's activities in these two growth markets, while also providing a source of earnings in addition to its existing production range.

2.7. PRODUCTION SITES, PLANT AND EQUIPMENT

Generally speaking, the Group owns its production sites and the equipment on them. Some large items of equipment are financed under finance leases (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:

<i>(in millions of euros)</i>	Gross	%	Net	%
Société Le Nickel-SLN (New Caledonia)	1,572	33.07	672	31.71
Others	129		42	
Nickel Division	1,701	35.78	714	33.70
Comilog S.A. (Gabon)	537	11.30	306	14.44
ERAMET Norway (Norway)	359	7.55	158	7.46
ERAMET Marietta (United States)	134	2.82	46	2.17
GCMC (United States)	136	2.86	71	3.35
Others	714		329	
Manganese Division	1,880	39.55	910	42.94
Aubert et Duval (France)	623	13.10	290	13.69
Airforge (France)	111	2.33	78	3.68
Erasteel Kloster AB (Sweden)	140	2.94	40	1.89
Erasteel SAS	107	2.25	18	0.85
Others	168		60	
Alloys Division	1,149	24.17	486	22.94
Holding-Companies Division	24		9	
TOTAL	4,754		2,119	

2.8. RESEARCH AND DEVELOPMENT/RESERVES AND RESOURCES

2.8.1. Research and development: an organisational structure in keeping with Group ambitions, and steadily growing

1) This organisation is based on:

- a dedicated research centre (a wholly-owned subsidiary of ERAMET since 2003) based in Trappes, which changed its name to ERAMET Research in 2008. The centre employs some 141 persons, including 120 researchers, engineers and technicians. This activity earned €18.3 million, 11% up on 2010, and approximately doubled from 2006;
- some 200 additional staff in the divisions deal with more specific areas, such as products, modelling of certain special processes, coordination of industrial tests and, in particular, the critical final industrialisation phases of research projects.

These significant resources generate between 1% and 2% of sales by the Divisions. In 2010, ERAMET created the Research, Innovation, Engineering and Purchases Department, to unify Group-wide the actions to improve these four significant areas of its activity. In 2011, the newly-formed Science and Innovation Department was attached to it.

Since 2006, ERAMET has been continuously stepping up its research & development efforts in order to meet the needs of its industrial customers, improve its competitiveness, offer new services and identify new development opportunities. Potential environmental impact is a constant concern when developing new processes. The reduction in and quality of emissions are determining factors when selecting a new process.

For ERAMET's mining, metallurgical and chemical businesses, effective research is a critical advantage. Designed to meet or even exceed 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 the full relevance of results, the ERAMET Research teams work in close collaboration with the development teams at the various units, who in turn are in direct contact with the operational teams. This makes for considerable efficiency, from determining programmes to introducing innovations, whether involving products, processes themselves or productivity.

The ERAMET Group's R&D is enriched by continuous contact with the academic world and by partnerships with research institutes and industrial firms. In France, ERAMET has standing

partnerships with the Paris advanced-learning institutes *École des Mines* and *École centrale*, and with the Nancy-based Geology University and Mining Institute. AREVA and Rhodia also partner the Group in developing processes for extraction of pyrochlores, particularly from the Mabounié deposit. ERAMET also collaborates with AREVA, TECHNIP, BRGM, IFREMÉR and MEEDDM in prospecting studies on marine mineral resources.

In 2011, a partnership was formed with Cooltech to develop magnetocaloric alloys for the refrigeration markets. Beyond France's borders, the Group has entered into several research partnerships, particularly with Trondheim University in Norway, the GTK public research centre in Fenland, the KT—Royal Institute of Technology in Sweden and the semi-public MEFOS research centre, the South African mineral and metallurgical research institute MINTEK, and the Australian ANSTO and CSIRO institutes (of which the French equivalents are the CEA atomic energy commission and the CNRS national scientific research council respectively).

Research programmes were entered-into in 2011 with a semi-public body in the Spanish Basque Country, CEIT (Centre for Technical Studies and Investigations), specialising in powder metallurgy and materials. Aubert & Duval carried on its partnership with the University of Strathclyde in Scotland and begun undertaking R&D projects at the University's research and development centre on the forming and forging of parts for the aerospace industry (AFRC).

- 2) The flagship project at the Nickel Division is the continued development of the hydrometallurgical treatment process for oxidised nickel ores. For reference, this innovative process was developed between 2005 and 2007 on the back of the extensive experience in processes for extracting and purifying the various metals and the cutting-edge expertise of the teams at ERAMET Research. This process can handle mixtures of the low-grade saprolites and laterites characteristic of ores from Weda Bay in Indonesia and the newer deposits in New Caledonia. The crushed ore is attacked with sulphuric acid at atmospheric pressure and at temperatures below 100°C. The dissolved nickel and cobalt are separated and the manganese is concentrated separately and isolated. This process consumes very little fossil energy and its liquid effluent should satisfy the most stringent environmental standards. Efforts continued in 2011 on an intensive programme of hydro-metallurgy process pilot studies. These pilots totalled 13 weeks, with the chief aim of improving the reliability of processes over a representative period. These studies identified ways of improving project returns in the early start-up years, testing for robustness to variations in raw materials and contributing to the design of future plant and facilities in coordination with several potential suppliers.

In December 2007, ERAMET Research began a new phase in piloting ferronickel production in New Caledonia with a new, larger pilot furnace, the perfect tool for meeting the challenges

of developing ore chemistry in New Caledonia. This enlargement was undertaken to improve safety conditions when operating this larger furnace, and in response to the need for industrial facilities capable of handling the complex phenomena at work in industrial furnaces. In 2010, ERAMET Research achieved stable reproduction at pilot scale of all the chemical, heat and electrical phenomena present in industrial furnaces. The pilot furnace design was adjusted in 2011, thus adequately equipping ERAMET to investigate in 2012 the adaptation of the present process to changes in the chemical composition of the New-Caledonian ores.

- 3) ERAMET Research worked hard in 2009 to increase direct reduction in the ferromanganese smelting furnaces. This was the most effective means available for reducing the specific energy consumption of the process. It featured the design of a brand new pilot furnace tailored to the requirements of the process and five times larger than the existing furnaces. This furnace enabled pyrometallurgical phenomena to be reproduced and studied. Seven weeks' piloting in 2010 yielded exceptional results with energy performance equivalent to close upon 20% potential gains over current industrial standards. The next stage will be to identify what drives this performance in order to transpose on an industrial scale.

ERAMET Research was also involved in various developments of the process for producing electrolytic manganese metal, with the aim of reducing both the consumption of reagents that are not readily available in Gabon and the environmental impact of the process. An industrial-scale pilot run performed in China validated the use of reduced ore instead of ammonia, thus eliminating the necessity to discharge this harmful reagent in aqueous effluent. In a parallel development, the electrolysis hall and cells were redesigned to adapt the electrolytic process to the Group's health and safety standards (eliminating the manual moving of the cathodes practised in China). This move is also designed to make the hall environment healthier by capturing the stray ammonia released by the cathode. An improved prototype industrial cell operated for 5 months in 2011, confirming the design of industrial cells.

- 4) In the Alloys Division, the Aubert & Duval and Erasteel R&D departments continued to create new products and to improve reduction process control in order to cut back on costs, improve process robustness and control production-process uncertainties.

The year 2010 featured the creation of a new research centre in Sweden, PEARL, dedicated to powder metallurgy, a key concept being the gearing of the product to the customer.

To enhance this customer-centred approach, a powder-metallurgy showroom was created, adjoining the PEARL laboratory; a virtual version of this showroom is also available to sales & marketing staff. In October 2011, Erasteel acquired control of a Spanish company, Metallied, which owns several small-scale pilot plants for atomising very fine metal powder. This controlling interest has stepped up Erasteel's strategic development in powder metallurgy.

A majority of resources is devoted to digital simulation. The first stage in simulating new alloy grades, solidification structures and metallurgical processing domains identifies the heat treatment and the expected mechanical characteristics. These ideas are then verified by experimental casting and physico-chemical analyses. Successive iterations of this approach from simulation to testing lead to the development of new industrial alloys and new parts. These innovations materialise through close coordination among researchers and technical specialists at the production sites, and occasionally with some customers partnering development, to better apprehend the value in use of the final applications.

At Erasteel, the development of a new family of steel grades, in partnership with strategic customers for cutting tools, is driving growth in high-speed steels with properties intermediate between conventional products and ASP powders.

A&D innovations are usually intended for strategic industries with customers such as AIRBUS, EADS or the Safran group. Development work is continuing of new parts in Al-Li Airware 2050 alloy. New industrial-development projects were launched for landing-gear parts in the new MLX19 stainless-steel alloy under the aegis of the DGAC (the French Civil-Aviation Board) and in cooperation with Messier-Bugatti-Dowty. At the same time, customers' interest in the new AD730 superalloy was confirmed, and the first discs for hot aeronautical engines were produced for evaluation.

Erasteel is also pursuing three lines of diversification outside high-speed steel:

- the development of stainless steels or superalloys with the new Durin atomising tower in Sweden, targeting the energy markets (oil extraction at sea), for which we are working on qualification of our powders developed in Sweden. On these markets for powder-metallurgy parts, numerous synergies have been developed with A&D (on the commercial, metallurgical, project and other fronts);
- the development of fine powders with the Metallied production facilities in Spain, for emerging markets;
- the development of new powder-metallurgy alloys for the refrigeration markets in partnership with Cooltech.

- 5) Stepping beyond the Group's current business lines, ERAMET is developing processes in line with its diversification strategy. In partnership with AREVA, and in collaboration with Rhodia and several international research laboratories, ERAMET is developing a new process for the hydrometallurgical processing of pyrochlores, with particular potential for application to the world-class polymetallic deposit at Mabounié in Gabon, containing sizeable resources of rare-earth metals, niobium, tantalum and uranium. A dedicated team of 14 engineers and 15 technicians was set up at ERAMET Research and a new laboratory constructed at Trappes to cater for the specific characteristics of this ore. In parallel, the pilot covering the upstream part of the process was designed and assembled at the AREVA site at Bessines-sur-Gartempe (France). Four pilot runs were conducted, yielding preliminary results for continuous operation, and enabling the plant design to be improved.

ERAMET continued to work on developing a process to produce lithium, for electrical-vehicle batteries among other uses, drawing on brine from the *salars* of the Andean *altiplano*. In 2012, a pilot evaporation plant on-site in Argentina and the pilot run for the lithium carbonation process at Trappes should confirm the ability of the process to produce lithium carbonate of sufficient purity for use in batteries. Two new avenues are being explored with first, the development of high-Purity lithium carbonate and secondly, the recycling of batteries to extract lithium from them, among others.

ERAMET has also been associated since 2010 with two campaigns to explore the sea bed off the Wallis and Futuna islands; conducted by the French sea research agency Ifremer, they also involved other partners such as BRGM, the French Marine Protected Areas Agency (Futuna 1), Technip and AREVA (Futuna 1 and 2). These scientific campaigns are designed to gain a closer acquaintance with the sea floors in this Exclusive Economic Zone from all standpoints (topography, geology, geophysics, volcanology, biodiversity, biology, etc.). Their aims included identifying and mapping active and extinct hydrothermal fields, which could in the long run harbour potential for an economically-exploitable mineral resource. Part of the funding for these scientific explorations was provided by ERAMET, and their findings contribute a wealth of sea-floor knowledge to French science; several hydrothermal sites were discovered, and may subsequently be earmarked for more intensive investigation.

6) The Group is deploying its strategy self-sustainably while factoring in environmental concerns, thanks to its R&D

ERAMET specialises in mining alloy metals essential to the steel industry and is an uprange metallurgy industrialist supplying strategic industrial sectors such as aerospace or defence. The Group is strategically positioned and is reinforcing its positions throughout the value chain for these metals from their extraction to their recycling, as well as seeking to diversify its portfolio to other alloy metals and to special non-steel metals, while remaining attentive to preserving the environment. Fulfilling its ambitious strategy entails constantly facing technological challenges, and ERAMET's R&D resources are mobilised to meet them.

Thus, hydrometallurgy is harnessed to both ore extraction and recycling.

The fall in metal content of mineral ores witnessed worldwide calls for process improvements and increased recourse to hydrometallurgy. Recycling waste to recover and separate the small quantities of metal contained in it also makes use of hydrometallurgy processes. ERAMET's several decades of experience in hydro-metallurgy (particularly for nickel and manganese) makes it a unique centre of hydrometallurgy skills. This skills centre provides essential drive to development with, for example, the Weda Bay Nickel project, or again the development of the process for developing the Mabounié deposit and the development of the Lithium project, both of which are lines of diversification for ERAMET.

Recycling is a strategic line of development for ERAMET, and the focus of numerous research programmes.

ERAMET is expanding its recycling activities in various fields, from recovery and separation of metals present in waste to the reclamation of metal waste for inclusion in production processes. As an example, ERAMET Research developed a pyrometallurgy process for recycling scale (metal waste from forging). This process, industrialised at Söderfors in Sweden, recovers valuable metals in the form of an alloy used in steel production by Erasteel. Other projects are being developed or are under study, such as hydrometallurgy recycling of rhenium, nickel and cobalt contained in superalloy machining waste at the Eurotungstène subsidiary in Grenoble. At the Sandouville plant producing metallic nickel, several decades of research have enabled nickel- or cobalt-bearing waste to be recycled and returned to industrial use as an adjunct to the matte provided by Le Nickel-SLN.

Sustainable development is at the heart of ERAMET's strategy, and a watchword for its R&D policy.

Environmental protection is a strategic concern in research and a structuring force for development programmes. As an example of this, environmental preservation played a major structuring role in the early stages of the ERAMET process for hydrometallurgy processing of nickel oxide ores, and environmental concern stands out as a novel feature of this process. All environmental considerations relating to the process were taken into account as early as the bibliographical studies and laboratory tests.

Waste reduction and quality are now a key line of approach to selecting a new process. A major concern in optimising our pyrometallurgy processes is energy saving, reducing the carbon footprint of products derived from these processes; this is the case with direct ferromanganese reduction or ferronickel production at Le Nickel-SLN.

Conclusion

The ERAMET Group's R&D is based on an original organisational approach involving close collaboration among researchers, engineers and operational staff with regular consultation of customers; past experience has proved the worth of this approach. R&D is and shall remain indispensable to driving the Group's strategy of sustainable, diversified growth in an industry with increasingly stringent technical requirements.

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 volcanic-sedimentary rocks.

In Indonesia, the Weda Bay Nickel project has completed the banking feasibility analysis, with the project launch scheduled for end 2012—early 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 developing the Grande Côte heavy mineral sands project in Senegal. The Grande Côte deposit, a few dozen kilometres north of Dakar, is a heavy-mineral placer in coastal dunes containing large quantities of titanium-bearing minerals (ilmenite, rutile, leucosene) and zirconium-bearing minerals. 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.

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 75-year term, renewable for successive 25-year terms 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 State in September 2007 for a renewable 25-year term.

The carrying amount of reserves is recognised at historical cost for purchased claims, and the value of the concessions granted is not measured. The balance-sheet amount does not necessarily reflect market value.

ESTIMATES

The estimates have been drawn up 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.

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

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 masses.

Estimation methodology

Given 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 2004 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.

As concerns Le Nickel-SLN (saprolites for use at the Doniambo plant), Pt Weda Bay Nickel (laterites and saprolites) and Comilog S.A. (manganese ore), an external audit has certified the resources and reserves have been evaluated satisfactorily, and in compliance with the JORC code recommendations.

Mineral resources

Mineral resources are calculated with the same cut-off grades as reserves (except where specified otherwise), but without guaranteeing that these mineral 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 grade than the 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, its 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 have been factored on the basis of experience acquired at 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 for ore dressing, are established based on 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 future technical mining and treatment processes. Reserves are estimated based on a complete mining project. No assurance can be given as to the total recovery of the published reserves, insofar as 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

Mineral resource estimates are broken down by major technical and geographical areas, whereas estimates for recoverable resources and reserves may be 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 through 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 sufficiently close together 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 sufficiently close together 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 (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 figures for the mineral resources of Comilog S.A. at 1 January 2012. The Bangombé plateau, which is currently being mined, was not re-estimated. The estimate of resources at end 2011 remains relevant. This estimate was made on the following granulometry breakdown:

- rock ore is estimated on the basis of the +5 mm of fraction of the drilled samples (as against the +10 mm fraction in 2009), and this is closer to the true cut-off grade at the washery;
- fines are now estimated on the basis of the 2-5 mm fraction of drilling samples, as against the 2-10 mm fraction in 2009;

The figures for resources at 1 January 2012 are based on the following parameters:

- a 30% manganese (Mn) cut-off grade (on the rock-ore granulometric fraction);
- the mined-area boundaries areas updated at end December 2011.

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 consultancy.

Okouma deposit

In the absence of any new information acquired in 2011, the resources announced in 2010 are unchanged. On a similar basis to the Bangombé deposit, the resources are established as follows:

- based on the same drilling granulometric fractions (+5mm for rock ores and 2-5mm for fines);
- based on a 30% manganese (Mn) cut-off grade (on the rock-ore granulometric fraction).

Bafoula, Massengo and Yéyé deposits

Comilog S.A.'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 masses. The quantity and quality of available information is sufficient to estimate inferred resources. Similarly, the reconnaissance work performed on Yéyé indicates the existence of ore masses but here, the quantity and quality of available information are not sufficient to estimate inferred resources.

For these plateaux, the resources announced in 2011 are unchanged.

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 moisture contents of:

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

The figures are given in millions of Dry Metric Ton Units (DMTU million): "Mn DMTU million"; 1 DMTU Mn = 10 kg of manganese.

Moullili deposit

A fine Manganese ore deposit that had filled the Moullili river bed was verified by drilling in 2006 and was assessed for mineral resources, which were included in measured resources. The resources figures at 1 January 2012 were established taking into account the redrawing of the boundaries to the areas mined in 2011. No cut-off grade was taken into account. The dry density for these fines is 1.8.

Mineral resources of manganese rock ore and fines at 1 January 2012

Deposit	Measured			Indicated			Inferred			Total		
	kt	% Mn	DMTU x 10 ⁶	kt	% Mn	DMTU x 10 ⁶	kt	% Mn	DMTU x 10 ⁶	kt	% Mn	DMTU x 10 ⁶
Rock ores > 5 mm												
Bangombé	44,981	45.2	2,031	27,411	45.9	1,257	2,139	42.0	90	74,531	45.4	3,378
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	73,881	46.4	3,421	79,811	46.2	3,687	37,139	36.4	1,350	190,831	44.4	8,458
Fines 2-5 mm												
Bangombé	14,209	41.5	590	9,965	43.0	429	670	38.4	26	24,844	42.0	1,045
Okouma	9,300	45.3	420	17,400	43.5	760				26,700	44.1	1,180
Moullili	3,500	45.4	159							3,500	45.4	159
Bafoula							15,000	32.4	490	15,000	32.4	490
Massengo							7,900	38.1	300	7,900	38.1	300
TOTAL	27,009	43.3	1,169	27,365	43.3	1,189	23,570	34.5	816	77,944	40.6	3,174

RECOVERABLE RESOURCES AND RESERVES

The table below sets out the figures for Comilog S.A.'s recoverable resources and reserves at 1 January 2012 for 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 2 m;
- the mining and technical factors that allow mineral resources to be transformed into recoverable resources or reserves. Those factors were adjusted following the 2011 change in the estimation method (change in drilling granulometric cut-off

grades), and in the light of the production reviews taking account of the year 2011;

- commercial specifications changed at 1 January 2009, simplifying the product range. Thus, only the MMR, MMD and BIOG grades (for rock ore) are included in recoverable resources and reserves;
- zone boundaries frozen because of public-easement constraints (aerodrome, trunk road and HT line).

Reserves are included in recoverable mineral resources. Recoverable resources covered by a mining study have been converted into reserves. Thus, a portion of the ore resources located at the edge of the Bangombé plateau has not been converted into reserves since studies are continuing with the aim of transforming these recoverable resources into reserves.

Okouma deposit

Recoverable-resource figures for the Okouma deposit were established using the same approach as for the Bangombé plateau. However, given the uncertainties regarding the mining-recovery and ore-processing 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 to apply to inferred mineral resources, no recoverable resources have been calculated for the ore-bearing masses at Bafoula and Massengo.

Mouliili deposit

Mining of the upstream part of the Mouliili deposit (called MT1) began in 2010. However, the whole deposit remains classified as measured recoverable resources, since mining studies have not been completed on certain (downstream) areas of the deposit.

Note on the heap

At end 2010, the heap, a stock of ore consisting of surplus fines that had not previously been marketed, was fully exploited. The heap therefore does not appear in recoverable resources and published reserves at 1 January 2012.

Manganese ore recoverable resources and reserves at 1 January 2012 (in millions of DMTU)

Deposit	Granulometry	Recoverable resources			Total
		Measured	Indicated	Inferred	
Bangombé		1,438	712		2,150
Okouma	> 8 mm		2,710		2,710
Mouliili					
Heap					
TOTAL ROCK ORE		1,438	3,422	0	4,860
Bangombé		488	284		772
Okouma	1-8 mm		1,200		1,200
Mouliili		141			
Heap					
TOTAL FINES		629	1,484	0	1,972

Deposit	Granulometry	Reserves			Total	2011 shipments
		Proven	Probable			
Bangombé		1,398	154	1,552		
Okouma	> 8 mm					
Mouliili						
Heap						
TOTAL ROCK ORE		1,398	154	1,552	85	
Bangombé		475	54	529		
Okouma	1-8 mm					
Mouliili						
Heap						
TOTAL FINES		475	54	529	60	

The production figures indicated in the above table correspond to ore shipments for 2011, 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 Comilog S.A. were satisfactorily evaluated 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

Mineral resources

The foregoing mineral resources have been grouped together by major geomorphological unit according to the regions defined in the Le Nickel-SLN geographical information system. Their equivalents in the breakdown used by the DIMENC New-Caledonian government agency are shown in brackets.

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.

Humidity contents vary from 22% to 38% according to mass.

These figures were drawn up with:

- a cut-off grade of 1.7-2.2% of nickel for the Tiébaghi and Népoui Kopéto centres with mineralurgical processing of run-of-mine;
- a nickel cut-off grade of 2.0-2.4% for all sites with conventional treatment.

Saprolite mineral resources for the Doniambo pyrometallurgy plant at 1 January 2012

SLN region (DIMENC boundaries)	Measured		Indicated			Inferred			Total	
	kt	% Ni	kt Ni	kt	% Ni	kt Ni	kt	% Ni	kt Ni	kt Ni
Borindi (Kombwi N'Goye)	527	2.84	15	1,408	2.84	40	2,803	2.71	76	131
Boulinda							858	2.60	22	22
Kaala	1,265	2.67	34	2,426	2.70	66	523	2.70	14	114
Kopéto	6,923	2.27	157	10,112	2.27	230	19,022	2.11	402	789
Kouakoue Ouinne							1,932	2.68	52	
Kouaoua	2,541	2.47	63	8,377	2.55	214	6,470	2.55	165	441
Me Aiu Baie Laugier Mara (Boakaine)							1,944	2.59	50	50
Moneo (Moneo North and Centre)							8,529	2.57	219	219
Porou Houailou Mere (Porou)	2,114	2.81	59	664	2.74	18	1,579	2.59	41	118
Poum Arama (Poum)	223	2.57	6	11,206	2.64	296	2,255	2.63	59	361
Poya Me Maoya (Me Maoya)	44	2.61	1	137	2.61	4	463	3.12	14	19
Tchingou							1,750	3.34	58	58
Tene Me Adeo (Me Adeo)							131	3.74	5	5
Thio Camp des Sapins (Thio+Ouenghi)	411	2.88	12	1,109	2.91	32	4,112	2.77	114	158
Thio Nakety (Dothio + Nakety)	3,644	2.61	95	7,310	2.64	193	3,583	2.67	96	384
Thio Rive Droite Meh Neumenie (Thio)							20	3.33	1	1
Tia Plaine des Gaiacs							1,753	2.57	45	45
Tiébaghi	8,122	2.45	199	28,588	2.27	650	7,865	2.27	179	1,028
Tontouta Humboldt (Tontouta)				1,613	2.56	41	479	2.52	12	53
Tontouta Ouenghi (Tontouta)	721	2.51	18	875	2.68	23	1,755	2.51	44	86
TOTAL	26,537	2.48	659	73,824	2.45	1,807	67,824	2.46	1,668	4,135

A salient feature in 2011 is the fact that SLN's historic mines (Thio, Kouaoua, Népoui) have virtually reached the reconnaissance limits for the deposits within their immediate mining scope. The resources within those bounds are diminishing overall. As regards these resources, geological work will be undertaken to improve the degree of knowledge of the deposits concerned. For many years, SLN has been engaged in reconnaissance of the remote peripheral deposits and will continue its efforts in the area for the years to come.

In 2011, geological prospecting work increased SLN's resources in the remoter peripheral areas of the mines:

- Rive Gauche Tontou at Thio;
- ORG at Kouaoua;
- the eastern part of Tiébaghi.

Resources have also been included in the Southern massif of the Kouakoué region.

Exploration results

The exploration results also correspond to the weathered saprolites phase. At 1 January 2012, they are evaluated at 456 kt Ni (16.5 Mt at 2.76% Ni). The difference, 48 kt Ni lower than for 2011 is explained by the continuing reconnaissance work the deposits in the regions of Thio (Rive Gauche Tontou) and Kouaoua (Stamboul, ORG). On the basis of this work, the exploration findings have been converted into inferred mineral resources.

Recoverable resources and reserves

The table below gives the recoverable resources and reserves of saprolites for the Doniambo pyrometallurgy plant at 1 January 2012, with those published in 2011 shown in italics. The data

show the thousands of tonnes of nickel contained in the ore shipped, calculated with the moisture contents observed on production in progress or estimated. 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 the coarser fractions depending on ore content;
- mineralurgical processing in Népoui Kopéto (in existence) and Tiébaghi (building up to normal output);
- mining projects in the case of reserves.

Changes in mineral resources and reserves of Le Nickel SLN from 2010 to 2011

Changes in recoverable resources and reserves of Doniambo

Reserves included in Resources

Resources recoverable	2011			2010			Reserves	2011			2010		
	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni		Mt	% Ni	kt Ni	Mt	% Ni	kt Ni
Measured	18.6	2.66	493	19.1	2.70	517	Proven	14.5	2.72	393	13.2	2.73	362
Indicated	46.6	2.67	1,243	45.5	2.67	1,217	Probable	23.1	2.75	637	24.1	2.76	666
Inferred	44.7	2.59	1,158	41	2.58	1,058	-						
TOTAL	109.9	2.63	2,894	105.6	2.64	2,792	TOTAL	37.6	2.74	1,030	37.3	2.76	1,028

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 Dôme and 1.7–2.8% Ni for Tiébaghi Alpha).

SLN mining production in 2011 amounted to 58 kt Ni ('000 tonnes of Nickel). This figure corresponds to the tonnages of nickel contained in the ore transported to the various facilities at ports (wharves or mechanical loading machinery).

Reserves are estimated at some 1,030 kt Ni at 1 January 2012, compared with the 1,028 kt Ni of reserves in 2011. This corresponds to a 104% renewal rate for the reserves.

The indicated and measured recoverable resources are evaluated at 1,736 kt Ni. The proportion of measured and indicated resources in the inventoried total is slightly lower because the resources provided by the prospecting teams are classified as inferred.

Inferred recoverable resources are estimated at 1,159 kt Ni. The gain observed in comparison to the 2010 figures results from prospecting in 2011 of the Thio, Kouaoua, Tiébaghi and Kouakoué regions.

The renewal rate of saprolite recoverable resources for pyrometallurgy was 284%.

An external audit was carried out in 2008 by Melabar GeoConsulting, which certified that the resources and reserves estimated by Le Nickel-SLN were evaluated satisfactorily in accordance with the recommendations of the JORC code. The next external audit is programmed for end 2012.

SLN constructs its mining and industrial plan on the basis of all its reserves and part of the recoverable reserves regarded as economically exploitable but not yet included in any mining project. The sum of reserves and recoverable resources included in the current mining plan is 2,025 kt Ni (of which 1,030 kt Ni declared as reserves) at 1 January 2012.

MINERAL RESOURCES FOR HYDROMETALLURGY

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

At the cut-off grade of 1.8% Ni and outside ore-processing centres, preliminary exploration results on low-grade saprolite zones, which are currently uneconomical for pyrometallurgical processing, point on a preliminary basis to 2,000 kt in nickel content which may be recovered using the hydrometallurgical process developed by ERAMET.

In 2011, the surveys of the Paéoua massif (East Kopéto) confirmed the existence of well-weathered, low-grade saprolites that are apparently recoverable using hydrometallurgy processing.

Mineral resources for hydrometallurgy have not been audited to date. They are nevertheless 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 strata in the laterites and saprolites, without applying any transformation or beneficiation 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 laterites are around 0.8-0.9 in the masses in question, and nearly 1 for the earthy saprolites. Saprolitic rock ores exhibit higher dry densities, with an average value according to mass of around 1.3-1.4. These figures were established on the basis of measurements performed in 1999-2001 and 2008-2011.

Given the small proportion of sound dividing rock, the tonnages and content provided in saprolites represent the saprolitic column as a whole.

Global resources are calculated by 3-D block modelling performed by the 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 variogram quality permits it.

Local resources were estimated for the Bukit Limber Barat deposit by Tenzing PTY LTD, and on the Coastal, Tofu Blowen and Kao Rahai masses, by an ERAMET team, using multivariate uniform conditioning. Tonnage-content graphs have been plotted from the results obtained, to visualise the selectivity effects in the masses concerned.

The figures set out below are derived from findings of local estimates for the masses marked with an asterisk, and global estimates for the other masses and for the laterite horizon.

Saprolite and limonite mineral resources at 1 January 2012

Prospects	Measured					Indicated					Inferred					Total
	Mt	% Ni	kt Ni	% Co	kt Co	Mt	% Ni	kt Ni	% Co	kt Co	Mt	% Ni	kt Ni	% Co	kt Co	kt Ni
LIMONITES																
Bukit Limber Barat	14.2	1.26	178	0.19	26.9	9.4	1.23	116	0.18	17.0						294
Bukit Limber Timur						15.4	1.22	187	0.17	26.1						187
Coastal Deposits	7.0	1.20	84	0.20	13.9	2.9	1.19	34	0.18	5.2	1.2	1.12	13	0.17	2.0	131
Tofu Blowen	11.6	1.29	150	0.15	17.3	3.8	1.25	47	0.15	5.7	1.3	1.22	16	0.14	1.8	213
Kao Rahai West	3.3	1.33	44	0.23	7.5	2.9	1.25	36	0.21	6.1	1.3	1.23	16	0.21	2.7	96
Kao Rahai East						3.6	1.26	46	0.17	6.2						46
Kao Rahai North-East											3.3	1.00	33	0.09	3.0	33
Big Kahuna (Fonli)						12.0	1.22	147	0.21	25.3						147
Ake Jira						7.2	1.14	82	0.20	14.4						82
Pintu						9.2	1.23	113	0.18	16.5	5.0	1.18	59	0.22	11.0	172
Boki Mekot											7.2	1.23	89	0.12	8.3	89
Jiguru											1.1	1.23	14	0.16	1.8	14
Total Limonites	36.0	1.26	455	0.18	66	66.4	1.22	809	0.18	122	20.4	1.17	239	0.15	31	1,503
SAPROLITES																
Bukit Limber Barat ⁽¹⁾	37.5	1.52	570	0.03	11.2	26.0	1.53	398	0.03	7.8						968
Bukit Limber Timur						53.2	1.42	756	0.03	16.0						756
Coastal Deposits ⁽¹⁾	21.7	1.67	363	0.04	7.8	10.6	1.65	175	0.03	3.5	5.5	1.72	95	0.01	0.6	633
Tofu Blowen ⁽¹⁾	26.6	1.86	496	0.03	6.9	9.0	1.68	151	0.02	2.2	5.0	1.63	82	0.02	1.1	729
Kao Rahai West ⁽¹⁾	12.9	2.05	264	0.04	5.3	5.9	1.93	114	0.04	2.2	3.9	1.85	73	0.04	1.6	451
Kao Rahai East ⁽¹⁾						18.3	1.56	285	0.03	5.5						285
Kao Rahai North-East											25.3	1.58	400	0.03	7.6	400
Big Kahuna (Fonli)						14.2	1.54	218	0.04	5.7						218
Ake Jira						14.9	1.64	244	0.04	6.0						244
Pintu						13.5	1.53	206	0.03	4.0	15.9	1.59	253	0.03	4.8	459
Boki Mekot											18.7	1.63	305	0.02	3.7	305
Jiguru											4.4	1.25	55	0.03	1.3	55
Total Saprolites	98.8	1.72	1694	0.03	31	165.6	1.54	2,547	0.03	53	78.8	1.60	1,262	0.03	21	5,503
TOTAL	134.8	1.59	2,149	0.07	97	232.0	1.45	3,356	0.08	175	99.3	1.51	1,502	0.05	51	7,007

(1) Resources estimated using multivariate uniform conditioning.

At a constant cut-off grade, the measured, indicated and inferred resources were 2,200,000 tonnes higher than the estimates made at the time of the acquisition in May 2006 (7.0 Mt Ni compared to 4.1 Mt Ni).

RESERVES

The figures below relate to the saprolite and limonite reserves intended for hydrometallurgical processing.

Pt Weda Bay nickel limonites and saprolites reserves at 1 January 2012

Mass	Proven					Probable					Total
	Mt	% Ni	kt Ni	% Co	kt Co	Mt	% Ni	kt Ni	% Co	kt Co	kt Ni
LIMONITES											
Bukit Limber Barat	13.0	1.28	166	0.17	21.7	5.4	1.29	70	0.16	8.7	236
Bukit Limber Timur						10.3	1.25	128	0.16	16.4	128
Coastal Deposits	4.4	1.18	52	0.20	8.6	0.7	1.18	8	0.19	1.2	60
Kao Rahai West	3.1	1.30	41	0.23	7.2	1.5	1.24	19	0.21	3.2	60
Tofu Blowen	11.0	1.29	142	0.15	17.0	3.5	1.25	44	0.15	5.1	186
Total Limonites	31.5	1.27	400	0.17	54.4	21.4	1.26	269	0.16	34.7	670
SAPROLITES											
Bukit Limber Barat	23.1	1.60	369	0.03	7.6	10.3	1.59	163	0.03	3.4	532
Bukit Limber Timur						20.9	1.49	311	0.04	8.8	311
Coastal Deposits	19.7	1.60	315	0.05	10.0	4.7	1.57	74	0.05	2.2	389
Kao Rahai West	11.1	2.09	232	0.04	4.4	4.8	2.00	96	0.02	1.0	328
Tofu Blowen	21.2	1.97	417	0.03	6.4	6.5	1.85	121	0.02	0.7	538
Total Saprolites	75.1	1.78	1,334	0.04	28.4	47.2	1.62	765	0.03	16.0	2,099
TOTAL	106.6	1.63	1,734	0.08	82.9	68.7	1.51	1,034	0.07	50.7	2,768

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

- A uniform 1% Ni cut-off grade for the Coastal Deposits ores, earthy saprolites and laterites in the Bukit Limber and Tofu Blowen masses.
- 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 geostatistical 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 to obtain the selectivity estimated by uniform conditioning. These factors were adjusted for the geometry of the mass and for the estimate method and findings. They average 0.98 for Ni content and range from 0.95 to 1 for the ore tonnage.
- The experience garnered 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 zones presenting a natural incline greater than 30° being rejected from

the project 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 thickness varies from 3 m to 12 m according to the specific climatic, geomorphologic or environmental conditions of each mass.

CHANGES IN RESOURCES AND RESERVES IN 2011

Changes observed in resources and reserves between 2010 and 2011 feature an increase in resources by some 10% and in reserves, by almost 13%.

Note that the ratio of proven reserves to total reserves rose from 50% in 2010 to more than 60% in 2011.

These changes are chiefly explained by:

- incorporation of findings from intensive reconnaissance on the Tofu Blowen and Kao Rahai deposits, which have appreciably richer Ni contents than the other C.O.W. ore masses;
- the carrying-out of a mining project on the Kao Rahai West mass, enabling part of the resources to be converted into reserves;
- the conversion into probable reserves of part of the Tofu Blowen resources following the carrying out of new mining projects.

Changes in Pt Weda Bay nickel resources and reserves from 2010 to 2011

Reserves included in Resources

Mineral resources	2011			2010			Reserves	2011			2010		
	Mt	% Ni	kt Ni	Mt	% Ni	kt Ni		Mt	% Ni	kt Ni	Mt	% Ni	kt Ni
Measured	135	1.59	2,149	135	1.59	2,149	Proven	107	1.63	1,734	78	1.55	1,207
Indicated	232	1.45	3,356	212	1.44	3,046	Probable	69	1.51	1,034	78	1.50	1,159
Inferred	99	1.51	1,502	77	1.49	1,144	-						
TOTAL	466	1.50	7,007	424	1.50	6,339	TOTAL	175	1.58	2,768	155	1.52	2,366

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.

Drilling will continue over the coming years to close the drilling pattern on certain strategic masses, which will result primarily in an improvement in confidence levels and resource/reserve classification.

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/cm³.

TiZir mineral resources at 1 January 2012

Resources	Run of mine (Mt)	HM (%)	HM (Mt)
Measured	1,002	1.73	17.3
Indicated	74	1.77	1.3
TOTAL	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, leucosene and rutile).

RESERVES

The data on reserves correspond to the transformation 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 2012

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

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

3

RISK FACTORS

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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 (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 (ex-Jernverk) for electricity.

The exposure to manganese is not hedged since there is no organised market in manganese.

Hedges are put in place with a horizon of 1 to 4 years, depending on the commodities, and based on the budget. Only part of the forecast consumption or production is hedged (e.g. for fuel oil, an average 50% and a maximum 80% of the budget is hedged). The Group uses various instruments to hedge and limit its exposure: futures and options.

At 31 December 2011, the fair value of hedges put in place for the various commodities breaks down as follows:

- €6 million asset for nickel (€4 million liability at 31 December 2010);
- €5 million asset for fuel oil (€5 million asset at 31 December 2010);
- 0 for aluminium (0 at 31 December 2010);
- €1 million liability for electricity (€6 million asset at 31 December 2010).

3.2. SPECIAL RELATIONSHIPS WITH GROUP 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 without long-term political and economic stability. While the Group ensures that appropriate measures are taken to avoid such risks, political and/or economic changes could have a material impact on its business.

3.2.2. Special relationships with third parties

3.2.2.1. 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 ongoing operations do not present any particular risks or commitments for the Group. These mainly involve purchases of raw materials (electricity, coke, and special alloys) and freight services (sea and land).

To date, ERAMET has not entered into any major contracts entailing a major obligation or commitment for the Group as a whole, other than those entered-into in the normal course of its business.

3.2.2.2. NICKEL DIVISION

SUPPLY CONTRACT WITH NISSHIN-STEEL

Nisshin-Steel, a Japanese stainless steel producer, has been a shareholder in Le Nickel-SLN since 1991, and currently holds a 10% interest. ERAMET and Nisshin-Steel have had a ferronickel supply agreement in place since 1991. Nisshin-Steel is a major customer that accounts for 10% of sales at the Nickel Division. This agreement was renewed in 2001 and 2007 and is designed to guarantee ferronickel deliveries for several years and smooth fluctuations in nickel prices.

RELATIONSHIP WITH STCPI AND NEW CALEDONIA

Le Nickel-SLN, a subsidiary 56%-owned by ERAMET, is 34% held by the Société Territoriale Calédonienne de Participation Industrielle—STCPI. Pursuant to the shareholders' agreement of 13 September 2000, this shareholding was raised to 34% at the close of the Shareholders' General Meeting of 23 July 2007. Four Directors out of twelve, plus an observer, represent that company on the Board of Directors of Le Nickel-SLN, while two others out of fifteen represent it on the Board of ERAMET.

LE NICKEL-SLN SHAREHOLDERS' AGREEMENT

Pursuant to the Le Nickel-SLN shareholders' agreement of 13 September 2000 between ERAMET and Société Territoriale Calédonienne de Participation Industrielle (STCPI), which followed the agreement of 17 July 2000 between the State, the provinces of New Caledonia and representatives of the island's main political parties, and after the share swap of 23 July 2007, STCPI holds 34% of the share capital of Le Nickel-SLN, in which ERAMET holds a 56% interest and Nisshin Steel a 10% interest.

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. This interest, initially of 30%, was sold by the French State when ERAMET was privatised. Its political, financial and strategic value resides in its allying local 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 one hand and the Northern and Island Provinces (with a mostly Melanesian population) on the other hand. It is represented on the Board of Directors of Le Nickel-SLN, and by two Directors out of fifteen on ERAMET's Board of Directors. The Board members and observer are selected so as to ensure parity of representation between 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 was renewed in 2010 for a first period up to 31 December 2011, and thereafter extended in 2011 until 31 December 2012. 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 over the shares held by any party that falls under the control of a company, "the main activity of which, or of the group to which it belongs, competes with that of Le Nickel-SLN";
- a non-dilution clause whereby in the event of the sale of shares to another shareholder or a share capital increase, each party shall retain the same interest in the share capital or voting rights as they had previously, through either balancing transfers of shares or the joint exercise of subscription rights in a share capital increase.

Following a press release from STCPI on 27 June 2008, proposing the holding 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 shareholding 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 the implementation of a new, modernised corporate-governance system with greater involvement by New Caledonia, and the creation of a strategic committee, an audit committee and a remuneration committee. STCPI has broad representation on all three committees, and chairs the audit committee.

On 13 July 2010, STCPI and ERAMET agreed to hold discussions to make adjustments to that agreement. Its guiding principles would remain unchanged, but the adjustments would take account of the full array of industrial, commercial and technological changes both within Le Nickel-SLN and in its environment since the conclusion of the original agreement. The extension of that agreement in 2011 until 31 December 2012 allows the discussions in progress to continue.

NOTE ON NEW-CALEDONIAN ORE RESERVES

The implementation of the Bercy agreements on 1 February 1998 was completed at the end of 2005. The Koniambo massif mining rights were granted to SMSP and those of Poum to Le Nickel-SLN. The French State is guarantor of the proper execution of the Bercy agreements. ERAMET and Le Nickel-SLN will be attentive to ensuring due performance in this matter, satisfying themselves that Falconbridge (acquired by Xstrata of Switzerland) duly fulfils its commitments and that the transfer of mining rights is actually linked to the construction of a plant in the North of New Caledonia.

RELATIONS WITH PT ANTAM AND INDONESIA

The Indonesian company, Pt Weda Bay Nickel, is the project and exploration company created to develop the nickel and cobalt project at Weda Bay, situated on the island of Halmahera 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 a Director on the Board of Directors of Pt Weda Bay Nickel (out of a total of five Directors, of whom three represent ERAMET) and it also holds an option to increase its shareholding to 25%.

Pt Weda Bay Nickel's exploration and mining are carried out under a "Contract of Work" with the Indonesian government.

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 of Pt Weda Bay Nickel out of a total of five Directors. Pamco is not represented on any of these boards.

3.2.2.3. MANGANESE DIVISION

RELATIONS WITH THE GABONESE STATE

Comilog has had a special relationship with the State of Gabon, which has been a shareholder since 1973, with an interest currently just below 29%, and 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 building the Owendo Port, operated under a concession by the Comilog subsidiary, Port Minéralier d'Owendo) and more recently by granting 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 joint interests, makes it possible to work together on a constructive basis and to plan for the development of new industrial projects.

For purposes of its project to construct two silicomanganese and metallic-manganese metallurgical units at Moanda in the Upper Ogooué (termed the "Moanda Metallurgy Complex"), Comilog signed two agreements with the Gabonese authorities on 7 January 2010, in Libreville; 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. Dedicated financing was arranged to implement the project. One of the conditions for the release of the funds is the issue of a guarantee by ERAMET and the Gabonese Republic, as the reference shareholders; this has already been issued by ERAMET, and the Gabonese part of the guarantee undertaking is pending ratification by its Parliament.

On 20 October 2010, ERAMET and the Gabonese Republic concluded an agreement to step up the Gabonese Republic's interest in the capital of Comilog. Under this agreement, from 2010 to 2015, ERAMET will transfer in stages to the Gabonese Republic an additional interest of up to 10% of Comilog S.A.'s capital, which would increase the Gabonese Republic's shareholding in Comilog S.A. to 35.4%. The first transfer stage 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 is to be transferred on 14 June 2011.

TIZIR PARTNERSHIP WITH MINERAL DEPOSITS LIMITED

On 25 October 2011, ERAMET and Mineral Deposits Ltd created a joint venture, with each of the partners holding 50%, to hold a 100% interest in ERAMET Titanium and Iron (ETI) (Norway) and 90% of the Grande Côte mineral sands project in Senegal. Production is scheduled to start at Grande Côte in late 2013, and will assure ETI supplies of good-quality ilmenite for its titanium dioxide slag production. The zircon production at the Grande Côte project will assure a strong position for TiZir on another very promising market. Lastly, TiZir will be backed by ERAMET's skills in mining, metallurgy, R&D, logistics and marketing, and by the project-development experience of the MDL teams, with the Senegalese Sabodala gold ore project in commissioned in 2009, and the exploitation of the mineral sands.

3.3. MINING AND INDUSTRIAL RISKS

3.3.1. Risk entailed in evaluating mining resources and reserves

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" subsection 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 beforehand the making of 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

Within ERAMET, the 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 Department.

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

Given metals' unique feature of being almost endlessly 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 durable and recyclable products may, at some stage in their conversion or use, present dangers or risks. The issue for the Group is, therefore, to identify all such hazards, prevent and control the resulting risks to its sites and to the outside environment, while contributing to the sustainability and development of its business activity.

As regards regulatory compliance, ERAMET has set itself a "zero disputes" goal as described below. Also reviewed are the various industrial-risk issues related to the Group's activities involving the status of polluted sites and soil, and the adequate control of industrial risks.

3.3.3.2. INDUSTRIAL RISK PREVENTION POLICY

GROUP CRISIS MANAGEMENT PROCEDURES

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

- crisis prevention: identification of the local and national landscape (authorities, elected representatives, media, etc.), contact plans, identification of weak indicators, Group reporting, simulations;
- management of serious incidents: 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 to all sites except China.

As part of the first procedure, a one-off action was taken in 2008, driven by the DC2D, in order to identify site and Group stakeholders.

In 2011, especial attention was paid to crisis simulation exercises at the sites in French-speaking areas. Out of 24 sites,

18 conducted one or more exercises in 2011, some of them with the Fire Brigade in attendance. Out of the 6 remaining sites, 5 have a formally-drafted emergency plan and must hold exercises annually, and 1 site is currently rolling out the "internal emergency plan" procedure.

METHODOLOGY ASSISTANCE WITH RISK ANALYSIS

The Group provides the sites with assistance for the study of hazards. These analyses are used to exhaustively identify major accident scenarios and the causes and impacts thereof and leads to the establishment of prevention and/or protection barriers (important safety items) to reduce the likelihood or seriousness of possible events.

PREVENTIVE ENGINEERING REQUIRED UNDER THE GROUP'S DAMAGE INSURANCE POLICY

In 2011, ERAMET continued its policy of biannual engineering visits (prevention audits) to all its industrial sites in close cooperation with the insurer, the Group Insurance Department and DC2D.

The following sites were visited:

- Aubert & Duval: Gennevilliers, Pamiers, Airforge;
- Erasteel Kloster: Söderfors, Langshyttan and Vikmanshyttan;
- Manganese Division: Comilog S.A., Setrag, GCMC, ERAMET Marietta, ERAMET Norway (Porsgrunn and Sauda), Tampico and, in China, Chongzuo, Laibin and New Guilin.

The follow-up indicators for the actions decided as a result of these visits are included in a summary report presented to the Executive Committee twice a year, covering compliance with standard fire safety procedures and the actions to protect strategic industrial facilities.

For example, in the case of the standard Group procedures drawn up with the insurers, in three and a half years the performance indicator for all industrial sites covered by the Group policy (some 50 sites) has risen from 39% to 74% for strict procedural compliance and fallen from 19% to 0% for the absence of procedures.

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 ensure optimum protection for new facilities. In 2011, these studies focused on UKAD, IV30 and the critical electrical rooms at Les Ancizes, the Champagnole rolling mill, New Guilin, the C2M project in Gabon, the protection of fuel tanks and critical electrical rooms at SLN.

ENVIRONMENTAL INSURANCE POLICY—RISK-CONTROL INSPECTIONS

In 2007, ERAMET signed an extension of its Group Civil Liability policy with Axa, including Environmental Damage cover (Écosphère).

Under the inspection programme, the insurers assess the risk of harm to the environment, with 3 sites inspected per year. A half-yearly progress report monitors implementation of the actions decided following these inspections.

3 • RISK FACTORS

3.3. MINING AND INDUSTRIAL RISKS

In 2011, the Aubert & Duval Imphy, Valdi Le Palais-sur-Vienne and ERAMET Sandouville sites were inspected in accordance with the pre-established schedule.

Each site inspection involves determining the site's compliance with the regulations, inspection of the terrain and a first-approach survey of the existing action plans. This preliminary survey is additional to the periodic internal audits.

This year, the AXA insurer conducted two special assignments. The first was an initial inspection of the New Caledonia sites (Doniambo and the Népoui mine). Discussions are in progress on extending cover to SLN under the Écosphère insurance policy.

The second assignment audited the waste landfill centres at the Erachem Comilog Tertre site in Belgium, specifically requested by AXA following the 2010 "red mud" environmental disaster in Hungary. Following this inspection, AXA was satisfied that Erachem had complete control of the containment ponds.

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 zero formal notices or legal proceedings liable to arise from any breach by Group sites of binding regulatory requirements.

Since 2009 the "zero dispute" has been widened to cover 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 which, if not acted upon, could lead 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 lead to 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 2011 is lower than in previous years, with the following occurrences that year:

- one level 3 dispute arising from the changing demands of the supervisory authorities in environmental cases opened by them in 2009 concerning the GCMC Freeport site in the USA;
- a fresh rise in level 2 disputes. After 7 cases of formal notice in 2010 and 14 in 2009, formal notice was served in 13 new cases, mainly in France, New Caledonia and the USA.

Nevertheless, these disputes remain few in number, and should be viewed in perspective, set against the large number of mining permits with which the Group sites must comply. A first consolidation records over 160 permits, each of which includes at least ten parameters to be complied-with on an annual, quarterly, monthly or even continuous bases.

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 markets. To protect itself against sharp rises in freight costs, the Group strives to enter into long-term contracts 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 damage to property and goods is covered by specific insurance policies.

3.3.4.2. RAIL TRANSPORT

The Group was awarded the concession to operate the "Transgabon" railway for a 30-year term beginning in November 2005. In addition to providing a public service and transporting miscellaneous goods, the railway carries manganese ore from the Moanda mine to the port of lading in Owendo.

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 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 Code and the Environmental Code.

Independently of mining, industrial operations are also subject to specific, site-related regulations. These regulations relate mainly to:

- the regimes governing the operating permits and authorisations;
- compliance with limits on effluent discharge into the natural environment during site operation, taking due account of major industrial risks and health hazards entailed in operations, and the management and elimination of industrial waste;
- the obligations to restore the site after cessation of operations, with particular reference to the risks relating to polluted sites, ground pollution and wastes.

These regulations may change, with possible incidence on the operation and performance, particular where additional capital expenditures are required to factor in environmental concerns after 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 chargeable 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 5% applicable since 2011.

It should be noted that ERAMET is the parent company of a tax consolidation group that comprised 22 companies at 31 December 2011.

The following notes apply to subsidiaries outside mainland France.

- Le Nickel-SLN is liable for the mining and metallurgical corporation tax in New Caledonia 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 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 enjoy 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 prompt, 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. SLN and the other mining and metallurgical businesses have worked hard to develop proposals for reforming mining taxation, to be submitted to the New-Caledonian government Strategic Industrial Committee. The mining business community in New Caledonia will be watchful of any impacts of this reform on current and future tax-freeze arrangements.

- 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 regime is frozen until 2032 under a mining agreement signed in October 2004, 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 finally published in the Office Journal of the Republic of Gabon on 24 to 31 July 2011. The authorities have initiated discussions, involving Comilog and the other mining concerns, on radically redrafting the Mining Code. The mining business community in Gabon will be watchful of any impacts of this reform on current and future mining agreements.
- In general, subsidiaries based outside France (Norway, Sweden, USA, China, etc.) are subject to standard local taxation. The dividends paid by those subsidiaries to the parent company are in some cases subject to a withholding tax. In this respect, the ERAMET Group subsidiaries are covered by the current double-taxation conventions.
- It should be noted that since 1 January 2008, substantial reforms have been introduced to Chinese taxation, among others by discontinuing systems favouring certain foreign companies and introducing a uniform 25% corporate income tax rate. This reform has had no particular implications for the ERAMET Group's Chinese companies.

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 has in the last 12 months had material effects on the financial position or profitability of the Company and/or the Group.

CARLO TASSARA FRANCE

On 17 December 2009, Carlo Tassara France issued a writ against the S.I.M.A., SORAME and ERAMET companies, together with members of the Duval family, summoning them to appear at the Paris Commercial Court. The writ of summons states that the action is being brought in the presence of ERAMET. Details of this action are given in Note 34 to the consolidated financial statements, 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 has entered an appeal against this ruling.

3.4.2.1. NICKEL DIVISION

PRONY AND CREEK PERNOD CONCESSIONS

In January 2009, the Southern Province of New Caledonia awarded to research permits Le Nickel-SLN for the Prony Ouest and Emouchet (“Creek Pernod”) deposits. On the same date, a mining agreement was signed between Le Nickel-SLN and the Southern Province specifying the conditions for developing those deposits.

This project requires the construction of a hydrometallurgy ore treatment plant, entailing annual production capacity of the order of 60,000 tonnes of nickel.

Vale-Inco disputed the validity of the decisions awarding the permits. The permits were annulled by rulings of the New Caledonia Administrative Court on 17 November 2009.

Le Nickel-SLN appealed against these administrative-court rulings. Accordingly, the project has been suspended while awaiting favourable appeal rulings.

SUPPLY OF ELECTRICITY BY ENERCAL

A dispute has arising on the determination of the financial terms applicable as from 1 January 2012 for the supply of electricity by Enercal to Le Nickel-SLN, provided in the 1956 concession agreement for the operation of its Doniambo metallurgy plant at Nouméa in New Caledonia. Despite negotiations between the parties, no agreement has been reached. Accordingly, in December 2011, the arbitration procedure was initiated as provided in the agreement between Enercal and Le Nickel-SLN, and the arbitral tribunal was empanelled.

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 Law Court in Brussels, claiming €335 million in damages. ERAMET Comilog Manganèse, in association with Euroalliages, has taken the fullest measures to fight this manifestly excessive claim, which is actually intended to exert indirect pressure on the European Union. As matters stand, that claim has little chance of succeeding. On 17 February 2009, the Brussels Court found 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 Kazakh producers appealed against this decision, and an appeal ruling could be given in 2012.

FORMER EMPLOYEES OF COMILOG IN CONGO

Before the “Transgabon” railway started operating, Comilog exported its manganese ore *via* the Republic of Congo, where it then employed nearly 1,000 people. Following a very serious rail accident on 5 September 1991 in the Republic of Congo, Comilog’s transportation of ore through this country was suspended. This situation showed no sign of coming to an end, and resulted in the discontinuation of Comilog’s operations in the Congo and the severance of its Congolese employees. After several years of negotiations delayed by the civil war in the Republic of Congo, 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 the Republic of Congo taking over all liabilities and obligations resulting from Comilog’s operations in the Republic of Congo. Under the terms of this agreement, Comilog paid the Republic of Congo the sum of one billion two hundred million FCFA to compensate the employees who were dismissed. This sum is in addition to the considerable real and movable assets made over without charge by Comilog. Considering this compensation insufficient, 867 former employees of Comilog in the Republic of Congo summoned three French subsidiaries of Comilog—which never employed these people—and Comilog to appear on 9 October 2008 before the Conciliation Board of the Paris Employment Arbitration Tribunal. After discussing the matter and finding a number of irregularities in the summonses, the Conciliation Board decided to schedule another conciliation hearing for 22 June 2009. A decision by the Conciliation Board on 28 October 2009 referred the matter to the Employment Arbitration Judgement Board, after having sought a judicial opinion on it, and having noted that the objections advanced by the defendant companies, particularly regarding the nationality of Comilog, raised an issue of especial complexity.

In early December 2009, the applicants appealed against that decision, petitioning for its total nullification. A ruling by the Paris Court of Appeal on 30 September 2010 dismissed that appeal. In a decision on 26 January 2011, the Judgement Board of the Employment Arbitration Tribunal declared that it had no territorial competence in the matter. The claimants formally disputed that decision. In view of the weak grounds for these actions, the various defendant companies have not funded any provision.

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 in February and March 2011 instituting various civil actions in Gabon, seeking reparation from Comilog S.A. and ERAMET for environmental damage alleged to have been caused in the past by the operation of the Moanda mining site.

The proceedings are in progress before the Court of First Instance at Libreville, with statements of case exchanged between the

parties. The arguments so far put forward by the claimants fail to substantiate their claims.

GULF CHEMICAL & METALLURGICAL CORP.

In 2009, the American company GCMC (Gulf Chemical & Metallurgical Corp.), a subsidiary of the Group, entered into negotiations with TCEQ (the Texas Commission for Environment Quality) regarding the terms of its mining licence. The authorities noted that it required a number of corrections, which it submitted to GCMC. In February 2011, the Attorney-General for the State of Texas instituted enforcement proceedings against GCMC, mainly relating to the corrections requested by TCEQ, before the District Court of Travis County, Texas. On 15 June 2011, the District Court of Travis County found that GCMC fulfilled the obligations laid down in the amicable settlement signed between the parties. Civil proceedings and discussions remain in progress with local authorities for a resolution of the matter. A provision has been recognised in due proportion to the risk assessed for an amount of two million euros.

3.5. LIQUIDITY, MARKET AND COUNTERPARTY RISKS

3.5.1. Liquidity risk

The Group is not exposed to liquidity risks because of its clearly positive net cash position of €1,153 million at 31 December 2011. Cash surpluses are mostly transferred to Metal Securities, the Group's special-purpose entity responsible for pooling and investing Group cash surpluses.

In addition, the Group may draw whenever necessary on additional sources of financing, namely a revolving credit facility, the issue of commercial paper and a repo programme.

3.5.1.1. OTHER LIABILITIES

Some Group subsidiaries also have credit facilities of their own, some of which were drawn down at 31 December 2011, particularly in the form of finance leases and borrowings.

3.5.1.2. COVENANTS

The main covenants at Group level are described in the Notes to the consolidated financial statements (Note 20).

3.5.2. Market risks

The Group is primarily exposed to three types of market-trading risk: foreign-currency risk, interest-rate risk and commodity risks. These three types of risk are monitored by the Group's Treasury Department.

3.5.2.1. FOREIGN-CURRENCY RISK

ERAMET is exposed to two types of foreign-currency risk, namely:

- transactional currency risks when a Group company pays or receives net flows in a currency other than its functional currency;
- foreign-currency risks to the balance sheet due to changes in the net assets of subsidiaries measured in currencies other than the euro.

Since 2003, the Group has centralised the transactional foreign-currency risk of its subsidiaries. Each Group company reports to Group Treasury its exposure in currencies other than its functional currency. This management scheme is part of a multiyear policy with procedures approved by the Executive Committee and monthly reporting to its members.

The Group manages the foreign-currency risk to the balance sheet for each case individually.

TRANSACTIONAL RISKS

Since 2007, transactions have been carried out *via* the special-purpose entity, Metal Currencies. The subsidiaries in question determine the amount of their net exposure. The associated risks are then hedged if the amount is greater than €2 million or the equivalent thereof per currency and per year, except in special cases.

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 22).

At 31 December 2011, the fair value of the currency hedges in respect of transactional risks represented a €43 million net liability (31 December 2010: a €19 million net asset), mainly due to the strengthening of the dollar against all currencies in the first half-year of 2011.

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. 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 ("Translation adjustments on sales") or purchases ("Cost of goods sold").

A change of plus or minus 10% in the dollar rates would have an impact on the hedges charged to shareholders' equity of around +€106 million were rates to rise and approximately -€147 million were rates to fall.

BALANCE SHEET RISKS

ERAMET partially manages foreign-currency risks to the balance sheet, primarily related to the U.S. dollar, through long-term debt issues denominated in the same currency as the net assets in question.

In 2006, the ERAMET Group acquired Weda Bay Minerals Inc. for USD232 million. This acquisition was financed internally for the equivalent amount in euros, and the foreign-currency risk was hedged from the outset by a euro/dollar currency swap.

See Notes to the consolidated financial statements (Note 22).

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.

At 31 December 2011, the Group had two interest-rate hedges in place on its gross debt.

b) The cash surpluses managed by Metal Securities are invested in:

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

Under these conditions, a drop of 10 basis points in the EONIA/EURIBOR rate would have a negative annual impact of approximately €0.8 million on financial income.

3.5.2.3. COUNTERPARTY RISK

The Group is exposed to several types of counterparty risk, which arise from its customers and its financial partners, particularly because of its cash surpluses.

- The Group has several means of monitoring and hedging its customer risk: gathering information ahead of transactions (from rating agencies, published financial statements, etc.), credit insurance and the putting in place of letters of credit and documentary credits. Trade receivables are specifically monitored by a credit manager for each Group Division, with a credit committee meeting monthly to set individual-customer limits for credit and outstanding balance. 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 putting Group programmes in place, monitoring the risk-control policy in liaison with the DC2D and seeking optimal risk-premium-coverage solutions, including *via* the Group's captive reinsurance.

3.6.1.2. RISK IDENTIFICATION AND CONTROL

When instituting its risk management policy, the Group re-mapped its risks, submitting the map to the Audit Committee attached to the Board of Directors in 2011 in order to set up action plans for each risk designed to prevent their occurrence and limit their impacts, particularly by having them transferred to the insurance market whenever possible.

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 optimise the balance between cost and coverage. 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 to non-recurring operations, as well as 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 more effectively manage premiums *via* reinsurance retrocession and to adjust the retention limits. The Divisions are accordingly encouraged 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 three main insurance programmes cover civil liability, property damage, business interruption and transport risks.

3.6.2.1. CIVIL LIABILITY INSURANCE

GENERAL CIVIL LIABILITY INSURANCE

This programme covers the civil liability incurred by the Group as a result of damage caused to third parties by its business operations or products, *i.e.* general operating liability, property in care or custody, product liability including for aerospace products, professional civil liability and sudden and accidental pollution cover. Coverage is comprehensive meaning that everything not excluded is covered, the 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, when local regulations require local insurance policies, the programme is used on top of these 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 on top of the coverage and limits of several specific sub-programmes, particularly in North America, for motor insurance and employer's civil liability, and on top of mandatory insurance policies in the United Kingdom such as employer's civil liability. The annual renewal date for this programme is 1 July. This programme was put in place on 1 July 2004 with AXA Corporate Solutions. It has been renewed since then with no increase in premiums.

3. RISK FACTORS

3.6. INSURANCE/COVERAGE OF RISKS LIKELY TO BE INCURRED BY THE ISSUER

ENVIRONMENTAL CIVIL LIABILITY

In 2007, a specific environmental civil liability policy was taken out for €10 million to cover certain subsidiaries. The cover terms for this policy were significantly improved in 2010, among others by raising the amount from €10 million to €20 million. A similar policy was taken out for USD25 million in early 2008 for the US and Canadian companies.

3.6.2.2. PROPERTY DAMAGE AND BUSINESS INTERRUPTION INSURANCE

This scheme covers property damage caused suddenly and accidentally affecting 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, the United Kingdom and Sweden, providing cover on any difference in conditions and/or 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 scheme was taken out with a pool of insurers with AXA Corporate Solutions as 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 cover and excesses under the programme. Furthermore, it has been systematically extended under the same budget conditions. Particular attention is given to recommendations made by the insurers based on site prevention visits. Hence, the prevention programme and the coverage terms for the sites can both be customised.

3.6.2.3. TRANSPORT INSURANCE

On 1 January 2008, a Group global transport insurance scheme was established. This scheme covers all Group entities worldwide and 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: "marine cargo" for goods shipping with Chartis, "charterer" with RAETS Club and "hull and machinery" with AXA Corporate Solutions. The introduction of this programme secured particularly favourable terms for both coverage conditions and premiums.

4

CORPORATE GOVERNANCE

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4.1. PRESENTATION OF COMPANY AND GROUP MANAGEMENT AND ADMINISTRATIVE BODIES

4.1.1. General Management Organisation Chart



(1) Deputy CEO.

4.1.2. Report from the Chairman of the Board of Directors

Ladies and Gentlemen,

As Chairman of the Company's Board of Directors, I am delighted to be able to present you with the report provided for under Article L. 225-37 of the French Commercial Code. This report was approved by the Board of Directors at its meeting of 15 February 2012.

As required by law, this report firstly covers the preparation and organisation of the work of the Board of Directors and indicates, where applicable, the limits on the powers of the Chairman and CEO. It will subsequently cover internal control procedures.

4.1.2.1. CONDITIONS FOR THE PREPARATION AND ORGANISATION OF THE WORK OF THE BOARD OF DIRECTORS

In accordance with the decision of the Board of Directors of 9 December 2008, ERAMET uses the Afep/Medef corporate governance code for listed companies as a reference ("the Afep/Medef code"). A copy of this code is available from the Legal Department at head office.

GENERAL MANAGEMENT

Company Management Method

At its meeting of 26 March 2003, the Company's Board of Directors adopted, in line with the discussions of the General Shareholders' Meeting of 23 May 2002 and Article 14 of its Articles of Association, a traditional organisation of the Company's management with a Chairman & Chief Executive Officer responsible for both the general management of the Company and the Chairmanship of the Board of Directors.

In accordance with Article 16 of the Articles of Association, the Board may, at the proposal of the person in charge 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.

The Board may also, in accordance with Article 18 of the Articles of Association, appoint up to four non-voting observers. The observers may be selected from amongst the Company's employees.

Membership of General Management

The General Management of the Company and 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 subsequent Meeting of 11 May 2011, the Board of Directors renewed the powers of the Chairman and CEO and those of the Deputy CEOs. The Board granted the Chairman and CEO power to substitute and delegate, under his 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 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 are Division Managers. The China Department reports to Philippe Vecten. The Administration and Finance Department, the Human Resources, Health and Safety Department, the Communications and Sustainable Development Department, the Research, Innovation, Engineering and Purchasing Department, the Development Department, the Leaders Project Department, the Strategy and Investor Relations Department and ERAMET International, report to the Chairman and CEO. The Chief Financial Officer, Jean-Didier Dujardin, also supervises IT systems, internal audit, management control, treasury, finance, accounting and legal affairs.

The monthly meetings of the Divisions, chaired by the Chairman and CEO, provide a forum for important Group-related decisions. They allow monthly reporting to be monitored and the critical operating decisions facing the Divisions to be established.

Since September 2004, the Company's management 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, which is the decision-making body for the Group and the Divisions, is comprised of the Chairman and CEO, the three Division Managers, the Human Resources, Health and Safety Manager, the Chief Financial Officer and the Communications and Sustainable Development Manager. The Corporate Directors of support functions (Human Resources, Health and Safety 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 composed of the members of the Executive Committee, the CEO of Erasteel, the CEO of Aubert & Duval, the Chairman of ERAMET International, the Deputy CEO of Société Le Nickel-SLN, the CEO of Comilog, the Chairman of Pt Weda Bay Nickel, the Manager of the Weda Bay Nickel project, the Manager of the manganese chemistry/recycling business unit, the Manager of the Leaders programmes, the Manager of ERAMET in China, the Executive Manager in charge of Group development in Africa and the Research, Innovation, Engineering and Purchasing Manager.

THE BOARD OF DIRECTORS

Membership/independence

In line with the shareholders' agreement of 17 June 1999, as amended on 29 May 2008, between SORAME and CEIR on the one hand, and AREVA, on the other hand, since the Meeting of 21 July 1999, the Board of Directors has been comprised of fifteen members, other than the Chairman, including:

- five Directors, put forward by the SORAME-CEIR concert party (including one (Manoelle Lepoutre) having the status of the four "qualified persons" mentioned below);
- three Directors put forward by AREVA;
- two Directors put forward by STCPI;
- four "qualified persons", two put forward by the SORAME-CEIR concert party and two by AREVA, "in light of their expertise and their independence from the party nominating them and from the Company itself, in line with the recommendations of the Viénot report" (under the terms of the shareholders' agreement).

On 31 December 2011, the Board had the following fifteen members:

Chairman of the Board of Directors

Patrick Buffet, since 25 April 2007.

Vice-Chairmen

At its meeting of 13 September 2000, the Board of Directors decided to appoint two Vice-Chairmen representing the two largest shareholders. On 11 May 2011 the Board of Directors renewed these appointments. The current Vice-Chairmen are:

- Édouard Duval, on behalf of SORAME, since 11 May 2011;
- Gilbert Lehmann, on behalf of AREVA, since 13 December 2005.

Directors

- Claire Cheremetinski (director representing the State);
- SORAME, represented by Cyrille Duval;
- Édouard Duval;
- Georges Duval;
- CEIR, represented by Patrick Duval;

- Gilbert Lehmann;
- Manoelle Lepoutre (independent director);
- Jean-Hervé Lorenzi (independent director);
- Louis Mapou;
- AREVA*, represented by Sébastien de Montessus;
- Michel Quintard;
- Michel Somnolet (independent director);
- Frédéric Tona (independent director);
- Antoine Treuille (independent director).

The Afep/Medef corporate governance code considers that a director is independent "when he has no relations whatsoever with the Company, its Group or its management, that could compromise the exercising of 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 directly or indirectly holds a directorship or in which a salaried employee designated 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 associated with) a major customer, supplier, merchant banker, financing banker of the Company or its Group, or for which the Company or its Group represents a significant percentage of its business activity";
- "not having any close family ties with a corporate officer";
- "not having been company auditor during the past five years";
- "not having been a company director for more than twelve years".

On 31 December 2011, on the basis of an analysis of these criteria by the Board, the Board of Directors has five independent directors out of a total of fifteen members, meaning that one third of the members are independent in accordance with the recommendations of the Afep/Medef code.

In its meeting of 16 February 2011, the Board of Directors decided that Mr Treuille, who was first appointed a director of the Company in July 1999, could continue to be considered independent owing to his significant experience and expertise. Additionally, the Board of Directors decided that Mr Tona, who stopped being a salaried employee of the AREVA group more than five years previously, would be considered as independent from 2011 onwards.

In accordance with the new recommendations added to the Afep/Medef corporate governance code in April 2010 and the provisions of Act 2010-103 of 27 January 2011, it is hereby stated for the record that, since May 2011, membership of the Board of Directors of ERAMET comprises 13% female directors.

* Represented as from 20 March 2012 by Mr Pierre Charreton.

Pursuant to Article 10 of the Articles of Association, the directors may not be over seventy years of age at the time of their appointment and are appointed for a four-year term of office. The Chairman and a majority of members of the Board of Directors (including legal entities and their permanent representatives) must be nationals of a member state of the European Union. In accordance with the Articles of Association, each director must own at least one share and, at its meeting of 11 May 2011, the Board of Directors further specified that each director must hold at least one hundred shares within a period of 18-months following his/her appointment to the Board.

Other participants in Board Meetings

Observers

The Board of Directors, at its Meeting of 12 April 2000, drawing on the option provided for in Article 18 of the Articles of Association, decided to offer two observer positions to Group employees, in addition to Works Council representatives. In practice, the two observers are nominated by the European Works Council. On 30 July 2008, the Board reappointed Jean Javelier and Daniel Signoret as observers for a further four years. On 29 July 2009, the Board appointed Mr Bertrand Fréart as an observer, replacing Mr Javelier, and on 20 June 2011 the Board appointed Mr Pierre Lescot as an observer, replacing Mr Fréart.

Company Works Council Delegates

Louis-Pascal Aussedat, Claudine Grossin, Philippe Laignel, Guillaume Pareyt.

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. Paragraph 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 they shall refrain, whilst carrying out their duties, from any and all action, or inaction, that may compromise it".

All new directors elected by the General Shareholders' Meeting or co-opted by the Board, whether he or she is a director in their own right or the permanent representative of a legal entity, signs up to a charter that 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, particularly emphasises directors' competence, their duties as regards disclosure and obtaining information, their attendance both at Board Meetings and, insofar as possible, at General Shareholders' Meetings, and their independence. Board members are notably asked, at all times, to ensure they are not in a direct or indirect conflict of interest with the Company and any company in which they hold a position. Such a situation, which must be notified to the Board, may result, as the case may be, in a refusal to appoint or a resignation (structural conflict), or in their abstention (one-off conflict). On the date when this report was drawn up, no director had a conflict of interest within the meaning of Section 14.2 of Annex 1 to EC Regulation No. 809/2004.

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, who appear on a regularly updated list. This procedure was updated and reviewed at the Board of Directors' meeting of 16 February 2011 which adopted a code of conduct for the prevention of insider trading for the ERAMET Group.

By-laws

At its Meeting of 16 February 2011, the Board reviewed the By-laws specifying its organisational methods, first adopted in 2006. The By-laws are available from the Secretary to the Board of Directors at the Company's head office. The By-laws state that the Board approves the strategic directions and strategic investment projects and any transactions, in particular, acquisitions or disposals, which could significantly affect the Group's earnings, balance sheet structure and risk profile. It also receives press releases concerning the approval of the financial statements or acquisition or disposal transactions, prior to their dissemination, unless there is a duly justified emergency.

The By-laws also specify the membership, organisation and operation of the Committees, as described below. Whilst carrying out their respective assignments and after having duly informed the Chairman, the Committees may interview the Group's senior executives. They report on the information obtained and the opinions gathered.

Code of Conduct

At the recommendation of the Audit Committee, the Board adopted the Group's Code of Conduct on 20 January 2010. The full text of the Code can be consulted on ERAMET's website. The purpose of this Code is to formalise a set of core shared principles of behaviour which everyone in the Group will be able to refer to and comply with in all circumstances. These principles apply firstly to the Group, but the Group encourages all its partners to apply the same requirements. These principles are as follows: combating all forms of fraud or corruption, avoiding any conflict of interest, complying with rules on competition, protecting the Group's information, respecting and protecting health and safety in the workplace, providing high-quality products and services in compliance with safety and environmental protection standards, promoting the Group's regional and social responsibility, providing the Group's local partners with high-quality information and its shareholders with reliable and comprehensive information.

During the 2010 financial year, this Code was distributed to all the Group's employees. It is passed on by Comex members, the Management Committee of each Division and the main associates of the corporate Managers. The Legal Manager, Patrick Rothey, has also been placed in charge of ethics for the ERAMET Group. In particular, he is responsible for the due and proper application of the Code of Conduct.

Sustainable development policy

At the recommendation of the Audit Committee, the Board adopted a sustainable development policy on 20 January 2010. The full text of the policy can be consulted on ERAMET's website and the main provisions are also set forth in the sustainable

development chapter of the 2010 Reference Document. During the 2010 financial year, the corresponding objectives were approved; their deployment will be subject to regular monitoring.

Assessment of the Board's Work

At its meeting of 28 July 2010, the Board reviewed the conclusions of the latest assessment of its work.

Meetings

Meeting notice

Meetings are called, as often as necessary, by the Chairman sending an invitation to members, in accordance with the law. Invitations may be sent to members by any means, including electronic, in principle one week prior to the date of the Meeting. With the exception of meetings held by telephone during the year, the Board's Meetings are usually held at the Company's head office (Tour Maine-Montparnasse).

Board Meeting Procedure

At each Board Meeting, a dossier containing files on most of the items on the agenda is given to every participant in the Meeting.

Each Meeting usually begins with a preliminary report from the Chairman concerning the key events having occurred since the last Meeting, followed by a presentation given by each Division Manager on the operations of each of the three Divisions. Particularly important projects with respect to the Group's strategy may be presented.

At the end of the Meeting, in particular 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 the 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 2011

The Board of Directors met eight times in 2011. The attendance rate of its members was 87.5%.

In addition to examining recurring items relating to the Group's business activity and, in particular:

- the approval of the 2010 financial statements of the Company and of the Group, and the calling of the General Shareholders' Meeting;
- the review of the 2011 interim financial statements;
- the review of the key events affecting the Company and its Divisions during the previous quarter;
- the 2012 budget;
- planned investment in or development of existing facilities.

This year the Board focussed, in particular, on discussions concerning the amendment of technical support and marketing agreements between ERAMET and Société Le Nickel-SLN,

The Board is assisted in its work by the three Committees which it has established.

Audit Committee

A charter setting out its membership (three members), its operation and its responsibilities was adopted by the Board on 10 December 2003.

In accordance with article L. 823-19 of the French Commercial Code, this Committee is responsible, in particular, for monitoring (i) the process for producing financial information, (ii) the effectiveness of the internal control and risk management systems, (iii) the legal auditing of the annual financial statements and, where applicable, the consolidated statements by the Statutory Auditors, (iv) the independence of the Statutory Auditors.

In particular, this Committee is responsible for (i) reviewing the suitability and proper application of the accounting methods used, (ii) analysing the interim and annual financial statements, (iii) examining the internal audit plans and conclusions, (iv) monitoring major disputes (v) examining the Group's management policy for exchange rates and commodities, hedging and investments and (vi) reviewing the Chairman's report on the preparation and organisation of the work of the Board and the internal control procedures.

In order to organise the work of the Audit Committee, the Company refers to the report from the AMF's working group on audit committees (AMF recommendation of 22 July 2010).

In particular, Committee meetings involve the attendance of the Chief Financial Officer, the Statutory Auditors and the Group's Internal Audit Manager, the Accounting and Tax Manager and the Treasury Manager.

The Audit Committee is currently comprised of three directors: Gilbert Lehmann, Michel Somnolet (independent director) and Antoine Treuille (independent director).

Gilbert Lehmann, a graduate of the *Institut d'études politiques* in Paris and having a degree in economics, has been a member of General Management and, specifically, Chief Financial Officer of the AREVA Group, for many years.

Michel Somnolet, an HEC graduate, is a former director, Vice-Chairman and Chief Executive Officer in charge of Administration and Finance at L'Oréal.

Antoine Treuille, a graduate of the ESSEC and with an MBA from the University of Columbia in the United States, is Executive Managing Director of Altamont Capital Partners LLC, a New York based private equity fund.

The Audit Committee met three times during 2011 and the attendance rate of its members was 100%.

In addition to presenting the financial statements for the previous year in February and examining the interim financial statements in July, every year, the Committee reviews the report on the audits carried out during the year and the audit plan for the following year. The Committee's examination of the financial statements is

accompanied by a presentation given by the Statutory Auditors of the findings of their audits and of the main points concerning the work carried out.

During the 2011 financial year, besides reviewing the annual and interim financial statements, the Committee specifically examined the following points:

- the Chairman's report on the work of the Board of Directors and on internal control;
- the work of the Internal Audit Department for 2011 and its provisional work programme for 2012;
- the most recent changes to IFRS;
- the Gabon environmental dossier;
- the increased Working Capital Requirement of the Alloys Division;
- the investment rules for available cash and corresponding control mechanisms;
- an in-depth review of risk mapping, as well as the management plan for those risks.

Compensation Committee

A charter setting out its membership (three members), its operation and its responsibilities has been adopted by the Board. This Committee is mainly responsible for making suggestions to the Board of Directors in respect of 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 and Safety Manager, who also holds the position of Secretary for Committee meetings.

The Compensation Committee is currently comprised of three members: Michel Somnolet (independent director), Frédéric Tona (independent director) and Antoine Treuille (independent director).

The compensation policy for corporate officers, as set by the Board of Directors, is based on the following items:

- Remuneration is comprised of a fixed portion and a variable portion, decided on annually by the Board following recommendations from the Compensation Committee.
- The variable portion is based on a certain number of specific criteria and goals, the choice and weighting of which are approved by the Board of Directors every year, on the basis of a recommendation from the Compensation Committee, such as, for example, for 2011: (i) actual economic earnings (Current Operating Income, (ii) financial earnings (net cash), (iii) the completion vis-à-vis the schedule and budget of major capital investments, industrial projects or development and acquisition activities, (iv) "managerial" results in terms of team leadership and motivation, project and strategy proposals and goals in the field of safety, the environment, health and industrial risks. For reasons of confidentiality, these results, compared to pre-established targets which were precisely defined by the

Compensation Committee and the Board of Directors, cannot be made public. The variable portion may not be more than 55% of the gross annual fixed remuneration (110% 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, on the basis of a recommendation from the Compensation Committee. Since the Board Meeting of 23 July 2007, corporate officers are required to retain 20% of the shares acquired under these performance share plans granted during their entire term of office. In 2011, a total of 13,945 performance shares, all subject to performance conditions, were allocated to corporate officers. Performance conditions are calculated over three years and are as follows: relative performance of ERAMET shares for 50% of the allocation (this involves comparing the change in total shareholder return over three years 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 in thirds over three years of certain economic indicators for 50% of the allocation (25% of current operating income on turnover and 25% of cash-flow related to operating activities, with the annual targets referring to the Company's budgetary objectives and the performance conditions only being fully achieved in the event of significant out-performance of these objectives). No allocation of share subscription or purchase options was made during the financial year to these same beneficiaries.
- Corporate officers are eligible for the existing defined benefit supplementary pension plan for ERAMET senior executives; the new arrangements for this plan became applicable as from 1 July 2008. In the event of a settlement of their pension rights vis-à-vis the 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 final variable salaries, calculated on the basis of full years, for the variable portion. All these arrangements, combined with the overall limitation of 35% of the reference salary, which is itself limited to 25 times the annual social security ceiling ⁽¹⁾ provides the whole pension plan with a very well balanced structure.

(1) In 2011, the annual social security ceiling was €35,352.

- 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 total gross variable remuneration (itself subject to specific performance conditions) received over the final three full financial years of the term of office must be 20% or more of the total gross annual fixed remuneration received during said financial years. Consequently, these arrangements exclude payment of such an indemnity should the Chairman and CEO fail to achieve his targets. This change was approved by the General Shareholders' Meeting of 16 April 2008 as part of related-party agreements. Moreover, in accordance with the recommendations of the Afep/Medef corporate governance code, Patrick Buffet does not hold an employment contract 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 terms of office expire. The suspended employment contracts of Messrs Madelin and Vecten provide for the payment, in the event of dismissal, retirement or pensioning-off, 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) as employees. 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. The suspended employment contract of Georges Duval contains a clause providing, in the event of dismissal, retirement or pensioning-off, for the payment of a contractual payment of 18 months' salary, calculated on the basis of his reference remuneration (fixed plus variable) as an employee, which is not cumulative with the customary payments calculated on the basis 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 terms of office, with the exception of Cyrille Duval whose employment contract provides for the right of his employer to invoke a one-year non-competition obligation, renewable once for the same term, in consideration for the payment of an indemnity of 50% of his average fixed remuneration for the twelve months preceding the termination of the contract, regardless of the reason. In the event of dismissal, this indemnity 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 is not cumulative with the other applicable contractual guarantees or those under collective bargaining agreements, was decided upon in 2005 and implemented. On 31 December 2011, this guarantee applied to 17 of the Group's senior executives (Messrs Madelin and Vecten, the only corporate officer beneficiaries, and Comex members of the Divisions). This guarantee, which represents an indemnity of three years' remuneration (fixed plus variable) for each beneficiary executive, was estimated at a total of €7.6 million at 31 December 2011. Patrick Buffet does not benefit from this guarantee.

Under their employment contracts, certain employees also benefit from contractual indemnities, including when they retire, 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.

- Following a review of the recommendations of the Afep/Medef code by the Board of Directors in 2008, the conclusion was reached that the corporate officer remuneration arrangements are in line with those recommendations, with the exception of the number of annuities taken into account to calculate the amount of the severance pay of the Chairman and CEO (three years). Following the Board's decision, taken on 11 May 2011, to renew the term of office of the Chairman and CEO, and at the suggestion of the Compensation Committee, at its meeting of 27 July 2011 the Board of Directors unanimously decided (with the Chairman and CEO's abstention) to uphold this arrangement (taking into account, in addition, all amendments decided upon since by ERAMET's Board of Directors at the recommendation of the Compensation Committee), 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, which was brought in line with the provisions of the TEPA act of 21 August 2007, by the Board of Directors at its meeting of 20 February 2008.

The Compensation Committee met four times during 2011 and the attendance rate of its members was 100%.

During the financial year, besides validating the proposed 2010 bonuses, the 2011 targets and the 2012 fixed salaries of corporate officers, which the Board of Directors approved, the Committee also suggested to the Board of Directors, under the framework of the annual performance share allocation plan for corporate officers and senior executives of the Company and its subsidiaries, a 2011 Erashare worldwide bonus share allocation allowing for the allocation of two bonus shares to all employees of the Company and its subsidiaries, and a selective performance share plan for 2011 for a total of 71,665 performance shares to 205 of the Group's executives (including 13,945 performance shares to corporate officers). For 2012, the Committee suggested to the Board of Directors the renewal of a performance share allocation plan with criteria and terms similar to those of the plans approved for 2010 and 2011, accompanied by a worldwide allocation plan of two bonus shares to all the Group's employees (2012 Erashare), which the Board approved.

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.

When considering 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 criteria for independence laid down by the Afep/Medef corporate governance code. With regard to the replacement of corporate officers in cases where

unforeseen leave is taken, it must examine and render an opinion on solutions for such replacement.

These rules are set out in detail in the Selection Committee's charter.

The Committee is currently comprised of Patrick Buffet, Cyrille Duval, Édouard Duval and Gilbert Lehmann. Contrary to the recommendations of the Afep/Medef corporate governance code, the Committee does not include an independent director among its members. This is due to the specific rules of the shareholders' agreement designed to structure the relations between the various Company shareholders.

The Selection Committee met once during 2011 and the attendance rate of its members was 100%.

4.1.2.2. INTERNAL CONTROL PROCEDURES

THE COMPANY'S GOALS WITH REGARD TO INTERNAL CONTROL PROCEDURES

In accordance with the AMF's January 2007 reference framework, the goals of the internal control procedures in force at ERAMET are to:

- ensure that management actions, the carrying out of transactions and employee behaviour all comply with the policies laid down by the Company's governing bodies, with applicable legislation and regulations and with 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 ensure that assets are protected against the various risks of losses resulting from theft, fire, improper or illegal actions and natural risks;
- prevent and control risks of error or fraud, in particular, in the accounting and financial fields.

However, as with any control system, it cannot provide an absolute guarantee that these risks have been totally eliminated.

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 one having 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 internal control players:

- the Executive Committee (Comex), the membership of which is set out in the "General Management" section above, is the Group's decision-making centre and meets every two weeks. The International Management Committee, the membership

of which 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 annual Audit Plan approved by the Comex, the department carries out assignments in the various Group units as defined in the Plan and as 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 of 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 changes it feels are necessary;
- the Group Planning and Management Control Department reports to the CFO. It sets out the structure of ERAMET's management control and monitors the Division's management system projects to ensure they are consistent with the Group's goals. The department defines for the Group and helps implement for every Division and entity the relevant key performance indicators for each level. It is also responsible for Group reporting;
- the Legal Department reports to the CFO. As a service centre, it provides the whole Group with legal support on all issues within its area of expertise;
- the Treasury Department and the Finance and Risk Management Department both report to the CFO. As service centres, they manage, together with specialised Committees of the main subsidiaries, hedging of exchange rate and commodity risks, in particular, nickel and fuel, and financial resources (investments and borrowings), for the whole Group, as well as the implementation and monitoring of all the insurance policies taken out by the Group;
- the Group Risk Manager, reporting to the CFO, coordinates Risk management processes. He 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 the level of risk control. He reports to the Comex and to the Audit Committee on risk management actions carried out;
- 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 to control and reduce the Group's environmental impact, thereby ensuring the sustainability of ERAMET's business activities, products and markets in line with regulatory, political and labour developments;
- the Group Human Resources, Health and Safety Department. It manages the Company's human resources and ensures that HR policies are consistent across the Group's various entities. The department coordinates Health and Safety 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

Because of constant change taking place in the economic and regulatory environments framing 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 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

In 2011, the Group carried out an in-depth update of its risk mapping. 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.

This exercise was achieved through risk mapping carried out at Branch level and at Group level. The risks identified were assessed by the Management Committees for the Divisions and the Comex for the Group, respectively.

The findings of all these works were presented to the Audit Committee.

The main operational and financial risks faced by the Group are described in the Reference Document for the 2010 financial year, in chapter 3, Risk Factors, and in the notes to the 2011 consolidated financial statements.

Treatment of risks

In 2012 and thereafter, the main risks identified by risk mapping will be treated in two different ways:

- Action plans aimed at strengthening the existing control mechanisms will be deployed for the major risks identified. The monitoring function for this process will be overseen by the Group Risk Manager.
- The results obtained from risk mapping will be integrated 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.

The financial risks associated with liquidity, interest rate, exchange rate and commodity risk are managed by the Treasury Department for the whole Group, together with the relevant contacts in the larger subsidiaries.

In respect of commodity risk, a "Nickel Committee" was established in 2006. It is composed of certain directors, on the one hand, and representatives of ERAMET's Management (including the CFO of SLN) on the other. It is responsible for advising the

Group as regards the definition and implementation of policies to control the risks relating to Nickel price fluctuations.

Finally, the Finance and Risk Management Department, together with Division managers, establishes the insurable risk hedging policy for all the Group's companies. The various insurance programmes are described in the Group's 2010 Reference Document. Any additions to those insurance programmes will be detailed in the Group's 2011 Registration Document.

Summary of internal control procedures implemented by the Group

- **Existing charters:** The Audit Committee, the Legal Department, the Finance and Insurance Risk Management Department, the Management Control Department, the Tax Department and the 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, following a recommendation from the Audit Committee, the Board adopted the Group's Code of Conduct on 20 January 2010.
- **Signing authority,** other powers: the three Division Managers, who are Deputy CEOs, have all the powers granted by law. The 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, appearing on an established list, 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 must be confirmed in writing with a co-signer appearing on said 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 is also being drafted for office technology (hardware and software packages). Several projects to improve management systems have been implemented and are ongoing in the Divisions, including the implementation of integrated applications, especially in respect of procurement, allowing for better control of commitments and the 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, has been 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;

- with regard to professional 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 has been 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, planning, updating forecasts, analysis of over/under-runs, etc.), the consolidation manual and shared accounting rules, travel and expense accounts and financial procedures for 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, the Divisions are managed independently for their day-to-day management. Each Division has a Management Committee that makes all the decisions within its area of responsibility, reporting to the Group Comex on a regular basis;
 - under the authority of the CFO, the Legal Department, which reports to him, 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 S.A. 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 establishing three committees: a Strategy Committee, an Audit Committee and a Compensation Committee, as part of a modernised corporate governance system. This was implemented at the SLN Board Meeting of 17 November 2009 and has since proved to be a very effective measure;
 - Divisional Management meetings: Monthly meetings are organised with the management of each Division to review monthly performance and 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 are organised with the same participants as Division meetings to address these issues;
 - implementation of the internal audit plan: the Internal Audit Department carried out 13 assignments in 2011 throughout

the Group's subsidiaries. The work carried out in 2011 did not reveal any serious failings or shortcomings in the organisation of internal control;

- approval of strategic investments: under the Capital Expenditure Procedure, all projects exceeding €4 million are submitted for approval at Division meetings, following specific procedures (presentation dossier, approval meetings, follow-up, etc.). Capital expenditure projects are controlled and approved from a technical perspective by the Engineering Department, which reports to the Group Development Manager and, from a financial perspective, by the Administration & Finance Department. Strategic projects are presented to the Board of Directors of ERAMET;
- monitoring of commitments made 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 accounting responsibilities within the Group: the Accounting Departments of the parent company and the subsidiaries record daily transactions (purchases, sales, cash flows, etc.) and ensure that the accounting methods comply with the procedures introduced by the Group. The Accounting, Tax and Consolidation Department, within the Group Administration and Finance Department, keeps the parent company's accounts, files the 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 software 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 pursuant to the 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.
- Budget and management control: The budget is calculated at the end of the year for the following year and at least three forecast revisions are made during the year. These budgets and forecast revisions, and the associated action plans, are subject to formal validation by Division management, the Group Comex

4 ● CORPORATE GOVERNANCE

4.1. PRESENTATION OF COMPANY AND GROUP MANAGEMENT AND ADMINISTRATIVE BODIES

and then 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: In addition to its pivotal role in managing exchange rate and commodity risk, the Group Administration and Finance Department sets up financing for the Group's main subsidiaries and carries out financial investments in collaboration with the managers of said subsidiaries. It centralises the cash forecasting of 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 governance established in full collaboration with the managers of the relevant subsidiaries.
- 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 the exchange rate and commodity management policy procedures and with hedging policy. It reviews the internal audit plan and the actions decided upon based on audits carried out.

- Liaison with the Statutory Auditors: the Auditors carry out half-yearly reviews of the financial statements for which validation meetings are held with the Finance Departments of the Divisions and the Group, with the Division Managers and finally with the Chairman and CEO of ERAMET.

4.1.2.3. OTHER ITEMS

MEANS OF SHAREHOLDER PARTICIPATION AT GENERAL SHAREHOLDERS' MEETINGS

The means by which shareholders may participate at General Shareholders' Meetings are set out in Articles 8, 20, 21 and 22 of the current Articles of Association.

INFORMATION REQUIRED UNDER ARTICLE L. 225-100-3 OF THE FRENCH COMMERCIAL CODE

The information required under Article L. 225-100-3 of the French Commercial Code (factors likely to have an impact in the event of a public offer) is published in ERAMET's 2010 Reference Document and shall be updated, if necessary, in the 2011 Registration Document.

Paris, 15 February 2012

The Chairman of the Board of Directors

4.1.3. Statutory Auditors' Report drawn up pursuant to Article L. 225-235 of the French Commercial Code on the report of the Chairman of the Board of Directors of ERAMET – 2011 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 2011.

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.

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, on 22 February 2012

The Statutory Auditors

ERNST & YOUNG and others
Aymeric de la MORANDIÈRE

Deloitte & Associés
Alain PENANGUER

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*).

4.2. LIST OF OTHER POSITIONS HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Surname, first name or corporate name Main duties Family connection Expertise	Date of first appointment	Most recent reappointment and expiry date of term of office	Other positions held
<p>BUFFET Patrick Director, Chairman and CEO since 25 April 2007 Born on 19 October 1953 (58 years old) Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Mr BUFFET is a mining engineer. He was Senior Executive Vice President of Suez until 2007.</p>	<p>Director: Co-opted by the Board Meeting of 7 March 2007 to replace Mr François HENROT, who resigned Chairman and CEO: Board Meeting of 25 April 2007</p>	<p>Reappointments: General shareholders' meeting of 25 April 2007 and of 11 May 2011, each for a four-year term. Expiry date: General shareholders' meeting called to approve the 2014 financial statements</p>	<p>In Group companies</p> <ul style="list-style-type: none"> Chairman and CEO of Société Le Nickel-SLN <ul style="list-style-type: none"> Director of Comilog S.A. <p>In non-Group companies</p> <ul style="list-style-type: none"> Member of the Supervisory Board of Arcole Industries (unlisted) Director of Bureau Véritas and Banimmo (Belgium) (listed companies) <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Member of the Supervisory Board of: AREVA; Astorg-Partners <ul style="list-style-type: none"> Director of: <ul style="list-style-type: none"> Rhodia (until 21/10/11) Subsidiaries majority-owned by the Suez Group: Suez Energy Services; Tractebel (Belgium), Electrabel (Belgium), Société Générale de Belgique (Belgium), Fluxys (Belgium)
<p>AREVA Director, Represented by CHARRETON Pierre Permanent representative of AREVA on the Board of Directors Born on 14 February 1949 (63 years old) Business address: AREVA 33, rue Lafayette 75009 Paris Mr CHARRETON is Secretary General of AREVA.</p>	<p>Co-opted by the Board Meeting of 27 March 2002 (Ratified by the General Shareholders' Meeting of 23 May 2002)</p>	<p>Reappointment: General Shareholders' Meetings of 25 April 2007 and 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies</p> <ul style="list-style-type: none"> Secretary General of AREVA <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director of Mobinic
<p>CHEREMETINSKI Claire Director, Born on 2 May 1976 (35 years old) Business address: Agence des participations de l'État 139, rue de Bercy Teledoc 229 75012 Paris, France Mrs CHEREMETINSKI is deputy director for energy and other shareholdings at the French Government Shareholding Agency (APE).</p>	<p>Co-opted by the Board Meeting of 14 December 2011 to replace Mrs Astrid MILSAN, who resigned</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Director of AREVA NC Member of the Supervisory Board of ERDF and RTE (Réseau de Transport d'Electricité) <p>Offices held and completed during the past five years</p> <p>None</p>

4.2. LIST OF OTHER POSITIONS HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Surname, first name or corporate name Main duties Family connection Expertise	Date of first appointment	Most recent reappointment and expiry date of term of office	Other positions held
<p>DUVAL Georges Director, Deputy CEO Born on 3 May 1946 (65 years old) 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.</p>	<p>General Shareholders' Meeting of 21 July 1999 Vice-Chairman of the Board: Board Meeting of 13 September 2000 Deputy CEO: Board Meeting of 23 May 2002</p>	<p>Reappointment: General Shareholders' Meetings of 21 May 2003, of 25 April 2007 and of 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In Group companies</p> <ul style="list-style-type: none"> Chairman of: <ul style="list-style-type: none"> Aubert & Duval (SAS); S.I.M.A. (SAS); ERAMET Alliages; Erasteel (SAS) <p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Manager of SORAME SCA CEO of CEIR <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Chairman of UKAD (SAS)
<p>DUVAL Édouard Director, Vice-Chairman Born on 2 December 1944 (67 years old) 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 Vice Chairman of the Board of ERAMET, Chairman of ERAMET International, Chairman of the Management Board of SORAME and CEO of CEIR.</p>	<p>General Shareholders' Meeting of 21 July 1999</p>	<p>Reappointments: General Shareholders' Meetings of 21 May 2003, of 25 April 2007 and of 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In Group companies</p> <ul style="list-style-type: none"> Director of Société Le Nickel-SLN Chairman of ERAMET International (SAS) Deputy CEO of S.I.M.A. (SAS) <p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Chairman of the Management Board of SORAME SCA CEO of CEIR
<p>CEIR Director represented by DUVAL Patrick Permanent representative of CEIR on the Board of Directors Born on 15 May 1941 (70 years old) Address: c/o ERAMET 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.</p>	<p>General Shareholders' Meeting of 11 May 2011</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In Group companies</p> <ul style="list-style-type: none"> CEO of S.I.M.A. <p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Chairman of CEIR Manager of SORAME SCA Director of Cartonneries de Gondardennes SA Manager of SCI Compagnie Franroval, SCI Les Bois de Batonceau, SCI de la Plaine, SCEA Les Terres d'Orphin
<p>SORAME Director represented by DUVAL Cyrille Permanent representative of SORAME on the Board of Directors Born on 18 July 1948 (63 years old) Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Brother of Patrick DUVAL, cousin of Georges and Édouard DUVAL Mr DUVAL is General Secretary of the Alloys Division, Manager of SORAME and CEO of CEIR.</p>	<p>General Shareholders' Meeting of 11 May 2011</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In Group companies</p> <ul style="list-style-type: none"> Deputy CEO of S.I.M.A. Director of Metal Securities (permanent representative of S.I.M.A.) Director of Comilog Chairman of Brown Europe and of Forges de Montplaisir <p>In non-Group companies</p> <ul style="list-style-type: none"> Manager of Transmet and of SCI Grande Plaine <p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Director of Nexans (listed company) (unlisted companies) CEO of CEIR Manager of SORAME <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Chairman of AD TAF

Surname, first name or corporate name Main duties Family connection Expertise	Date of first appointment	Most recent reappointment and expiry date of term of office	Other positions held
<p>LEHMANN Gilbert Director, Vice-Chairman Born on 28 September 1945 (66 years old) Business address: AREVA 33, rue Lafayette 75009 Paris, France</p> <p>Mr LEHMANN has worked for the AREVA group for 25 years where he is currently an Advisor on the Management Board having previously held the position of Deputy CEO (until 2006).</p>	<p>Co-opted by the Board Meeting of 13 December 2005</p>	<p>Co-optation ratified: General Shareholders' Meeting of 27 April 2006 Reappointments: General Shareholders' Meetings of 25 April 2007 and of 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies</p> <ul style="list-style-type: none"> • Director and Vice-Chairman of the Board of Directors of ST Microelectronics N.V. (The Netherlands) (listed company) • Vice Chairman of the Supervisory Board and Chairman of the Audit Committee of Assystem SA (listed company) • Director and Chairman of the Audit Committee of Cadogan plc (United Kingdom) (listed company) • Chairman of the Supervisory Board of Linas (unlisted company) <p>Offices held and completed during the past five years <i>In France:</i></p> <ul style="list-style-type: none"> • Director and Chairman of the Board of Directors of SEPI (Switzerland) (until 2010) <ul style="list-style-type: none"> • Director of: Framatome ANP; Sofinel; Framatome Connectors International (FCI); Compagnie Technique d'Assurances (CTA); Framapare; CNS; Intercontrôle • Chairman of the Board of Directors of Compagnie d'Études et de Recherche pour l'Énergie (CERE) <i>Abroad: (United States):</i> <ul style="list-style-type: none"> • Director of Framatome Technologies; FC USA; Canberra
<p>LEPOUTRE Manoele Director, Born on 8 May 1959 (52 years old) Business address: Total 2 place Jean Millier La Défense 6 92078 Paris La Défense Cedex</p> <p>Mrs LEPOUTRE is Sustainable Development and Environment Director of the Total Group and a member of the Management Committee.</p>	<p>General Shareholders' Meeting of 11 May 2011</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> • Director of Ifremer, <i>Institut de physique du globe</i> (the Paris Geophysics Institute), Total E&P Norge and of the Vilette-Entreprises Foundation <ul style="list-style-type: none"> • Member of the BRGM Scientific Board <p>Offices held and completed during the past five years None</p>
<p>LORENZI Jean-Hervé Director, Born on 24 July 1947 (64 years old) Business address: 232, boulevard Saint-Germain 75007 Paris, France</p> <p>Mr LORENZI is a member of the Economic Analysis Board and Professor of Economics at the <i>Université de Paris Dauphine</i>.</p>	<p>General Shareholders' Meeting of 13 May 2009</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2012 financial statements</p>	<p>In non-Group companies</p> <ul style="list-style-type: none"> • Member of the Economic Analysis Board <ul style="list-style-type: none"> • Professor of Economics at <i>Université de Paris Dauphine</i> • Advisor on the Management Board of Compagnie Financière Edmond de Rothschild, Chairman of the Supervisory Board of Edmond de Rothschild Investment Partners and of Edmond de Rothschild Capital Partners, member of the Supervisory Boards of Compagnie Financière Saint-Honoré, SIACI Saint-Honoré and Newstone Courtage <ul style="list-style-type: none"> • Director of BNP Paribas Assurances, Crédit Foncier de France • Member of the Supervisory Board of Euler Hermès <ul style="list-style-type: none"> • Observer with Associés en Finance <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> • Director of Editis, GFI Informatique

4.2. LIST OF OTHER POSITIONS HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Surname, first name or corporate name Main duties Family connection Expertise	Date of first appointment	Most recent reappointment and expiry date of term of office	Other positions held
<p>MAPOU Louis Director, Born on 14 November 1958 (53 years old) Business address: STCPI Immeuble Carcopino 3000 98845 Nouméa Cedex Mr MAPOU is Chairman of STCPI.</p>	<p>Co-opted by the Board Meeting of 29 March 2001 (Ratified by the General Shareholders' Meeting of 30 May 2001)</p>	<p>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</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Chairman of STCPI (New Caledonia) CEO of Sofinor (New Caledonia) <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director of Société Le Nickel-SLN
<p>QUINTARD Michel Director, Born on 1 August 1946 (65 years old) Business address: BP 1109 98845 Nouméa Cedex Mr QUINTARD is technical advisor to the Chamber of Commerce and Industry of New Caledonia which he chaired from 1998 to 2005.</p>	<p>Co-opted by the Board Meeting of 15 December 2010 (Ratified by the General Shareholders' Meeting of 11 May 2011)</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2012 financial statements</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Director of Société Le Nickel-SLN <p>In non-Group companies</p> <ul style="list-style-type: none"> Manager of Locauto, a subsidiary of the CFAO Group Foreign trade advisor, technical advisor to the CCI of NC <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director of Vale NC
<p>SOMNOLET Michel Director, Born on 6 February 1940 (71 years old) Business address: c/o ERAMET Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Mr SOMNOLET is former Director, Vice-Chairman and CEO in charge of Administration and Finance of L'Oréal (until 2002).</p>	<p>General Shareholders' Meeting of 21 May 2003</p>	<p>Reappointments: General Shareholders' Meetings of 25 April 2007 and 11 May 2011 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies</p> <ul style="list-style-type: none"> Director and member of the Compensation Committee of L'Oréal USA <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director and Vice Chairman of the Board of L'Oréal Morocco Director of Perinvest Dividend Equity Fund
<p>TONA Frédéric Director, Born on 27 August 1947 (64 years old) Business address: c/o ERAMET Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France M. TONA has been working for the AREVA Group for 30 years.</p>	<p>General Shareholders' Meeting of 11 May 2011</p>	<p>Expiry date: General Shareholders' Meeting called to approve the 2014 financial statements</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Chairman of Somaïr (Niger) Director of OSEAD (SAS) (France), of OSEAD (Mauritania), of OMM (Morocco), of CMT (Morocco), of Cominak (Niger), of Imouraren (Niger), of CFMM (France) and of Fondation d'Entreprise AREVA <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director and Chairman of Uramin Inc (BVI) (until 31 December 2008)
<p>TREUILLE Antoine Director, Born on 7 October 1948 (63 years old) Business address: French American Foundation 28 West 44th Street Suite 1420 New York, NY 10036 USA Mr TREUILLE is Chairman of Altamont Capital Partners LLC.</p>	<p>General Shareholders' Meeting of 21 July 1999</p>	<p>Reappointment: 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</p>	<p>In non-Group companies (unlisted companies)</p> <ul style="list-style-type: none"> Chairman of the French American Foundation (United States) Chairman of: Altamont Capital Partners, LLC (United States); Mercantile Capital Partners LLC (United States) Chairman of Charter Pacific Corporation (United States), Partex Corporation (United States) Director: Harris Interactive, Inc. (United States), Imperial Headwear, Inc. (United States) <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director of BIC SA (France), Harlem Furniture, LLC (United States) until 2009. Skip's Clothing, Inc. (until May 2007)

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CORPORATE GOVERNANCE

4.2. LIST OF OTHER POSITIONS HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Surname, first name or corporate name Main duties Family connection Expertise	Date of first appointment	Most recent reappointment and expiry date of term of office	Other positions held
<p>MADÉLIN Bertrand Deputy CEO (non Director) Born on 13 September 1954 (57 years old) Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Mr MADÉLIN is Deputy CEO.</p>	<p>Appointed by the Board Meeting of 12 December 2007</p>		<p>In Group companies</p> <ul style="list-style-type: none"> Chairman of the Board of Directors of Strand Minerals (Indonesia) Pte Ltd (Singapore) <ul style="list-style-type: none"> Director of Société Le Nickel-SLN Director and member of the Board of Commissioners of Pt Weda Bay Nickel (Indonesia) <ul style="list-style-type: none"> Chairman of Eurotungstène <p>Offices held and completed during the past five years None</p>
<p>VECTEN Philippe Deputy CEO (non Director) Born on 22 April 1949 (62 years old) Business address: Tour Maine-Montparnasse 33, avenue du Maine 75015 Paris, France Mr VECTEN is Deputy CEO.</p>	<p>Appointed by the Board Meeting of 23 May 2007</p>		<p>In Group companies</p> <ul style="list-style-type: none"> Director of Comilog S.A.; Comilog US; Société Le Nickel-SLN, Port Minéralier d'Owendo, Maboumine; Chairman of the Board of Directors of Setrag and of Eralloys Holding AS <ul style="list-style-type: none"> CEO of ECM Manager of Comilog Holding <p>Offices held and completed during the past five years</p> <ul style="list-style-type: none"> Director of Tinfos International (until January 2010)

No information falling within the scope of Section 14.1 of Appendix 1 to EC Regulation No. 809/2004, other than that set out above, needs to be disclosed.

4.3. SHARES HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND GENERAL MANAGEMENT

Some directors have a material interest in the Company's share capital.

4.3.1. 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 CEIR.

4.3.2. Direct interests

Shares held on 31 December 2011	Equities	Voting rights
Patrick Buffet	10,010	20,020
AREVA	6,810,317	13,567,594
Pierre Charreton	0	0
Claire Cheremetinski (representing the State)	na	na
SORAME	8,027,095	15,849,106
Cyrille Duval	537	1,044
Édouard Duval	465	930
Georges Duval	1,209	2,410
CEIR	1,783,996	3,567,992
Patrick Duval	102	152
Gilbert Lehmann	100	200
Manoelle Lepoutre	45	45
Jean-Hervé Lorenzi	100	100
Louis Mapou	1	1
Michel Quintard	100	100
Michel Somnolet	100	200
Antoine Treuille	210	370
Frédéric Tona	204	205
Bertrand Madelin	3,106	5,356
Philippe Vecten	1,150	1,300

No director has a material interest in any Group subsidiary. No director is subject to a conflict of interest within the meaning of Section 14.2 of Appendix 1 to EC Regulation No. 809/2004 or has entered into a service agreement with ERAMET.

4.3.3. 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.

4.4. REMUNERATION OF CORPORATE OFFICERS

4.4.1. Directors' fees

The amount of directors' fees paid to ERAMET's corporate officers in January 2012 in respect of 2011 amounted to €378,950 (€398,450 in 2010). The total sum allocated to the Board of Directors was set at €550,000 at the General Shareholders' Meeting of 16 April 2008 (sixth resolution), to be distributed freely amongst the directors by the Board of Directors.

The directors' fees for 2011 were distributed on the following basis:

- annual fixed amount of €12,000;
- amount of €1,000 for each actual attendance at Board Meetings;
- annual fixed amount of €8,000 for Audit Committee members;
- amount of €1,000 for each actual attendance at Audit Committee Meetings;

- annual fixed amount of €8,000 for members of the Compensation Committee;
- amount of €1,000 for each actual attendance at Compensation Committee Meetings.

In addition, a travel allowance of €1,525 is paid to each director living abroad, when he actually travels, for each Board Meeting (and Committee meeting if such a meeting is held more than 48 hours before or after a Board Meeting).

The directors' fees paid to ERAMET's directors by other companies in the Group amounted to an overall total of €90,500 in 2011 (€74,000 in 2010).

The breakdown of directors' fees paid at the beginning of 2012 for 2011 is as follows (in euros and before deductions at source):

	ERAMET	Other companies	Total 2011	Total 2010	Total 2009
Rémy Autebert ⁽⁵⁾	-	-	-	7,525	21,050
Patrick Buffet ⁽¹⁾	20,000	45,000	65,000	65,500	57,486
Claire Cheremetinski ⁽⁹⁾	2,000	-	-	-	-
Cyrille Duval ⁽¹⁾	20,000	16,000	36,000	39,000	38,000
Édouard Duval ⁽¹⁾	20,000	14,500	34,500	35,500	30,993
Georges Duval ⁽¹⁾	20,000	-	20,000	22,000	21,000
Patrick Duval	19,000	-	19,000	22,000	21,000
Pierre Frogier ⁽²⁾	-	-	-	14,575	1,000
Pierre-Noël Giraud ⁽⁸⁾	6,500	-	6,500	19,000	17,000
Gilbert Lehmann	31,000	-	31,000	34,000	31,000
Manoelle Lepoutre ⁽¹⁰⁾	11,500	-	11,500	-	-
Jean-Hervé Lorenzi ⁽³⁾	19,000	-	19,000	21,000	10,000
Louis Mapou	24,100	-	24,100	13,000	18,525
Harold Martin ⁽⁴⁾	-	-	-	-	10,000
Astrid Milsan ⁽¹¹⁾	7,000	-	7,000	-	-
Sébastien de Montessus ⁽⁶⁾	16,000	-	16,000	10,000	-
Michel Quintard ⁽⁷⁾	22,575	15,000	37,575	3,525	-
Jacques Rossignol ⁽⁸⁾	12,500	-	12,500	33,000	34,000
Michel Somnolet	55,200	-	55,200	56,675	61,250
Frédéric Tona	31,000	-	31,000	33,000	34,000
Antoine Treuille	41,575	-	41,575	43,150	43,200
TOTAL	378,950	90,500	469,450	472,450	449,504

(1) Other remuneration: refer to the Chapter on remuneration of corporate officers below.

(2) Appointed at the Board of Directors meeting of 26 November 2009—resigned in 2010.

(3) Appointed at the General Shareholders' Meeting of 13 May 2009.

(4) Resigned at the Board of Directors meeting of 26 November 2009.

(5) Resigned at the Board of Directors meeting of 20 May 2010.

(6) Appointed at the Board of Directors meeting of 20 May 2010—amount repaid to AREVA.

(7) Appointed at the Board of Directors meeting of 15 December 2010.

(8) Until General Shareholders' Meeting of 11 May 2011.

(9) Appointed at the Board of Directors meeting of 14 December 2011—amount paid to the Ministry of Finance.

(10) Appointed at the General Shareholders' Meeting of 11 May 2011.

(11) Appointed at General Shareholders' Meeting of 11 May 2011—resigned in September 2011—amount paid to the Ministry of Finance.

4.4.2. Total remuneration and benefits of corporate officers and Comex members

The table below shows the individual breakdown of the gross amount of compensation allocated in 2011 to corporate officers and members of the Group Executive Committee ("Comex"):

(in euros)	Remuneration owed for financial year		Valuation of performance/ bonus shares/options granted during the financial year ⁽²⁾		Total	Total
	2011	2010	2011	2010		
Patrick Buffet ⁽¹⁾	1,476,322	1,560,543	1,301,764	1,224,291	2,778,086	2,784,834
Chairman and CEO						
Georges Duval ⁽¹⁾	405,631	430,107	307,098	225,936	712,729	656,043
Deputy CEO						
Bertrand Madelin ⁽¹⁾	366,793	357,512	225,407	216,051	592,200	573,563
Deputy CEO						
Philippe Vecten ⁽¹⁾	456,584	464,202	275,330	263,357	731,914	727,559
Deputy CEO						
Édouard Duval	328,921	331,290	113,460	84,726	442,239	416,016
Manager of ERAMET International						
Cyrille Duval	256,333	258,506	90,768	88,962	347,101	346,973
General Secretary of the Alloys Division						
TOTAL CORPORATE OFFICERS	3,290,584	3,402,160	2,313,828	2,103,323	5,604,270	5,504,988
Michel Carnec ⁽¹⁾	389,028	691,354	249,915	239,685	638,640	931,039
Human Resources Manager						
Jean-Didier Dujardin ⁽¹⁾	455,028	452,128	292,273	282,754	746,998	734,882
Chief Financial Officer						
Catherine Tissot-Colle ⁽¹⁾	244,522	219,311	169,736	164,138	413,956	383,449
Communications & Sustainable Development Manager						
TOTAL CORPORATE OFFICERS AND COMEX	4,379,162	4,764,953	3,025,751	2,789,900	7,403,864	7,554,358

(1) Member of the Comex.

(2) Calculated according to the share's fair value on the day of allocation by the Board of Directors.

Summary table of the remuneration of each corporate officer and/or Comex member

	Amount for 2011 financial year		Amount for 2010 financial year	
	Owed	Paid	Owed	Paid
Patrick Buffet				
Chairman and CEO				
Fixed remuneration	753,679	753,679	711,018	711,018
Variable remuneration	650,022	775,725	775,725	640,540
Directors' fees	65,000	65,500	65,500	57,486
Benefits in kind ⁽¹⁾	7,621	7,621	8,300	8,300
Total	1,476,322	1,602,525	1,560,543	1,417,344
Georges Duval				
Deputy CEO				
Fixed remuneration	290,733	290,733	278,192	278,192
Variable remuneration	90,704	126,524	126,524	132,818
Directors' fees	20,000	22,000	22,000	21,000
Benefits in kind ⁽¹⁾	4,194	4,194	3,391	3,391
Total	405,631	443,451	430,107	435,401
Bertrand Madelin				
Deputy CEO				
Fixed remuneration	234,749	234,749	225,720	225,720
Variable remuneration	102,241	104,410	104,410	94,859
Directors' fees	25,500	23,000	23,000	11,979
Benefits in kind ⁽¹⁾	4,303	4,303	4,382	4,382
Total	366,793	366,462	357,512	336,940
Philippe Vecten				
Deputy CEO				
Fixed remuneration	286,532	286,532	275,512	275,512
Variable remuneration	120,558	140,673	140,673	123,517
Directors' fees	43,914	42,437	42,437	37,000
Benefits in kind ⁽¹⁾	5,580	5,580	5,580	5,580
Total	456,584	475,222	464,202	441,609
Édouard Duval				
Manager of ERAMET International				
Fixed remuneration	274,599	274,599	268,900	268,900
Variable remuneration	19,822	26,890	26,890	0
Directors' fees	34,500	35,000	35,500	30,993
Benefits in kind ⁽¹⁾			0	0
Total	328,921	336,489	331,290	299,893
Cyrille Duval				
General Secretary of the Alloys Division				
Fixed remuneration	193,444	193,444	187,169	187,169
Variable remuneration	24,473	29,881	29,881	30,682
Directors' fees	36,000	39,000	39,000	38,000
Benefits in kind ⁽¹⁾	2,416	2,416	2,456	2,456
Total	256,333	264,741	258,506	258,307
SUB-TOTAL CORPORATE OFFICERS	3,290,584	3,488,890	3,402,160	3,189,494

(1) This relates to the provision of a company car.

	Amount for 2011 financial year		Amount for 2010 financial year	
	Owed	Paid	Owed	Paid
Michel Carnec				
Human Resources Manager				
Fixed remuneration	262,288	262,288	250,000	250,000
Variable remuneration	100,750	120,000	120,000	42,000
Exceptional remuneration ⁽²⁾			300,000	300,000
Directors' fees	21,500	17,000	17,000	0
Benefits in kind ⁽¹⁾	4,490	4,490	4,354	4,354
Total	389,028	403,778	691,354	596,354
Jean-Didier Dujardin				
Chief Financial Officer				
Fixed remuneration	305,973	305,973	294,840	294,840
Variable remuneration	101,127	110,860	110,860	68,677
Directors' fees	42,000	40,500	40,500	31,993
Benefits in kind ⁽¹⁾	5,928	5,928	5,928	5,928
Total	455,028	463,261	452,128	401,438
Catherine Tissot-Colle				
Communications & Sustainable Development Manager				
Fixed remuneration	183,902	183,902	171,384	171,384
Variable remuneration	57,372	44,988	44,988	35,437
Directors' fees			0	0
Benefits in kind ⁽¹⁾	3,248	3,248	2,939	2,939
Total	244,522	232,138	219,311	209,760
TOTAL CORPORATE OFFICERS AND COMEX	4,379,162	4,588,067	4,764,953	4,397,046

(1) This relates to the provision of a company car.

(2) Contractual hiring provisions.

The top ten earners at ERAMET in respect of 2011 received total remuneration of €4,717,904 as certified by the Statutory Auditors.

No share subscription or purchase options were allocated to the corporate officers during the financial year.

Performance shares were allocated to the corporate officers during the financial year (see below), and to 205 senior executives, managers and talented young employees of the ERAMET Group. In addition, all Group employees received two bonus shares pursuant to the 2011 Erashare plan for the allocation of bonus shares to all employees.

Performance shares allocated to each corporate officer during the financial year

	No. and date of plan	Number of shares allocated	Valuation of shares	Acquisition date	Availability date	Performance conditions
						See below
P. Buffet	16/02/2011	8,605	1,301,764	16/02/2014	16/02/2016	
G. Duval	16/02/2011	2,030	307,098	16/02/2014	16/02/2016	
B. Madelin	16/02/2011	1,490	225,407	16/02/2014	16/02/2016	
P. Vecten	16/02/2011	1,820	275,330	16/02/2014	16/02/2016	
É. Duval	16/02/2011	750	113,460	16/02/2014	16/02/2016	
C. Duval	16/02/2011	600	90,768	16/02/2014	16/02/2016	
TOTAL		15,295	2,313,828	16/02/2014	16/02/2016	

Details of performance conditions are provided in the report from the Chairman of the Board of Directors on internal control.

No performance shares became available to any corporate officer in 2011.

Record of share subscription option/purchase option grants

Plan	Plan G
Date of General Shareholders' Meeting	23/05/2002
Date of Board meeting	15/12/2004
Type of plan	Subscription
Number of options granted at outset	130,000
Number of beneficiaries at outset	80
Total number of shares that may be subscribed/purchased	
• by corporate officers at the outset, including:	31,500
Georges Duval	6,000
<i>Number outstanding on 01/01/2012</i>	6,000
Bertrand Madelin	2,000
<i>Number outstanding on 01/01/2012</i>	0
Philippe Vecten	3,000
<i>Number outstanding on 01/01/2012</i>	0
Édouard Duval	1,500
<i>Number outstanding on 01/01/2012</i>	1,500
Cyrille Duval	2,000
<i>Number outstanding on 01/01/2012</i>	0
• by the top ten employee beneficiaries	27,000
Start of option exercise period	15/12/2006
Expiry date	15/12/2012
Subscription or purchase price	64.63
• Terms and conditions of exercise	-
Number of shares subscribed at 31/12/2011	80,319
Share subscription/purchase options/bonus shares cancelled/lapsed	0
Share subscription/purchase options not yet exercised/purchased	24,102

Information on share subscription/purchase options/bonus shares (excluding corporate officers)

Share subscription/purchase options/bonus shares granted to the top ten employees who are non-corporate officer beneficiaries and options exercised by them	Total number of options allocated/shares subscribed or purchased or bonus shares	Price per share (in euros)	Related Plans
Options held vis-à-vis the issuer and companies referred to above exercised in the 2011 financial year by the ten employees of the issuer and these companies who purchased or subscribed for the most options (global information)	5,650	64.63	G
Bonus shares or share subscription or purchase options allocated during the 2011 financial year by the issuer and by any company within the scope of allocation to the ten employees of the issuer and of any company within this scope who received the most bonus shares (global information)	20 10,400	151.28 151.28	N O
TOTAL	16,070		

Summary table for each corporate officer

Corporate officers	Employment contract	Supplementary pension plan (see details below)	Indemnity or benefits owed or which may be owed as a result of departure or a change of position (see details below)	Indemnities under a non-competition clause (see details below)
Patrick Buffet Chairman and CEO Start of term of office: 25/04/07 End of term of office as director: GSM on 2014 financial statements	No	Yes	Yes	No
Georges Duval Deputy CEO Start of term of office: 23/05/02 End of term of office as director: GSM on 2014 financial statements	Yes—suspended	Yes	Yes (within the limits of the suspended employment contract)	No
Bertrand Madelin Deputy CEO Start of term of office: 01/01/08 End of term of office: unspecified	Yes—suspended	Yes	Yes (within the limits of the suspended employment contract)	No
Philippe Vecten Deputy CEO Start of term of office: 23/05/07 End of term of office: unspecified	Yes—suspended	Yes	Yes (within the limits of the suspended employment contract)	No
Édouard Duval Vice Chairman of the Board Manager of ERAMET International Director Start of term of office: 21/07/99 End of term of office as director: GSM on 2014 financial statements	Yes	No	Yes (within the limits of the employment contract)	No
Cyrille Duval General Secretary of the Alloys Division Permanent representative of SORAME, director Start of SORAME term of office: 11/05/2011 End of term of office as director: GSM on 2014 financial statements	Yes	No	No	Yes (within the limits of the employment contract)

4.4.2.1. TERMS AND CONDITIONS OF REMUNERATION

Remuneration of corporate officer Comex members is set annually by the Board of Directors on the recommendation of the Compensation Committee. For Comex members who are not corporate officers, remuneration is set by the Group's Chairman and CEO.

Remuneration of each Comex member is broken down into a fixed portion and a variable portion. The goals of the corporate officers are determined by the Compensation Committee and submitted to the Board of Directors for approval. The elements for calculating the variable portion are set forth in Chapter 4, "Corporate Governance", of this document, in the report from the Chairman of the Board of Directors.

The Comex members also benefit from the supplementary medical expenses collective insurance scheme and from the supplementary disability/death collective welfare scheme offered to all ERAMET Group employees.

Members of the Comex who are not corporate officers also benefit from the collective profit-sharing scheme. The amounts paid under the scheme in 2011, with respect to 2010, amounted to a total of €51,757, in line with the legally prescribed ceiling.

4.4.2.2. RETIREMENT COMMITMENTS

Corporate officers are eligible for the existing defined benefit supplementary pension plan for senior executives of ERAMET. The elements of this plan are described in Chapter 4, "Corporate Governance", of this document, in the report from the Chairman of the Board of Directors.

Based on the latest actuarial calculation, the present value of the estimated portion of the four corporate officers currently concerned who were still in office on 31 December 2011, out of total commitments in respect of the past service of all beneficiaries of this supplementary pension plan, amounted to €15 million at the end of December 2011, with the total amount of commitments being measured, under IFRS, at €32 million.

4.4.2.3. OTHER COMMITMENTS

Commitments concerning corporate officers, related to their departure from the Company or in respect of a non-competition clause, are described in Chapter 4, "Corporate Governance", of this document, in the report from the Chairman of the Board of Directors.

4.5. SPECIAL REPORT ON SHARE SUBSCRIPTION AND PURCHASE OPTIONS

2011 FINANCIAL YEAR

Dear Shareholders,

Pursuant to the provisions of Article L. 225-184 of the French Commercial Code, this report is presented to the General Shareholders' Meeting.

4.5.1. Options granted

No share purchase or subscription options were granted during the 2011 financial year.

4.5.2. Option exercises

The table below sets out the number and price of shares subscribed for or purchased during the financial year by the Company's corporate officers and by the ten employees of ERAMET or Group companies, who are not corporate officers and who subscribed for or purchased the largest number of shares.

Exercised in 2011	Plan G 15/12/04 <i>(number of shares)</i>	Exercise price <i>(in euros)</i>
Corporate officers		
None	–	64.63
10 employees exercising the most options excluding corporate officers		
Tissidre A.	2,000	64.63
Lecadet J.	750	64.63
Jenkins J.	500	64.63
Robert A.	500	64.63
Roussel H.	500	64.63
Cescutti J.-P.	500	64.63
Levivier C.	400	64.63
Russ C.	250	64.63
Héritier P.	250	64.63

The Board of Directors

4.6. SPECIAL REPORT ON THE ALLOCATION OF BONUS SHARES

2011 FINANCIAL YEAR

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.

4.6.1. Allocations granted to the Company's corporate officers

Plan of 16 February 2011	Number of shares	Value (in euros)
Patrick Buffet	8,605	1,301,764
Cyrille Duval	600	90,768
Édouard Duval	750	113,460
Georges Duval	2,030	307,098
Bertrand Madelin	1,490	225,407
Philippe Vecten	1,820	275,330

4.6.2. Allocations granted to the employees of the Company and its subsidiaries who are not corporate officers

Plan of 16 February 2011	Number of shares	Value (in euros)
Jean-Didier Dujardin	1,932	292,273
Michel Carnec	1,652	249,915
Catherine Tissot-Colle	1,122	169,736
Pierre Gugliermi	1,002	151,583
Marcel Abeke	837	126,621
Pierre Alla	837	126,621
Alain Giraud	837	126,621
Joseph Chang	787	119,057
Philippe Gundermann	787	119,057
Patrick Rothey	627	94,853

4.6.3. Allocations to all beneficiary employees

In respect of the plan of 16 February 2011, each employee in the workforce received 2 bonus shares, subject to conditions concerning seniority.

The Board of Directors

5

SUSTAINABLE DEVELOPMENT

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5.1. INTRODUCTION

Sustainable Development is at the heart of ERAMET's activities and the Group has shown a long-standing commitment to it. Yet with the world's increasing population, the perspective of global warming, the exhaustion of some resources and people's environmental awareness, the world is changing very fast.

ERAMET's activities operate against a background of Sustainable Development based on a constant desire for ongoing improvement that generates added value. Great progress has been made in this field over the last few years, but there is still some way to go.

A Communications and Sustainable Development Department (DC2D) and a Human Resources Department (HR)—including a Health & Safety Department—whose directors are members of the Executive Committee (Comex), have been organising, supporting and following up various initiatives since 2007.

The Sustainable Development policy set up by the Group in 2009 adopts, reviews, expands and completes the objectives and actions undertaken as part of the sectoral policies based on Sustainable Development's three main thrusts, *i.e.* the social, environmental and economic aspects. It was adopted by the Board of Directors in January 2010.

This policy of Sustainable Development should enable the ERAMET Group to conduct its activities on a lasting basis in the areas where it is based and to support its development in new territories and new sectors of activity.

The document is divided into four sections, each corresponding to the four main elements of our activities: the employees, the sites, the products and the stakeholders.

This Sustainable Development policy, deployed at all sites in 2010 and translated into the Group's twelve languages, presents long-term objectives approved by the Comex.

The objectives are organised according to three levels of priority:

- Level 1: Essential objectives:
 - related to compliance with existing regulatory obligations,
 - helping to protect markets and activities,
 - actively preventing potential danger and risk from products and activities for the Group's employees;
- Level 2: Objectives allowing the policy to be actually implemented:
 - carrying out inventories before improvements,
 - setting up and/or updating support tools;
- Level 3: Objectives corresponding to new or forward-looking measures:
 - ideas to develop: new tools, defining indicators, new themes (example: biodiversity),
 - Group implementation of initiatives undertaken in certain limited areas (France, EU, etc.),
 - long-term preventive action.

These are short or long-term objectives and they are reviewed annually. For 2011, there are 42 objectives altogether, with 21 level 1 priorities, 13 level 2 priorities and 8 level 3 priorities set out in direct continuity with the "Environment", "Health" and "Safety" Objectives of previous years. Here are a few examples for information:

- Harmonized management of CMR products was implemented in 2011 through the use of dedicated software. Health monitoring standards, specific to nickel and manganese, were developed and validated in-house and are now being implemented.
- The policy of ISO 14001 certification of the industrial sites was successfully pursued. At the end of 2011, this certification was awarded to four new sites.
- The Group's "EraGreen" tool which collects and analyses environmental data was implemented at all Group sites.
- Following a significant industrial accident, a new immediate objective regarding industrial risks was added. All the hazard studies carried out at Group sites where such an accident was possible were reconsidered in the light of this feedback.
- A specific approach involving discussions with the stakeholders at the Aubert & Duval site in Firminy (France).

Site audits on the Environment, Health and Safety were also pursued. Other inspections, carried out as part of the insurance programme, and which address both industrial and environmental risks add to our knowledge on the environmental impacts of sites and the structures and actions implemented to minimise them. These on-site initiatives are essential and enable us to properly integrate the multifaceted regulations which apply to the Group's various activities. This knowledge of details is also primordial for the proactive examination of regulatory developments and sometimes for the initiation of new inter-site or inter-division improvements.

The process of identifying stakeholders continued. The maps produced since 2009 were distributed and discussions were held with divisions and sites. In 2011, the tool was enriched with specific mappings, in particular the aspects of biodiversity applied to France. A seminar on relations between manufacturers and stakeholders was held in the USA which brought together some of the Group's North American players.

The Group's project management integrates the dimensions of sustainable development. DC2D is associated with each Division's development projects.

Thus, social, cultural, economic and environmental aspects are covered, including biodiversity, relations with stakeholders, health and safety.

By referring to the best international standards, the Group strives to build long-lasting relations everywhere it sets up business and to respect any specific rules and cultures.

Numerous communication programmes, local support operations and even educational and health initiatives are encouraged.

ERAMET wishes to assume responsibility for the products marketed or used in its facilities. The process initiated as part of the work required by the REACH regulation continued. The emphasis placed on REACH in the past was reconsidered in 2011 in order to increase our understanding of issues related to the proper management of chemicals and the responsibility related to them, usually referred to as “product stewardship”.

This year, time was spent increasing the level of chemicals management both in terms of operations and documents. Various in-house working groups accompanied this work and, in each Division, strived to analyse the impact of the classification changes on everyday activities and projects throughout the whole value chain of our markets.

New work started in 2011. For example, an analysis of supply sensitivity, in view of the scarcity of resources; analyses of life cycles of some products or mixtures which integrate their contribution to energy issues.

The growing constraints of energy resources and greenhouse gas emissions, taken into account since 2005, had led ERAMET to

anticipate future regulatory requirements by establishing its carbon footprint. A specific monitoring committee made up of the three Divisions and the Industrial, Research & Development, Purchasing and DC2D departments monitors these matters.

Environmental data is analysed using specific Group software which was fully implemented at all the industrial and mining sites in 2011. It is based on the GRI methodology. 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 will be given new indicators after in-house discussions and external benchmarking.

The findings set out in the analysis of environmental data and the examples given testify to the ERAMET Group's desire and commitment to treat Sustainable Development as a priority and to unfailingly strive to make further improvements.

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 develops 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 Ethics Charter, Health & Safety policies and the Environmental Charter.

I. Protect and develop ERAMET's employees by involving them in its actions

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 between 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.

2. Foster professional development and industrial dialogue

- We recognise individual worth and talent. We value diversity as it is a major advantage for an international and innovative 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.

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.

II. Manage our health and environmental risks and impacts in order to protect balances on a sustainable basis

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.

2. Reducing energy consumption and fighting climate change

- The fight against climate change is an action priority for 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.

3. Aim for better use of natural resources and develop recycling

- The sustainable beneficiation of mining deposits is a primary environmental and economic issue 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.

III. Seize the opportunities offered by Sustainable Development for the benefit of our customers

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.

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.

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.

IV. Nurture a trusting relationship with our stakeholders to create value for all

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 actions in the various zones 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.

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.

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 stakeholder 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 looking 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 on the results achieved is becoming a regulatory obligation. 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 the development of scientific knowledge

Scientific knowledge on the impact of our activities on health and the environment 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 adopted in January 2010, continued in 2011.

In accordance with the goal formally set out at the beginning of 2007 and renewed each year, a schedule for sites undertaking the ISO 14001 certification process was established and followed, and in 2011, four more sites obtained ISO 14001 certification:

- Aubert & Duval Heyrieux;
- Erachem Comilog New Johnsonville;
- GCMC Freeport;
- Valdi—Le Palais-sur-Vienne (France).

ISO 14001 certifications demonstrate the sites' commitment to pursue a continuous improvement process. The coherence of the management systems and the extent of this continuous improvement are checked every year *via* external audits and *via* three-yearly audits to renew the certification.

On 31 January 2012, there were altogether twenty-six sites with ISO 14001 certification:

- Airforge, Pamiers;
- Aubert & Duval Heyrieux;
- Aubert & Duval—Imphy;
- Aubert & Duval—Issoire;
- Aubert & Duval Les Ancizes;
- Aubert & Duval Pamiers;
- Comilog Dunkirk;
- Erachem Comilog New Johnsonville;
- Erachem Comilog Tertre (copper recycling);
- Erachem Mexico;
- ERAMET Norway Kvinesdal;
- ERAMET Norway Porsgrunn;
- ERAMET Norway Sauda;
- ERAMET Sandouville;
- Erasteel Champagnole;
- Erasteel Commentry;
- Erasteel Kloster Langshyttan;
- Erasteel Kloster Söderfors;

- Erasteel Kloster Vikmanshyttan;
- Erasteel Tianjin;
- Eurotungstène Grenoble;
- GCMC Freeport;
- Interforge, Issoire;
- Tinfos Titane Iron Tyssedal;
- Valdi, Feurs;
- Valdi, Le Palais-sur-Vienne.

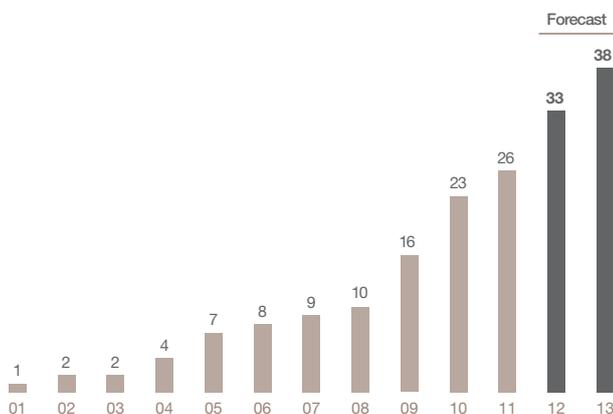
This process of obtaining ISO 14001 certification, undertaken in the industrial sites and now being undertaken in the mining sites, enhances performance. The certified sites represented 64% of the Group's 2011 sales compared to 54.2% at the end of 2010. This process of growth will continue in 2012.

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.

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.

Changes in sites with ISO 14001 certification and prospects for the next two years (including mines)



Prospects for new certifications in 2012 and 2013 result from the undertakings of sites, periodically reviewed and reconsidered at the end of 2011.

Thus, the Comilog sites in Gabon have undertaken to obtain the certification of their environmental management system in 2012.

At the SLN sites in New Caledonia, Management has undertaken to aim for certification of the plant in 2013 and the mines in 2014.

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).

Thus, cross-functional, multi-year objectives are developed, updated and followed up annually. They are managed either by the Environment Department, 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 decided to professionalize its in-house network of experts. 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:

- Two of the Group's three divisions were reinforced in 2011 with the creation of a Health, Safety and Environment Department for the Alloys Division and an Environment coordination and a Safety coordination for the Manganese Division. This initiative helps to reinforce the coherence of the Group's managerial policy between the central departments, the divisions and sites.
- The network of over 80 HSE correspondents meets regularly. The theme of the 2011 international Health Safety & the Environment seminar, held from 4 to 6 October 2011, was: "The sites, the Divisions and the ERAMET Group face-to-face with their responsibilities regarding chemicals". It was preceded by a visit to Seveso II site at Sandouville (France). There were representatives from almost all of the sites and major projects. This seminar recalled the mission of teams involved in Health Safety & the Environment and Sustainable Development in the Group and subsidiaries: ensure that the products and their hazards are properly understood, managed, controlled and anticipated to contribute to the development of the Group and the future of the metals it produces and converts. Moreover, five outside experts and some representatives from the Human Resources and sales departments took part in the three-day seminar.

- Sustainable Development was the theme of the Group's first international seminar on jobs in geology and mines (Géolmines) which was held in November 2011. It brought together over thirty people over a four-day period and was attended by the Environment Department. A lecture was given on the principles of responsible mining operations, controlled and reasonable management of water resources and impacts and these subjects were discussed during workshops.
- 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 coproducts, 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 with 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. "Kabar", a newspaper aimed at local populations living near Weda Bay (Indonesia) is one example of these initiatives.

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, and the "Alloys Management Institute" devotes a whole day to Health, Safety and the Environment to raise managers' awareness on the subject.

Finally, the Group continues to carry out its Environment audits of sites, and when relevant, combines them with Health & Safety aspects. In 2011, eight sites were audited for all the environmental themes and seven received an in-depth inspection. 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 and site representatives), who have been trained and certified according to an in-house framework, organise these audits which are carried out in an increasingly integrated fashion so that each site is assessed

at least every two or three years. Fourteen new Group auditors were trained in 2011.

This involvement will aid the sharing of experience between the operational teams and enable them to benefit from the others' best practices. Moreover, as the themes of health, safety and the environment are very inter-related, the Group's medical officer also takes part in the site audits.

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.

In addition, there are inspections carried out within the framework of the insurance programme which analyse both industrial and environmental hazards.

With regards technical resources to control the impacts on aqueous discharge or the air emissions of its 55 sites, the Group has a whole series of treatment and monitoring equipment:

- For water:
 - over 70 aqueous discharge points are canalized and monitored;
 - there are over 350 treatment facilities for these aqueous discharges (purification plants, septic tanks, pH adjustments, settling tanks, holding reservoirs, scrubbers/oil traps, etc.);
 - there are over 100 air-cooling towers which allow water loops to be used and which are suitably monitored;
 - there are over 250 piezometers to monitor ground water aquifers. About twenty extra piezometers have also been installed outside the sites' boundaries.
- For air:
 - over 300 air emission points are canalized and monitored;
 - there are over 300 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 about one hundred atmospheric fallout measurement points, half of which are on-site and the other half of which are outside site boundaries. 80% of the plants carry out these two types of monitoring.

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 over €70 million in 2011 (compared with €30 million 2010), spread out over 42 sites.

It contributes to the management of environmental impacts and to the ongoing process of continuous improvement.

Therefore, the capital expenditure discussed here is strictly related to environmental protection and prevention. For example, it is related to the installation of new facilities or work carried out to minimise impacts. This does not cover capital expenditure for new units which inevitably comprise a considerable financial proportion, but which is not specifically identified, to comply with the best techniques chosen.

More than 60% of capital expenditure in 2011 was devoted to the prevention of air pollution. The SLN Doniambo site (New Caledonia) continued to implement its multi-year investment plan by renovating the pre-refining filters, restoring the exhausters and the sensible heat circuit.

In 2011, there were numerous projects involving the installation, replacement or repair of dust removing facilities. The following sites were concerned by these capital expenditures: Aubert & Duval Les Ancizes (France), Comilog Moanda (Gabon), ERAMET Tyssedal (Norway), Erachem Comilog New Johnsonville (USA), Aubert & Duval Firminy (France), Guangxi ERAMET Comilog Chemical (China), ERAMET Marietta (USA), ERAMET Research (France) and Eurotungstène Grenoble (France).

Almost 30% environmental capital expenditure was devoted to the prevention of water pollution. For example, improvements were made to the effluent treatment conditions in mining facilities in New Caledonia with the installation of settlers, dams, and dips to recover solids. Capital expenditure was also put into improving water purification processes. This was the case on the sites of Erachem Mexico (Mexico), ERAMET Norway Sauda & Porsgrunn (Norway), GCMC Freeport (USA), ERAMET Norway Kvinesdal (Norway) and Erachem Comilog Baltimore (USA).

During the year, there were also several programmes to upgrade effluent collection networks. For example, Erasteel Champagnole (France) created separate sewerage systems for sanitary water and rainwater. The Port Minéralier d'Owendo site (Gabon) carried out work to upgrade the wastewater disposal system from the equipment lubrication station. An appraisal of the rainwater and waste water systems was carried out on the buildings at the Comilog mine (Gabon).

Capital expenditure in 2011 also concerned soil protection with the installation and/or repair of retention areas. This was the case in 2011 with the French sites of Aubert & Duval Les Ancizes, Erasteel Champagnole, Valdi Feurs and Aubert & Duval Pamiers.

Finally, capital expenditure was put into preventive protection of the environment in the event of new activities being set up. In specific terms, there was a lot of capital expenditure put into the new UKAD plant in France (holding reservoirs, self-monitoring discharge plant, low NO_x burners and energy recuperation systems on the reheating furnaces, dry cooling towers, shaving dewatering system, etc.)

5.4. ENVIRONMENTAL DATA

Environmental indicators have been improving over the past several years and this trend continued overall in 2011.

The significant reductions of some indicators recorded in 2009 were related to a slowdown in business. Generally speaking, 2011 results are proportional to activity levels, as they were in 2010.

The 2011 environmental report covers all the industrial and mining sites of the scope used for the Group (55 sites), spread out over five continents, *i.e.* the following Chinese, Norwegian, Italian, Swedish, Gabonese, Mexican, American, English, Belgian, French, Indonesian and Caledonian sites:

Norway	Porsgrunn, Sauda, Tyssedal, Kvinesdal
Sweden	Söderfors, Långshyttan, Vikmanshyttan
Belgium	Tertre
France	Les Ancizes (2 sites), Champagnole, Commentry, Dunkirk, Feurs, Firminy, Gennevilliers (2 sites), Grenoble, Heyrieux, Imphy, Issoire (2 sites), Laval-de-Cère, Le Palais-sur-Vienne, Pamiers (3 sites), Sandouville, Trappes
Italy	Ferrare
United Kingdom	Warrington
New Caledonia	Doniambo, 5 mining facilities
USA	Marietta, Baltimore, Freeport, New Johnsonville
Mexico	Tampico
Gabon	Setrag, Moanda (CIM and mine), Owendo
Indonesia	Halmahera
China	Chongzuo, Guilin, Liabin, Tianjin, Wuxi

The 2011 reporting scope includes the new UKAD site (France) inaugurated in September 2011, the site of the Weda Bay Nickel project (Indonesia), and the small sites of SUPA (France), Erasteel Romeoville (USA) and ADES (Italy).

The key events of 2011 also include:

- the Aubert & Duval Gennevilliers site was split into two and a workshop was completed in June;
- in June, the melting activity was stopped at the Valdi Feurs site (France) following an industrial accident, which led to a reduction in its consumption and discharges;
- the relocation of activities of the Guilin Comilog Ferroalloys (China) plant, scheduled for 2012, resulted in the shutdown of the plant in May 2011. Therefore, the consumption and discharges related to this site fell sharply in 2011.

Finally, the environmental results of the French sites of Valdi, which joined the Group on 1 January 2010, are taken into account as from 2010.

To monitor its key indicators, the Group uses its in-house reporting tool EraGreen. This computer system is used to collect and consolidate data on the environment of industrial and mining sites. The main issues covered are water, air, soils, energy, waste, biodiversity and regulations.

In 2010, the technical and conceptual aspects of the tool were completely overhauled and in 2011 the tool was implemented at all the Group's sites. In 2010, the data from the various sites was sent by mail or in separate computer files, but at the end of 2011, the environmental data on all sites included in the Group's report was consolidated solely *via* the EraGreen tool.

All the quantitative data given in the present report (environmental indicators) has been extracted from EraGreen and comes exclusively from the data encoded by each of the Group's sites.

It should be noted that in 2011, the EraGreen tool was deployed at the main mining facilities of the SLN (New Caledonia) *via* dedicated reporting entities, which up until then had consolidated their data *via* the SLN Doniambo reporting.

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.

This is the case when the results of the year are not known on the date of the report's fiscal year end. In the present report, the data on the air emissions was revised following the integration of the results of the 2010 measurement cycles received in 2011.

5.4.1. Pollution and waste management

5.4.1.1. AIR EMISSIONS

Air emissions		2009	2010	2011
CO ₂ emission related to energy	thousand tonnes	3,933	4,892	4,777*
Sulphur oxides (SO _x)	tonnes	14,044	11,825	11,291
Nitrogen oxide (NO _x)	tonnes	4,556	3,624	2,875
Volatile organic compounds (VOC)	tonnes	287	167	182
Total dust	tonnes	2,354	1,931	1,872*
Nickel	tonnes	29	11	10
Manganese	tonnes	131	83	78

* Elements reviewed by Deloitte—moderate assurance.

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 CO₂ emissions are calculated according to the type and quantity of energy consumed by a site and according to characteristic emission factors.

Concerning sulphur oxide and nitrogen oxide emissions in 2011:

- SO_x air emissions, which were stabilised in 2010, were more or less the same in 2011;
- the downward trend in nitrogen oxide (NO_x) emissions for the scope chosen continued in 2011.

This year, there was a drop in the SO_x emissions at SLN Doniambo (New Caledonia) mainly due to preventive management involving a switch to very low sulphur fuel oil. Following the work carried out to optimise combustion settings and the quality of fuel used on the site, there has also been a very sharp drop in NO_x emissions.

This was also the case with the Guangxi ERAMET Comilog Chemical site (China) which reduced its SO_x emissions by using coal containing less sulphur in its boiler. However, this plant saw an increase in NO_x emissions, due to the recommissioning of its blast furnaces which operated non-stop in 2011, after substantial shut-downs in 2009 and 2010.

By recycling used catalysts in its industrial process and considerably reducing its consumption of natural gas, the GCMC Freeport site (USA) also saw an improvement in its SO_x and NO_x emissions.

The reduction in SO_x air emissions is also due to the policy adopted by the Alloys Division several years ago which involved replacing reheating furnaces and preferring gas technologies rather than fuel. Thus, the utilisation rate of gas furnaces at Erasteel Commentry (France) reached 96% in the last quarter of 2011.

Air emissions are usually proportional to the activity of the facility emitting them. In 2011, the drop in the number of operating hours at the Complexe Industriel de Moanda (Gabon) led to a marked reduction in its air emissions. Moreover, repairs carried out on the air emission treatment facility in 2010 improved the facility's purification rate.

This was also the case with the Erachem Mexico site (Mexico) which set up a programme involving the maintenance and optimisation of its CO₂ emitting facilities. This enabled it to reduce SO_x and NO_x emissions by 30% compared to 2010 levels.

In 2010, with the improved handling of data by the EraGreen reporting tool, the accounting of Volatile Organic Compounds (VOC) in air emissions was impacted. Despite the upturn in business, VOC emissions are still lower than those of 2008.

In pyrometallurgy, emissions of suspended solids and other metal dust are channelled 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.

Collection and filtration systems accompany most of these sensitive operations. Upon the first count, we see that the Group's sites are fitted with over 300 air emission treatment facilities. These dust removing facilities are kept in good working order and constantly improved. Moreover, the Group is very determined to reduce its air emissions. As in 2010, two thirds of the environmental capital expenditure was devoted to the reduction of air emissions in 2011.

Compared to 2009 and 2010, total dust emissions dropped. Compared to 2009, nickel and manganese air emissions dropped once again.

Thanks to an improved dust filtering system, ERAMET Sandouville (France) contributed to this reduction.

Along with the capital expenditure, various projects were conducted on the sites to reduce air emissions. Improvements continued to be made to the facilities' existing dust traps. GCMC Freeport (USA), for example, set up a general plan of action called "keep it in the pipe" which aimed to improve the whole dust trapping process. This has already led to a 25% reduction in dust emissions at the site, compared to 2010 levels.

Finally, with regards dust emissions at the SLN Doniambo site (New Caledonia), the results are uneven, with emissions increasing at the thermal power plant but falling at the plant. The objective set for 2011 was reached, *i.e.* 120 grams of dust per tonne of ore treated (compared to 125 grams in 2010).

More and more attention is being paid to fugitive dust emissions. Once again this year, assessments were carried out and action plans were implemented to reduce these emissions. For example:

- improvements to the dust trapping system in the smelting plant on the Erasteel Söderfors site (Sweden);
- the installation of scale-like joints in the coal-based ore reduction unit at the Erachem Comilog Tertre site (Belgium);
- the installation of speed ramps for vehicles and an automatic spraying system for tracks in the "store" shop at SLN Doniambo (New Caledonia).

5.4.1.2. AQUEOUS DISCHARGES

Aqueous discharges		2009	2010	2011
Suspended solids (SS)	tonnes	6,386	8,348	4,360
Chemical oxygen demand (COD)	tonnes	102	204	200*
Nickel	tonnes	5.7	8.9	14.4
Manganese	tonnes	54.9	93.2	90.8

* Elements reviewed by Deloitte—moderate assurance.

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.

After an increase in 2010, aqueous discharges with Suspended Solids (SS) dropped sharply in 2011.

This drop is mainly due to reduced discharges at SLN Doniambo (New Caledonia). For the plant cooling and slag granulation, sea water from the Port of Nouméa is used. This sea water contains SS before it is collected. These quantities of SS are also contained in the water released afterwards; this means that all the SS contained in the sea water beforehand plus the SS involved in the processes are counted. This situation will be examined further.

The ERAMET Marietta site (USA) also reduced its SS discharges. As it operates at the moment, this plant only releases discharges from its settling tank and it only does this during periods of heavy and repeated rainfall. There were much fewer discharge periods in 2011 compared with in 2010.

The Aubert & Duval Les Ancizes site cleaned its settling tanks and improved the purification performance of its lagoons (increasing the residence time) and thus generated a smaller quantity of SS.

We should note that, in 2011, there was a marked increase in SS discharges at the ERAMET Titane and Iron site (Norway) related to unscheduled shutdowns of the facility (interruptions in the recycling loop).

As indicated in paragraph 5.3.3, in 2011, a great deal of capital expenditure was put into improving the quality of the water

released. Hydrocarbon separators were installed at Erasteel Stub (England) and SLN Tiébaghi (New Caledonia). Others were installed as part of more global redevelopment projects, *i.e.* at the hydrocarbon storage facility at Comilog Dunkirk (France) and the vehicle washing area at Interforge (France).

To date, over 100 hydrocarbon separators have been installed at all the Group's sites.

Initiatives to rehabilitate ore and fuel storage areas were also taken in 2011. We can note, for example, the extension of the coke storage area at the Moanda Metallurgical Complex (Gabon), the extension of the soluble oils storage area at Erasteel Commentry (France) and the earthworks at the SLN Kouaoua mining site (New Caledonia) aimed at improving the collection of effluent.

With regards aqueous discharge, we note that nickel discharge has increased. This is mainly due to discharges at SLN Doniambo (New Caledonia). Despite a great reduction in its SS discharges, nickel and manganese discharges increased at the site. An investigation plan has been initiated. At SLN, for the plant water cooling and slag granulation, sea water from the Port of Nouméa is used. It should be noted that this sea water contains SS before it is collected and that applicable regulations do not allow to deduct the SS counts.

Manganese aqueous discharges became stable in 2011. Apart from the increase observed at SLN Doniambo (New Caledonia), discharge levels dropped sharply at Erachem Comilog Tertre (Belgium) and ERAMET Marietta (USA).

After an increase in 2010, discharges of Chemical Oxygen Demand (COD) became stable in 2011.

The Aubert & Duval Firminy site saw a drop in its COD discharge in 2011 following the nominal operating mode of its new purification plant, which became operational in December 2010.

It should be noted that some sites had difficulties with the COD analysis measurement because various chemical elements may interfere with this, especially the presence of chlorides and this

may lead to incoherent results. Eurotungstène Grenoble (France) experienced this problem.

Finally, the Group's sites carefully monitor the quality of ground water and thus the impact of the activity on soils and sub-soils. There are over 250 piezometers at different Group sites which carry out this monitoring.

5.4.1.3. WASTE

Waste production		2009	2010	2011
Quantity of non-hazardous waste	thousand tonnes	3,775	3,997	3,640
Quantity of hazardous waste	thousand tonnes	35	48	58*

* Elements reviewed by Deloitte—moderate assurance.

The field of waste management is constantly changing. For years, ERAMET has strived to recycle the waste it generates in its processes.

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. The recycling levels in this sector are extraordinary. In 2011, 92% of the raw materials put into the furnaces at Aubert & Duval Firminy (France) come from the recycling loop.

We should also note, the constant efforts to optimise the inputs/outputs loop between the 4 sites of Erasteel Kloster and Commentry. Indeed, the semi-finished products or residue from one site serve as raw materials for another site, thus enabling greater synergy and reducing the amount of final waste to be stored in dedicated centres to an absolute minimum.

For many years, ERAMET has been diversifying its portfolio by 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 and zinc salts and oxides from waste, and also, since 2010, the Valdi sites (France) which are major players 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.

In 2011, many waste sorting and recycling installations were set up or improved. For example, at the SLN (New Caledonia) mining facilities, specific sectors were set up to recover scrap metal, neon tubes, printer toners, used grease and aerosols.

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.

Industries involved in steel-making, melting-reduction and the production of ferroalloys generate more than 80% of the Group's by-products and non-hazardous waste. They come in the form of slag and inert slag which is mainly stored in internal landfills.

However, over the past several years, increasing amounts have been recycled (recovery of metal, use in road ballast, civil engineering, etc.). This was once again the case in 2011 when a new sector was set up to recycle all the slag from the Aubert & Duval Les Ancizes and Aubert & Duval Firminy (France) steelworks instead of storing it in the specialised waste landfill that existed up until then. In Gabon, the sorting of non-hazardous mining waste was extended by the creation of areas dedicated to conveyor belts, tyres and scrap metal.

It should be noted that the 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.

After the upward trend in 2009 and 2010, the Group's overall quantity of non-hazardous waste fell slightly in 2011.

In particular, we should note that SLN Doniambo (New Caledonia) continued its efforts to reduce the quantity of non-hazardous waste generated in 2011.

HAZARDOUS WASTE

Activities that generate hazardous waste are mainly the pyrometallurgical and chemical processes carried out by the Manganese Division.

The Manganese Division's "chemicals" operations generate a large quantity of production and purification residues (called 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 which, according to their intrinsic characteristics, can be considered as hazardous waste.

After a sharp drop in the production of hazardous waste in 2009 related to the slowdown in activity, and the quantity produced in 2010 similar to that of 2008, there was an increase in production of hazardous waste in 2011.

This is mainly due to the localised clean-up work carried out at Group sites, to changing processes, but also to changes in the classification of some types of waste which became “hazardous waste”.

In 2011, Aubert & Duval Les Ancizes (France) carried out an exceptional clean-up of its lagoons which generated the elimination of over 2,500 tonnes of sludge. GCMC Freeport (USA) carried out excavation work to remove polluted soil before setting up a new facility.

A different additive in the process at ERAMET Norway Sauda and Porsgrunn (Norway) resulted in a 50% increase in process sludge.

Finally, ERAMET Sandouville (France) saw the proportion of its hazardous waste increase as a result of a change in status of sulphur.

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 or continuing operations, both mining and industrial.

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 the audits it carries out before acquiring new activities.

The key events of 2011 are listed below. First of all in the industrial field:

- *Erasteel Kloster Söderfors (Sweden)*: Following a major programme to investigate and map the soil that started in 2008, the rehabilitation of its former internal hazardous waste site (with a view to its closure) is in its final stages and is being closely monitored by the authorities. Further investigations are now being carried out in the zone next to the filter dust storage area to validate with local authorities the measures to implement to cover it over.
- *Aubert & Duval Les Ancizes (France)*: The site stopped operating its non-hazardous industrial waste landfill (slag, firebricks, debris from the pouring basin) on 31 December 2010.

The joint studies carried out by the Company and the municipality of Ancizes ended in March 2011, work on the “town’s” part started at the beginning of July 2011 and the last phase of the work on the “company’s” part ended in September 2011. After eradicating an invasive plant called Japanese knotweed, remodelling and containment work with silty earth was carried

out until the end of 2011 and will continue until March 2012. In the spring of 2012, grass will be sown on the whole surface of the former landfill and more than 1,100 trees will be planted.

The aim of the rehabilitation is to create a natural area where nature will take over and the relief and landscape will become a continuation of the surrounding hills.

- *Aubert & Duval Firminy and Aubert & Duval Les Ancizes (France)*: 2010 was dedicated to finding recycling channels for Ancizes’ waste stored on-site and for Firminy’s waste stored at an outside storage area. In 2011, a partnership was launched with a company specialised in the recycling of slag. The slag is mechanically separated and the metal fraction is used in the metallurgical sites while the mineral fraction, more commonly known as slag sand, is used to replace high-grade materials like quarry sand or road embankments. Therefore, as well as being able to close the landfill at the Ancizes site, 98% of the waste produced by these two steelworks was recycled in 2011.
- *Comilog France in Boulogne-sur-Mer (France)*: Following the rehabilitation of the waste storage site in Manihen (62) which was completed in 2010, further investigations were carried out in 2011 to better understand hydro-geological phenomena in the mass of waste and their potential impact on the subsoil. These studies will be continued in 2012.
- *Erasteel Kloster (Sweden)*: This Swedish entity comprises three plants: Söderfors, Långshyttan and Vikmanshyttan. A project to recycle the metal hydroxide sludge from the Långshyttan landfill by using it in the steelworks of the Söderfors plant continued in 2011. This project, which will recycle more than 6,500 tonnes of waste, is a fine example of inter-site synergy. 100% of the quantity concerned has been extracted from the internal landfill and 50% has already been dried with a view to re-using it as raw material for the Söderfors arc furnace. This follows on from the complete recycling of another store of millscales, under the same conditions, and allows the site of Långshyttan to recycle 100% of the waste stored.
- *Guilin Comilog Mn ferroalloys (China)*: after all industrial activities ceased at the former plant in June 2011, the storage areas were cleaned and any remaining products were removed. These products will be used as raw material at the new plant located outside the town. This situation gave rise to a visit by the DC2D. At the end of November, the land was handed back to the local authorities in accordance with the agreements made and within the deadline.
- *GCMC Freeport (USA)*: The protective ground slabs in all the outside areas for storing finished products were renovated and a layer of insulating material was put in place. The containers for this material are themselves completely closed so this represents a second level of risk management in the event of loss of confinement.

Initiatives were also taken in the mining sector.

IN NEW CALEDONIA

- Major rehabilitation work was continued in 2011, in the Poro region, at the halted Si Reis mine in Népouï, and also major hydraulic improvements to the Kiel mine (Doudou Canal); These fundamental actions, conducted since 2007, have allowed environmental impacts to be controlled and stabilised, with the SLN making repairs whenever technically feasible. These programmes account for expenditure of over €2 million annually. This fundamental technical recovery work controls the ground stability and erosion aspects as well as the water runoff. Thus, for New Caledonia, as concerns the stability and erosion control of dumps (for example: the very high dumps in Népouï), SLN is the main contributor to the drafting of the benchmark guide to good mining practice expected to be published soon.

At the same time, SLN made significant contributions to the following:

- the mining-site restoration Committees (*comités de réhabilitation des sites miniers*—CRSM) financed pursuant to Deliberation [motion] 104. Since its formation in 1990, SLN has contributed €20 million (€2.1 million paid in 2011).
- 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

- *Comilog Moanda*: restoration work continued on the river Mouilli by extracting the sediment deposited in the riverbed downstream

from the mine washery. By the end of 2011, two million tonnes of sediment had been excavated. This sediment is processed in the Moanda Industrial Complex. The industrial process had to be completed by a beneficiation facility so that this fine-grained sediment could be sintered and recycled. On this occasion, Comilog voluntarily carried out an environmental impact study which was presented to the Ministry of the Environment and the Ministry of Mining. An environmental and social management plan was drawn up so that the direct and indirect impact on the ecological balance, and the quality of life and living conditions of populations living within the project siting zone and adjacent areas are properly taken into account.

- *Comilog Moanda*: although the manganese ore reserves on the Bangombé plateau are still considerable, and operations are to continue for several years, one area of the plateau was rehabilitated as part of a test in 2011. It involved large-scale levelling of the ground. Indeed, mining operations create many uneven areas mainly because of the heaps of stored tailings. Part of this levelled out area was covered with topsoil. Nature is taking over again and many plants, herbs, flowers and shrubs have returned. A study of the fauna and flora will be carried out in order to compare this situation of natural recolonisation with a reference area that was not impacted by mining activities.

Finally, an important point to note here is that soil conditions are systematically mapped before the start of any new project, in accordance with the Group's Sustainable Development policy. This was done as part of the project to build a new gas atomisation tower at the Erasteel Kloster plant in Sweden, which was inaugurated in October 2011, as part of the project to build a silicomanganese plant and a manganese metal plant in Gabon, and before the new ferromanganese and silicomanganese plant was set up in Guilin, China.

5.4.2. Sustainable use of resources

Consumption		2009	2010	2011
Total energy consumption	GWh	14,300	17,350	17,346*
Total water consumption	million m ³	33.5	32.8	29.2
Industrial water consumption	million m ³	21.1	17.3	16.7
Mains water consumption	million m ³	1.6	2.1	1.9
Surface water consumption	million m ³	9.9	11.8	7.8
Ground water consumption	million m ³	0.9	1.5	2.8

* Elements reviewed by Deloitte—moderate assurance.

5.4.2.1. WATER CONSUMPTION

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.

Water consumption is related to production. The drop in consumption observed in 2010, despite the upturn in activity, became more marked in 2011.

For the first time, the assessment gives a breakdown of the type of water consumed. The following can be noted:

- Industrial water consumption has dropped over the last three years;
- Mains water consumption and surface water consumption dropped between 2010 and 2011;
- Ground water consumption has increased over the last three years.

It should be noted that the sea water used to cool the SLN thermal power plant (New Caledonia) and for slag granulation is not counted in the present assessment.

First of all, it should be emphasised that when it is technically possible, the sites:

- operate in a closed circuit thus favouring the internal recycling of the water consumed. The cooling of furnaces and other metallurgical 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. Sometimes, operating constraints impose the use of “clean” water. For example, Erachem Comilog Baltimore (USA) which used to use industrial water for the cooling process, had to change its habits and use mains water instead in order to provide water of a suitable quality for its cooling facilities.

The drop in the Group’s total water consumption in 2011 is mainly due to the continuity of the multi-year reduction plans implemented by many sites. For example, ERAMET Norway Sauda (Norway) optimised the use of cooling water and at Aubert & Duval Pamiers (France) the third phase of the project to reduce discharges enabled the site to reduce its water consumption by more than 2 million cubic metres compared to 2010.

It should be noted that some of the water consumption is based on estimations (rate of flow of pumps, inflow-outflow assessment). However, new water meters are regularly installed to cover all the networks. This is the case for Setrag (Gabon) which has a multi-year programme to install water meters.

5.4.2.2. ENERGY

The main energy requirements are due to the pyrometallurgy operations sites. The furnaces and the melting facilities, at the heart of the ERAMET Group’s metallurgy activities in its three Divisions, are the main contributors.

Since 2008, the consumption of energy (all energies consumed including reducers) at the Group’s ERAMET sites is the result of three factors:

- the scope of the Group;
- the sites’ level of activity;
- the sites’ energy performance.

Consumption fell in 2009 in relation to 2008 and 2010 because of the downturn in activities due to the economic climate.

In 2010 and 2011, with the upturn in activities, energy consumption reached its 2008 level. However, this increase was limited by the results of the “Energy Saving” process. This benefited from the managerial initiatives set up in 2009 (during the drop in activity) and also from energy cost optimisation practices (load reductions) and from the energy performance improvements resulting from capital expenditure and modernisation.

As for the CO₂ emissions indicated in this report, they are directly related to the sites’ energy consumption.

5.4.2.3. ENERGY SAVINGS

Since 2005, ERAMET has had an “energy savings” programme in place, designed to cut the Group’s energy spend by 5% to 10%. This measure, which helps the sites to define their “energy saving” action plan, was first initiated on six of the Group’s sites. It was then gradually extended to all Group sites with high levels of energy consumption.

A site’s action plan is defined in cooperation with the Group’s Industrial Affairs Department, which may call upon independent experts if necessary.

It requires three stages:

- identification/understanding of the process used by the plant;
- “brainstorming” of potential ideas, and;
- definition of the action plan.

The actions generally adopted cover at least the following subjects:

- production equipment and its energy performance (improvement and maintenance);
- operation of this equipment (best practices, etc.);
- energy metering and monitoring of energy performance, etc.

Once the action plan has been drawn up, the Group’s Industrial Affairs Department continues to support the sites depending on their needs and asks them for a six-monthly progress report. Progress is also presented to the Group’s Comex annually.

At the end of 2011, 26 sites (out of the 27 sites targeted) had their action plan. Specific measures were implemented which not only allowed substantial gains to be made but sometimes also enabled the environmental impact to be reduced.

After the drop in activities in 2009 which represented an opportunity to introduce new best practices (improving fallback methods, raising staff awareness on energy efficiency, load reductions, etc.), activities picked up again in 2010. In 2010, the results show that twice as much savings were made as in 2009. This is a result of the best practices adopted in 2009, and also as a result of the sites’ continued efforts to improve their energy performance (particularly SLN).

5.4.2.4. USE OF MINERAL RESOURCES

The ERAMET Group distinguishes itself by its wide range of activities: the Nickel and Manganese Divisions are involved in mining, pyrometallurgy, hydrometallurgy, chemicals, recycling, etc. The Alloys Division is involved in production (steelworks, remelting, powder atomising, etc.) and conversion (forging, closed die forging, embossing, casting, rolling, heat treatment, machining, surface treatment, etc.). Therefore, it would be illusory to produce an exhaustive summary of the raw materials used.

Mining operations are at the core of the Group's business. Mineral resources are extracted responsibly, *i.e.* by optimising the beneficiation of mining deposits. Geologists and miners have powerful technologies for prospection, modelisation and information management, which allow them to optimise extraction while minimising the impact and giving preference to non-destructive methods. At the same time, research is being carried out on the use of minerals with increasingly lower content, which would thus reduce the surface areas concerned and the quantities of tailings to store.

Thus, the Moanda industrial complex (Gabon), built in 2000, is destined to produce manganese sinter from a resource that at the time was not re-used because it was too fine-grained and unsuitable for the production of ferroalloys. Now, this industrial complex has seen its process modified and adapted so that it can make this sinter from the sediment deposited in the river Mouilli and thus contribute to its rehabilitation. Basically, manganese ore is marketed in a variety of different qualities thus maximising its beneficiation.

This desire to make full use of resources also applies to nickel ore.

At SLN (New Caledonia), supplies for the Doniambo plant are based on a clever mix of different quality ores in terms of the origins of the mining facilities in operation. This practice means resources are used as fully as possible. It sometimes involves using lower grade ore but allows the chemical properties of the operations to be regular, and homogenous.

Moreover, the Group has developed an innovative technology to process all profiles of nickel ore *via* a hydrometallurgical process at atmospheric pressure.

Finally, it should be stressed that secondary raw materials can be put to many uses. Working more and more in the spirit of a circular economy is one of the manufacturing options under study. Sites measure the percentage of materials that come from recycling compared to the total quantity implemented. This approach is of little interest to mining facilities because they use very few raw materials and only in very small quantities. Likewise, activities devoted to recycling should be excluded because they are in the opposite situation, *i.e.* their purpose is to re-use waste. Ignoring these cases in point, we see that most of the Group's other activities are in these types of situations.

They vary greatly from one site to another. For many of them, it is a matter of a small percentage. The Alloys Division stands out with over 90% of secondary raw materials being used, especially in steelworks.

The various raw materials needed for industrial processes are systematically and accurately monitored and their efficiency is measured.

5.4.3. Climate change

5.4.3.1. CONTRIBUTION TO GREENHOUSE GAS 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 European and French 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 and the Purchasing, Development and Innovation Department;
- providing information on CO₂ emissions and emission forecasts to the Group Purchasing Department, which is responsible for managing the accounts of the relevant Group sites in France vis-à-vis the French greenhouse gas allowance registry (Seringas).

DIRECTIVE 2003/87/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 13 OCTOBER 2003, ESTABLISHING A SYSTEM FOR GREENHOUSE GAS EMISSION ALLOWANCE TRADING WITHIN THE COMMUNITY

The sites affected are the 4 steelworks in the Alloys Division:

- Aubert & Duval: Firminy and Les Ancizes sites in France;
- Erasteel: Commentry (France) and Söderfors (Sweden).

Second period: 2008-2012

- Annual allowances for the 4 sites = 137,245 allowances
- 2008 emissions of the 4 sites = 95,478 tonnes of CO₂, representing a surplus of 41,767 allowances for the first year;
- 2009 emissions of the 4 sites = 66,132 tonnes of CO₂, representing a surplus of 71,113 allowances for the second year;
- 2010 emissions of the 4 sites = 77,715 tonnes of CO₂, representing a surplus of 59,530 allowances for the third year;
- 2011 emissions of the 4 sites = 81,846 tonnes of CO₂, representing a surplus of 55,424 allowances for the fourth year.

Due to the low level of activity of the sites concerned in 2009, 2010 and 2011, the forecasts for the end of 2012 show an overall surplus of approximately 260,000 allowances for the period.

N.B. Unlike the case in period 1, surplus allowances at the end of period 2 can be carried over to period 3 (2013-2020).

France's "new entrants" reserves, whereby allowances can be allocated to new facilities, is not high enough for period 2. Article 18 of the 2012 Finance law, adopted on 21 December 2011, institutes the replenishment of this reserve through a tax on the sales of companies which operate facilities subject to allowances, the rate of which will be specified in an order (between 0.03% and 0.07%). Aubert & Duval and Erasteel are concerned.

DIRECTIVE 2009/29/EC OF 23 APRIL 2009 AMENDING DIRECTIVE 2003/87/EC "IN ORDER TO ENHANCE AND EXTEND THE COMMUNITY SYSTEM FOR GREENHOUSE GAS EMISSION ALLOWANCE TRADING"

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). The subsidiary legislation of the amended Directive for period 3 (2013-2020) is being approved and published by the European authorities.

Sites concerned

Alloys Division: Aubert & Duval: Les Ancizes, Firminy, Pamiers and Airforge in Pamiers and Interforge in Issoire. Erasteel: Commentry.

Manganese Division: Comilog Dunkirk, ERAMET Norway (Porsgrunn, Sauda, and Kvinesdal) and TiZir in Tysseidal.

The Group's total emissions subject to allowances will rise from approximately 100,000 tonnes of CO₂ per annum at present to around one million tonnes of CO₂ per annum during the third period.

Free allowances

Calculation of the number of free allowances will be based on the general formula:

$$\begin{aligned}
 & \text{Free allowances} \\
 & = \\
 & \text{specific emissions} \\
 & \text{(according to benchmark)} \\
 & \times \\
 & \text{historical production volume} \\
 & \text{(2005-2008 median activity)} \\
 & \times \\
 & \text{annual reduction factor for allocations} \\
 & \text{(1.74\%)} \\
 & \times \\
 & \text{trans-sectoral reduction factor}
 \end{aligned}$$

The Commission decision of 27 April 2011 set out the various terms which will differ according to the installations and sub-installations.

An official questionnaire drawn up by the Commission, was completed by all the sites concerned, checked by accredited verifiers and passed on to the national authorities before 1 July 2011 in France and mid-September in Norway.

Each Member State passed on the compilation of this collected data to the European Commission to obtain its approval of the free allowances allocated to each installation.

CO₂ 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 Purchasing, Research and Innovation Department, the Industrial Affairs Department and the Industrial Departments of the three Divisions.

5.4.3.2. GROUP CARBON FOOTPRINT

The primary goal of a Carbon Review is to provide a high-level overview of an activity with an indicator of greenhouse gas emissions that is no longer primarily economic but physical in nature. The review brings to light "physical" dependence that may not be obvious in a purely economic review, but which over the long term are drivers of constraints.

ERAMET's initial Carbon Footprint, carried out jointly in 2007-2008 by Carbone 4, a company in receipt of ADEME approval as regards methodology, the Communications and Sustainable Development Department, the Industrial Affairs Department, the Group Purchasing Department, the environmental contacts at all Group sites and the logistical units in the three Divisions (for CO₂ emissions related to freight transportation).

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 is approximately:

6.35 million tonnes CO₂ equivalent

Breakdown by Division:

- 55% for Manganese Division;
- 39% for Nickel Division;
- 4% for Aubert & Duval;
- 1% for Erasteel.

Breakdown by item:

- **87% for energy** which includes energy consumption (electricity, gas, fuel oil, coal) and the consumption of reducing agents needed in the process (coke, coal, anthracite, etc.);
- **8% for freight;**
- **3% for "inputs":** CO₂ emitted during the production of the raw materials that were purchased, particularly the scrap for steelworks' arc furnaces.

According to the international reference, the GHG Protocol, global emissions can be broken down into three scopes:

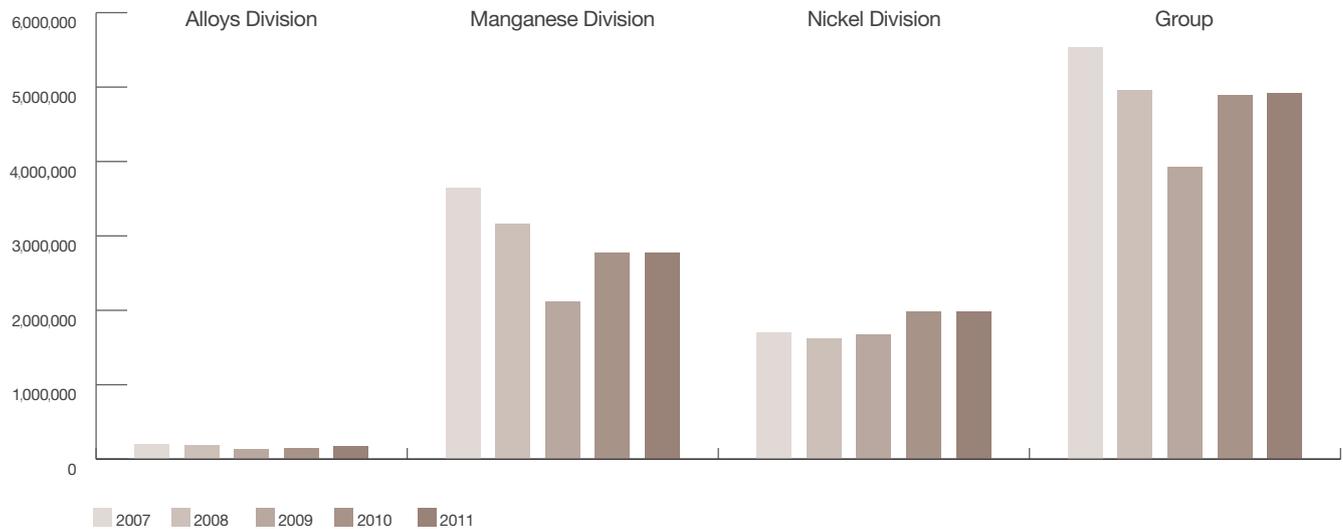
- scope 1: Direct emissions from processes carried out in Group installations;
- scope 2: Indirect emissions from the consumption of electricity;
- scope 3: Other emissions (freight transportation, carbon content of inputs, etc.).

According to this classification, the Group's emissions can be broken down as follows:

- scope 1 emissions = 4,742,098 tonnes of CO₂, *i.e.* 74% of the total;
- scope 2 emissions = 797,918 tonnes of CO₂, *i.e.* 13% of the total;
- scope 3 emissions = 810,473 tonnes of CO₂, *i.e.* 13% of the total.

Note that the total of scopes 1 and 2 represents 87% of the total.

Change in CO₂ emission – Scopes 1 & 2



5.4.4. The mining environment

Within the framework of its Sustainable Development policy, since 2010 ERAMET has reinforced its sharing of experiences and the international coordination of environmental management tools with regards mines.

The project is in line with a continuous improvement process and includes:

- an analysis of the situation with the participation of geologists, miners, industrial or legal departments, and environmental referent persons on the Group sites;
- anticipating changes in regulations with an international regulatory benchmarking process to analyse regulations of the countries in which ERAMET operates, major mining countries and important international standards;
- the Group's positioning, comparing internal practices with those of leading mining operators, based on information available to the general public;
- monitoring different operating methods and changes in new Mining Codes;
- pooling best practices: assessing impacts, managing mine water and hydraulic works, storing tailings, protecting biodiversity, restoration, relations with local communities, etc.;
- setting up a working group on biodiversity and the compensation process;

CHANGES IN THE GROUP'S CARBON FOOTPRINT

All sites enter the data used to calculate scope 1 and 2 emissions into the Group's consolidation of environmental data system (EraGreen).

The following table shows changes in the Group's emissions between 2007 and 2011.

The low level of emissions in 2009 is mainly due to the Manganese Division's drop in activity.

- setting up a discussion forum;
- awareness-raising and training of technicians;
- selecting indicators dedicated to monitoring the mining environment and integrating them into the Group's reporting tool;
- establishing ambitious and attainable goals.

In this way, the Group hopes to control, reduce and as far as possible avoid impacts at each stage in the life of the mine: exploration, research, construction, mining operations and the end of its life/rehabilitation.

Moreover, ERAMET pays close attention to regulatory changes that may affect its present and future activities and actively works on some of the recent changes, including:

- transposing the French Mining Code into an equivalent code and revising it;
- revising the Gabonese Mining Code.

5.4.5. Protecting 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 how to avoid, minimise and offset environmental impacts.

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 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 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. ERAMET is currently taking part in the translation of this draft standard into French. The first BBOP biodiversity offset programme is under study for the WBN project in Indonesia, the goal of which is achieve no net loss in biodiversity.

In France, ERAMET takes part in the work started by the Ministry of the Environment aimed at developing a doctrine and methodology sheets on "Avoidance-Minimisation-Offsets", in line with the BBOP principles.

ERAMET considers that it is extremely important to map and protect biodiversity. This aspect of the environment is integrated into the development of new industrial and mining projects a long way upstream, right from the feasibility stage, and it is taken into account in the everyday functioning of mining sites in operation or those being rehabilitated.

This year, an internal Task Force on Biodiversity was created bringing together the Group's main players specialised in this subject. It aims to encourage teams to exchange ideas, whether they are on site, in the divisions or at head office, to create networks with partners, to share experiences and to try to devise a Biodiversity policy together.

5.4.5.1. IN NEW CALEDONIA

The Société Le Nickel (SLN) mines nickel deposits at different sites in New Caledonia where the biodiversity and proportion of endemic plants and animal species are remarkable.

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 and the Company has decided to share them with the other mining companies.

Replanting work started at the SLN in 1993, and hydraulic seeding and planting has been carried out on over 160 ha. of land. These lengthy techniques face difficult conditions and in the short-term they are not always very visible.

In 2010, the SLN put a great effort into re-organising this "replanting" activity in order to considerably increase the surface areas treated (doubling them by the end of 2013) 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. The 2011 operation was carried out in the first half of the year and involved the treatment of 15.4 hectares of land spread out over three mining facilities. Not enough seeds could

be collected, due partly to bad weather conditions, so the initial objective of 22 hectares was not reached.

New Caledonia's new Mining Code, dating from 2009, requires that environmental impact studies are carried out for all present and future operations.

This is an opportunity to carry out a vast inventory of existing data on biodiversity and to complete it with new environment characterisation studies. Nineteen research departments are working on the study and more than one hundred reports have been commissioned. Numerous specialists and experts from the scientific community are working on fields as varied as botany, herpetology (the study of reptiles), ornithology (the study of birds), myrmecology (the study of ants) and even the marine environment (coral and fishes). Once this data has been compiled and summarised, the first step is to give concrete recommendations to operators to allow them to avoid or minimise identified impacts. Then when the data generated has been exploited, the second stage will involve taking further action such as suggesting biodiversity offset initiatives.

In an effort to improve scientific knowledge, enhance our understanding and protection of biodiversity, and improve the management of risks related to its activities, the SLN set up five scientific partnership agreements in 2011. The agreements cover several areas of environmental engineering: optimising the use of topsoil (UNC-IAC agreement), studying the genetic diversity and dynamics of *Araucaria rulei* populations, a conifer in danger of becoming extinct (IAC agreement), assessing the impact of light pollution on petrels, seabirds that nest on mining massifs (IRD agreement), developing in vitro culture propagation (CIVNC-UNC agreement) and finally a project to plant hyperaccumulator species capable of absorbing metal (CNRS-IAC agreement).

For several years, the SLN has been conducting a policy that resolutely promotes biodiversity at its mining sites. It has decided to formalise its past actions and their continuity in a Biodiversity Strategy. Through this, the SLN hopes to draw up an overall programme taking into account the environmental challenges facing all its facilities and mining sites spread out over New Caledonia's Grande Terre. This Biodiversity Strategy will be integrated into the SLN's future environment policy and will be an integral part of the Company's overall strategy.

In 2011, the SLN laid down the foundations of this Biodiversity Strategy with a summary of environmental challenges and studies on the development of biodiversity management plans and assessment criteria (habitat, state of conservation, richness of heritage, threats). This approach is set out and communicated inside and outside the Company.

5.4.5.2. IN GABON

The Compagnie Minière de l'Ogooué (Comilog) mines manganese ore on the Bangombé plateau (altitude ~600 m), in Moanda, Gabon. Comilog has developed ore mining and recycling activities (washing plant and sintering plant), and has started to build an industrial complex, near the existing installations, which will bring together the production of silicomanganese *via* pyrometallurgical processing and manganese metal *via* hydrometallurgical processing. Within the framework of this project, biodiversity studies were conducted on site and integrated into the environmental impact study approved by the authorities in July 2010.

Two large-scale rehabilitation programmes are underway at Comilog:

- the rehabilitation of mining sites at the end of their working life in order to make the geomorphology suitable for replanting, and also to secure the perimeter and create sites dedicated to educational visits (presenting a geological section to visitors). The manganese deposits in Moanda are mined opencast which comprises three stages: stripping the topsoil, removing the layer of overburden, and then the actual mining. Bumps and hollows of a few metres high are created by the mining operations. In 2010, Comilog reshaped 50 hectares of land, *i.e.* the same area as the recently cleared area. In 2011, the remodelling work continued on another 45 hectares and the mining operation procedure was reviewed so as to integrate the remodelling stage and recycle the topsoil;
- the rehabilitation of the river Moulili whose flow is disturbed by the accumulation of manganese sediments. This pollution is related to the washing plant operations and the sludge that was discharged into the river bed. The washing plant stopped discharging sludge into the Moulili at the end of 2010 and rehabilitation work on the first section started. To date, 2.14 Mt of sediment has been removed (13% of the estimated total volume), of which 1.47 Mt was removed in 2011. The rehabilitation will be spread over a period of about fifteen years and the banks and slopes will be landscaped gradually. 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.

5.4.5.3. IN INDONESIA

The Weda Bay Nickel (WBN) project is located on the island of Halmahera, in the wet tropical region of Indonesia, just north of the equator. The topography is characterized by a narrow coastal strip, from 3 to 5 km in extent, including a fringe of coral reef. Behind the coastal strip, the landscape rises rapidly to reach a plateau of between 750 m to more than 1,000 m in altitude.

There are two well-known ecological features about the island of Halmahera which is located:

- near the three ecological boundaries of Wallace, Weber and Lydekker which means that it 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 WBN 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 eventually avoid or limit the effect of future mining and industrial activities in the project's impact area. In 2011, the studies focussed on finalising the inventories of terrestrial and aquatic species, assessing the sensitivity of habitats (sensitive, critical, etc.) and anticipating the impacts of the future project on biodiversity.

WBN reinforced its partnerships and thus:

1. signed a Memorandum of Understanding with the *Lembaga Ilmu Pengetahuan Indonesia* (LIPI), the Indonesian Institute of Science, in September 2011 for the aquatic aspects of the studies and assessments;
2. entrusted the task of reviewing the concession's botanical inventories and assessing its endemism to the Missouri Botanical Garden (MBG), an organisation recognised for its skills in botanical research and conservation, in association with the botanical gardens of Saint Louis in the United States;
3. reinforced its relations with the NGO *Burung Indonesia* (Indonesian branch of Birdlife) with a view to establishing plans for the management and protection of the forest and remarkable avian species;
4. set up a programme to patrol and watch the areas of the concession concerned in order to prevent any illegal land clearing.

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;
- 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). 7,000 plants of 19 local species had been planted and they showed a survival rate of 90%. Shrubs that had died were replaced at the same time during a new planting campaign.

WBN continued to set up observatories, *i.e.* 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. WBN set out six plots near the future mines and industrial facilities. The trees and shrubs were inventoried on each plot and they will be monitored every two years.

5.4.5.4. ALONGSIDE ERAMET ACTIVITIES

Alongside its activities, ERAMET and its subsidiaries also take initiatives to protect the environment and species found in the countries in which they operate.

The *Parc de la Lékédi* is 5 km from Bakoumba, in the province of the Haut-Ogooué, in the south-east of the Republic of Gabon. It is managed by the Sodepal (Société d'Exploitation du Parc de la Lékédi) and has been supported by Comilog (Gabon) for almost 20 years.

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;
- a species imported from Namibia: impalas.

It is constantly maintained and regularly developed with a view to preserving fully protected species, animal observation and rearing. Sodepal has chosen to diversify to conduct activities that highlight the local resources, as well as the exceptional natural heritage of the region. It develops eco-tourism (holiday camps, rural discovery classes, etc.) and fish farming (Gabon's leading producer with 130 tonnes of tilapias per year), and encourages local crafts like basketwork and pottery.

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 and Jane Goodall International for chimpanzees. In 2011, the *Parc de la Lékédi* signed a framework agreement with the International Centre for Medical Research in Franceville to promote research programmes in the park. At the same time, the *Parc de la Lékédi* has hosted an original

programme for several years for the reintroduction of mandrills into the wild. In 2011, the park signed a partnership agreement with the CNRS, France's scientific research centre, to study this population of mandrills, track their networks of interactions precisely and estimate the social resilience of this species faced with environmental changes such as habitat fragmentations.

Finally, the park continues to combat poaching and offers authorities various fostering solutions for animals caught. In 2011, in collaboration with the Ministry of Water and Forests, the park took part, alongside the Wildlife Conservation Society (WCS), in sessions aimed at raising local populations' awareness of poaching problems.

The American subsidiary of ERACHEM Comilog, operating in New Johnsonville, Ohio, supports the National Wild Turkey Federation, an association aimed at protecting and hunting wild turkeys (*Meleagris gallopavo*). Not only does it work towards protecting this bird whose population in North America has risen from 1.3 million individuals in 1973 to 7 million birds now, but it also strives to preserve a hunting heritage. Hunting seasons have now been established in 49 American states, in Canada and in Mexico.

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. ON EMPLOYMENT AND REGIONAL DEVELOPMENT

The ERAMET Group is present in about twenty countries worldwide and strives to actively participate in the economic and social development of the regions in which it operates. This is put into practice by recruiting staff locally and a desire to have staff work in their countries of residence. Only 180 people out of the Group's 15,000 staff work outside their country of residence.

In Indonesia, 95% of Weda Bay Nickel employees are recruited locally; in China, this figure is 98.8% and in Gabon, 98.8% of Gabonese employees work for Comilog or Setrag. In New Caledonia, the Société Le Nickel (SLN) is the region's leading employer, employing 97% of local workers and generating a large proportion of the marine traffic. Moreover, 58% of SLN's profits are reinvested locally. As soon as 1969, the SLN was the first company in New Caledonia to set up trade union representatives and grant its employees financial benefits, a profit-sharing scheme based on the results and a mutual insurance.

Moreover, ERAMET is a fast developing Group which creates jobs. In the coming years, over 3,500 jobs will be created via the Group's large-scale projects spread out all over the world, such as: the Greenfield mining and hydrometallurgy project at Weda Bay Nickel, the construction of a new manganese alloy production plant in China, the creation of an industrial complex in Gabon (C2M for Moanda Metallurgy Complex), etc.

In 2011, aware of its contribution to the economic and social development of the host regions and countries, the Group decided to join the Extractive Industries Transparency Initiative (EITI). Through this, ERAMET shows its desire to combat all forms of corruption and makes a commitment, firstly, to publicly present its accounts as part of the reconciliation of these accounts with those of the host mining countries, and secondly, to encourage other companies and governments to make a commitment alongside the EITI. The Group's professional ethicist took part in the EITI's Annual Conference in Paris in March 2011. Moreover, ERAMET is represented in the national authorities for the implementation of the initiative. In Gabon, a Comilog employee takes part in the work of Gabon's EITI Interest Group. In Indonesia, the Group works in close collaboration with a member of the EITI Indonesia Secretariat creation committee who is also on the Weda Bay Nickel project Supervisory Board.

As well as this commitment at Group level, the subsidiaries have also made many contributions to local and social development.

New Caledonia's Société Le Nickel (SLN) entered into a tripartite partnership with the Northern Province and the towns of Koumac and Poya to support a three-year municipal investment programme. It is aimed at improving populations' living conditions and development via sanitation works, the rehabilitation of structures, the creation of facilities for sports and cultural activities, etc., for a contribution of CFP 400 million (€3,350,000).

In Indonesia, the Weda Bay Nickel (WBN) project fully contributes to the development of the Northern Moluku archipelago by becoming part of the government's "Master Plan for the Acceleration and Expansion of Indonesia's Economic Development" (MP3EI). This development plan identifies six economic corridors, one of which is the Papua—Moluku Islands corridor which includes the Island of Halmahera. Seventeen projects throughout the whole of Indonesia have been identified as catalysts for the development of these economic corridors, including the Weda Bay Nickel project, based on the development of agriculture, fishing, energy and mines. The fact that the Indonesian government chose the WBN project as a major project in the development of eastern Indonesia shows its great potential to develop the whole of this region with its abundance of natural resources. Even before the government launched this plan in 2011, the WBN was already very much involved in the development of the Island of Halmahera and its twenty-one villages near the site. Indeed, for many years, the WBN has been conducting many in-depth projects, e.g. supplying electricity to villages, installing piped running water, building medical units and working towards education for young people.

The Group's industrial sites are also involved in their region's social and economic development. Aubert & Duval Les Ancizes (France) takes part in working groups, with the Auvergne Region, on the attractiveness of the territory. As for Aubert & Duval in Pamiers – Airforge (France), it contributes to its region's social and economic development through its involvement in the local Agenda 21, taking part in three working groups on public transport, energy and the development of a work area.

After replying to the Belgian Ministry of the Economy's call for projects on "eco-zoning" aimed, among other things, at sustaining and developing the economic fabric in areas of economic activities, the project, partly supported by Erachem Comilog Tertre (Belgium), was chosen and was granted a budget of €285,000 to carry out technical and commercial studies on the following subjects: exchanging materials and energy, water management, railway development, road safety and landscape impact.

5.5.1.2. ON NEIGHBOURING AND LOCAL POPULATIONS

The ERAMET Group has an important social and societal responsibility and has a duty to act in favour of local communities in the regions where the sites operate. It is through partnerships and sponsorships that the Group's sites can support sports; cultural, charitable and even environmental activities initiated by local communities. In 2011, the ERAMET Group devoted a budget of over €4.9 million to sports, cultural and charitable sponsorships.

This year, Weda Bay Nickel in Indonesia, via the Saloi Foundation, spent USD1.1 million (over €850,000) to finance about forty community support programmes involving education, health, culture, local development and the environment. These programmes, which started in 2009, are aimed at helping the Island of Halmahera develop in a lasting and sustainable manner. Weda Bay Nickel also works with recognised NGOs like the Indonesian branch of Bird Life (like the French Bird Protection League), the network of international experts from the Business and Biodiversity Offsets Programme (BBOP) and public institutions like the LIPI (Indonesian Institute of Science) on environmental programmes. Finally, Weda Bay Nickel works with local NGOs like Bina Swadaya in the framework of "community empowerment" initiatives. This NGO set up forty-two economic development groups (Self Help Groups) in the twenty-one villages near the site, focussed on issues related to fishing, agriculture and construction. These groups work towards producing consumer goods, food or materials to be sold initially to the Weda Bay Nickel pilot site, and later on to be sold to outside buyers.

Different Group sites have entered into environmental partnerships with local NGOs. The SLN supports the "Association pour la sauvegarde de la nature calédonienne" (a nature conservation society) and the "Société calédonienne d'ornithologie" (an ornithological society). ERAMET ETI Tyssedal (Norway) finances environmental partnerships and is in charge of monitoring the Sørkjord environmental statutes while at the same time contributing to enquiries and to the analysis of results. This year, within the framework of the *Trophées de l'Eau* (water conservation competition), Aubert & Duval Les Ancizes (France) was awarded a prize for the site's initiatives in favour of water conservation. In Les Ancizes, these initiatives involved the rehabilitation of the river bed of the Viouze which flows through the site and the construction of a fish ladder to allow fishes to move about freely.

A lot of work is also carried out via NGO partnerships in Gabon, where Comilog and Setrag are partners with the WWF and the WCS (Wildlife Conservation Society) for example. In 2011, Sodepal also entered into a three-year partnership with the CNRS aimed at studying populations of Mandrills (primates) that have recently been released into the *Parc de la Lékédi*.

Group sites on all continents actively contribute to sports, cultural and charitable activities for local communities. Among the many sponsorships of 2011, we can mention SLN's support for *Pacifique et Compagnie* theatre company, La Foa film festival, Mégamiouz International music festival, the 19th "Nickel de l'Initiative" (an annual sponsorship programme for cultural, environmental, scientific and solidarity-based activities for which CFP8 million (€67,000) was allocated this year, and also ERAMET Marietta's (Ohio, United States) support for local sports associations and charitable associations devoted to the protection of under-privileged children or the prevention of violence against women.

In Gabon, Comilog becomes involved in local cultural life by supporting budding artists, and in particular inviting them to the very popular Saint-Barbe festivities (patron saint of miners) and by supporting local sports associations' summer activities.

5.5.1.3. SUPPORT FOR EDUCATION AND TRAINING

For over a decade now the Group has been committed to a policy of providing active support for the education and training of local communities and young people in particular. Training is supported in many ways on the sites and within the Group's major projects.

The support mainly involves receiving students on site, whether they are trainees, apprentices or people on professional training courses. This year, the SLN received 300 trainees and apprentices, mainly in industrial maintenance, electricity/electrical engineering and geology. Thirty-seven pupils or students on professional contracts, twenty-seven apprentices and fifteen trainees in metallurgy, machining, hot conversion of metal and logistics worked on the Aubert & Duval Les Ancizes site (France). The French sites of ERAMET Sandouville, Aubert & Duval in Imphy and Firminy, Eurotungstène, ERAMET Dunkirk and Brown Europe also received many trainees. At Comilog (Gabon), 230 trainees were received this year. These work experiences and apprenticeships regularly lead to employee contracts.

Sites also allow an even younger audience to discover their activities. For example, Erasteel Commentry (France) and ERAMET Marietta (Ohio, United States) organise site visits for various school groups. The sites of Aubert & Duval Les Ancizes (France) and ERAMET Sandouville (France) also take part in the Industry Days and organise site visits for high-school pupils.

With regards projects, WBN (Indonesia) is involved in the training of its employees. This year, several WBN employees were sent to France and New Caledonia for several months to follow specific training courses. These few months of apprenticeship allowed them to become specialised in a particular field or to perfect their knowledge before returning to their own site to apply this knowledge. WBN also offered people outside the Weda Bay Nickel project the chance to follow training courses abroad, as was the case with a student from Jakarta who followed a course at the *Centrale* Marseille school of engineering (France).

5.5.2. Relations with stakeholders

5.5.2.1. CONDITIONS FOR DIALOGUE WITH PEOPLE AND ORGANISATIONS

Being close to chemical, mining and metallurgy sites may make residents curious about the site's activities (its processes, products, businesses and commercial uses) and also lead to concerns regarding safety and environmental impact. More generally, the Company interacts with a variety of stakeholders on a daily basis, with whom it has a responsibility to develop relations.

To get to know stakeholders better and meet their expectations, the Group's industrial sites, in cooperation with the Group's Communications and Sustainable Development Department have been involved in a process of mapping and dialogue with their stakeholders since 2009. Since then, this process has been expanded to cover a larger geographic area. Amongst other things, this initiative has highlighted the great variety of best practices with regards relations with stakeholders. Certain players have been mapped specifically, *i.e.* those involved in biodiversity in Gabon, France and Indonesia, so that the Group's employees can identify the stakeholders that cannot be ignored in this field.

Group sites are encouraged to keep up close relations with their stakeholders. Most of the Group's industrial sites have special relations with their authorities and regularly invite them to visit their operating sites or present them their investment programmes. This year, Erasteel Champagnole (France) organised two visits for various stakeholders (mayor, departmental council, regional council, Regional Environment, Development and Housing Department (DREAL), prefecture, chamber of commerce and industry (CCI)) within the framework of the development of the plant and the construction of a new heat treatment workshop with a presentation of the impact on employment and capital expenditure. In October 2011, ERAMET Sandouville (France) received a delegation from the Ministry of the Environment and the Ministry of the Economy within the framework of the implementation of REACH regulations at the site. Another example is the GECC Chongzuo site in China which local authorities regularly visit and consider as the town's flagship site.

Many of the Group's sites also have special relations with schools and universities *via* a variety of partnerships. They thus enable college students, high school pupils and school children and their teachers to visit the Group's facilities or mines. The SLN (New Caledonia) has set up a partnership with the University of New Caledonia (DEUST (a two-year university science course) in Geo-Sciences/Degree in Metallurgy), and a partnership with Jules Garnier high school including visits to the mining and quarrying techniques training school (CFTMC) in Poro (New Caledonia) and visits to mine rehabilitation works. In France, ERAMET Dunkirk

has developed links with two engineering schools (Supélec and Ensam), with the *Université du Littoral Côte d'Opale* (ULCO) and the University of Valenciennes. In Gabon, Comilog has set up partnerships with the Fulbert Bogotha Technical High School, the University of Science and Technology in Masuku and the Technical and Vocational School in Moanda which, in some cases, have led to student visits to sites or mines.

The sites also appear on many forums for students and professionals, as was the case with Comilog Gabon (5 forums this year), Erachem Comilog Baltimore (United States), Guangxi Comilog Mn Ferroalloys (China) and, for example, the Paris Le Bourget Air Show where Aubert & Duval were strongly represented.

Sites develop strong relations with their local community by taking part in Local Information and Monitoring Committees (CLIS), in forums and public meetings and by inviting local communities to actually come and visit their sites. In 2011, Erachem Comilog Tertre in Belgium continued to take part in the Safety & Environment Commission for the Tertre industrial zone, alongside the local authorities and community. As for the SLN (New Caledonia), it is now on a Local Information Committee (CLI) set up in 2011 and concerned with the Doniambo site. It brings together administrations, local communities and environmental protection organisations.

Every year, some of the Group's industrial and mining sites organise Open Days to enable the general public to discover industrial sites and working mines. In 2011, a large number of people visited the Erasteel Kloster Söderfors in Sweden when the new Durin atomisation tower was inaugurated. At the SLN (New Caledonia), 1,800 people visited the Doniambo industrial site this year and 500 people had the opportunity to visit the Thio mine. The UKAD site (France) opened its doors to former students of the "*École centrale*" and to the "*Club des Entrepreneurs*". As for the Weda Bay Nickel site in Indonesia, it regularly receives groups of between 8 and 25 people who are shown how the project is progressing.

Some sites are quite innovative in their relations with stakeholders. This year, Aubert & Duval in Firminy (France) initiated a process of dialogue with its stakeholders. After identifying the stakeholders who were important for the site, an outside consultant met them to compare their view with the site's view, with regard to some major issues like: the environment, developing and maintaining skills, safety, supplier partnerships, etc. Based on the information collected, the site drew up an action plan which it will implement over a period of several years, starting in 2012. In the coming years, this process is to be extended to some of the Group's other sites in France and abroad.

The subject of relations with stakeholders is becoming increasingly important within the Group. The seminar organised on this subject in July 2011 by ERAMET Marietta (Ohio, United States) is another example of this. During the two-and-a-half-day seminar, stakeholders from inside and outside the Group described their experiences and shared their ideas on the importance of encouraging dialogue between industrial sites and players involved in their environment. This seminar was also a good occasion to share best practices and tools that can be used to establish the best possible relations with stakeholders. In the coming years, this initiative will be deployed in France and Northern Europe.

Dialogue with stakeholders is also a major concern on a Greenfield project like the one at the Weda Bay Nickel site (Indonesia), which has formalised three different procedures to encourage dialogue with its stakeholders. In each of the twenty-one villages concerned by the project, the WBN organises quarterly meetings; it has set up an information centre and twice a month it organises site visits to show how the project is progressing over time to those who are interested. WBN has also set up a system whereby communities can make complaints and receive a reply within a certain time. A team then conducts a study and provides a solution or else calls upon an outside mediator to settle the matter. Finally, Weda Bay Nickel's website and the various quarterly magazines for villagers are also ways of providing citizens with answers to any of questions they may have on the project or its state of progress.

5.5.2.2. PARTNERSHIPS AND SPONSORSHIPS

In addition to the local sponsorships and partnerships organised by industrial and mining sites, the ERAMET Group regularly finances major projects or events by means of sponsorships.

In 2008, ERAMET embarked upon a policy of sponsorships by supporting the production of "*Vanikoro 2008*", a film that retraces the expedition of La Pérouse. This year, following the earthquake and tsunami that hit Japan in March 2011, the Group decided to offer its support to Japan with which the Group has established many strong ties throughout its history. Therefore, ERAMET donated \$US 200,000 to the Japanese Red Cross and has undertaken to finance part of the reconstruction of the French *Lycée* in Tokyo.

At the beginning of 2012, on the African continent, the CAN (*Coupe Africaine des Nations* or African Cup of Nations) brought together Africa's best football teams in Gabon and Equatorial Guinea. On this occasion, ERAMET's Gabonese subsidiary Comilog wanted to become involved in the organisation of this major challenge and provided Gabon with 75 million CFA francs (€80,000) to finance the media campaign for its national team the "*Panthères du Gabon*". Comilog also offered stadium tickets for Gabon matches and some first-round matches to all its staff in Moanda, Libreville, Owendo, Bakoumba, etc., i.e. 1,800 people for an overall cost of over 60 million CFA francs (€85,000).

Another way of supporting the organisation of the CAN was to renew trains for the Setrag (Société d'Exploitation du Transgabonais—Gabon railways): Therefore, in 2011, ten comfortable, air-conditioned passenger carriages (two 1st class carriages, each with fifty seats, and eight 2nd class carriages, each with eighty seats) and six new locomotives were acquired to help carry supporters to the main stadiums used in this major sports event.

Another type of sponsorship this year involved the Société Le Nickel (SLN) in New Caledonia which became a partner in the fourteenth Pacific Games. On this occasion, it organised stands and activities in the towns bordering the route taken by the Olympic Flame; it also organised an inter-site football tournament and published a book retracing the history of the Nickel Sports Association and gave it to company employees and those involved in New Caledonia's world of sport.

5.6. MAJOR PROJECTS

ERAMET is driving major projects all over the world:

- the Weda Bay Nickel project in Indonesia;
- the Moanda metallurgy complex (C2M) and the Mabounié project in Gabon;
- the new manganese alloy production plant in Guilin China;
- the Lithium project in Argentina;
- the Grande Côte project in Senegal;
- the titanium ingot conversion plant in Saint-Georges-de-Mons in France.

All these projects are developed in accordance with the Group's Sustainable Development policy, with its Code of Conduct and environmental, health and safety charters.

Environmental, social, corporate and health aspects are taken into account upstream. 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.

The environmental and societal aspects of ERAMET Group projects are systematically taken into account by the risk assessment and management process.

5.6.1. Weda Bay Nickel Greenfield Project

In 2006, ERAMET acquired the Indonesian Weda Bay Nickel (WBN) deposit which represents one of the most attractive non-exploited deposits of nickel.

The Weda Bay Nickel project is at the banking feasibility/pre-construction stage. It includes mining operations and the recovery of ores *via* hydrometallurgical processing. The hydrometallurgical process is specially adapted to ERAMET's nickel ores and has been patented. It allows the efficient use of deposits, the recovery of laterites and saprolites, a limited consumption of energy (the process is almost self-sufficient) and totally environmentally-friendly techniques (controlled waste and effluent). This process is classified as the Best Available Technique in the European reference documents (BREF Non Ferrous Metal) which is in the final stage of validation.

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. The whole project is conducted in compliance with Indonesian regulations.

Since 2008, the Group has endeavoured to update and complete surveys on the initial state of the environment (water, air, soil, subsoil, biodiversity, fauna, flora, etc.) together with social and societal studies and public health studies and is conducting development initiatives for local communities.

ERAMET and the WBN (Weda Bay Nickel) entity have entrusted the performance of these studies and the assessment of the impact of the project to third-party Indonesian and international specialists and experts.

The project aims to respect nature and people and ERAMET strives to:

- assess social and environmental impacts in order to ensure effective management;
- 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 by favouring the sustainable development of natural resources.

In 2011, WBN completed the surveys on the biodiversity of the land and water and assessed the sensitivity of habitats (sensitive, critical, etc.). WBN also launched new studies on the cultural heritage, the maritime and ground transport associated with the project's future activities, the visual impacts and noise and vibrations. In 2011, work was focussed on finalising characterisation studies and hazard studies, assessing the potential impact of the future project and discussing how measures can be implemented to avoid, minimise and offset the impacts.

At the same time, the engineering team finalised the design of the future hydrometallurgy plant in accordance with the Group's HES specifications. With this in mind, it drew up the technical specifications with a view to issuing a call for tenders to suppliers.

As part of the insurance from the World Bank's MIGA (Multilateral Investment Guarantee Agency) which covers the project, the environmental and social monitoring and management plans are regularly reviewed. The site's facilities and activities are the subject of a quarterly report and an annual audit.

Moreover, WBN continued:

- to receive inhabitants from local communities, students, politicians, etc. in the project's information centre every week;
- to implement the local development programmes (initiated in 2008). Priorities regarding education, health, agriculture, fishing and light infrastructures are established with local populations and stakeholders *via* the Saloi Foundation inaugurated in 2010.

WBN also:

- increased the number of public meetings with one three-monthly meeting organised in every village;
- set up a complaints management system, formalising the receipt and resolution of complaints.

WBN reinforced its relations with the Region of Haute Normandy (France) *via* the Saloi Foundation in the fields of education, health, town planning and regional development, and it also strengthened its partnerships with non-governmental organisations (NGO) and local institutions:

- regarding social issues, school teachers were trained *via* the Sampoerna Foundation and community training campaigns were organised *via* the NGO Bina Swadaya;
- regarding environmental issues, in September 2011, a Memorandum of Understanding (MoU) was signed with *Lembaga Ilmu Pengetahuan Indonesia* (LIPI), the Indonesian Institute of Science for the aquatic aspect of the studies and evaluations; the Missouri Botanical Gardens (MBG) of Saint Louis in the United States was asked to review the concession's botanical inventories and assess its endemism; relations with the NGO Burung Indonesia (Indonesian branch of Birdlife) were reinforced with a view to establishing plans for the management and protection of the forest and remarkable avian species.

In October 2011, *via* the WBN project, ERAMET also joined the Business and Biodiversity Offsets Programme (BBOP) which aims to share experiences and expertise in the field of biodiversity offsets. The first draft of a BBOP biodiversity offset programme is under study and should be developed on the project in Indonesia, its aim being to achieve no net loss in biodiversity.

5.6.2. Metallurgical Complex in Gabon

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.

In 2010, the study on environmental impact, the study on transport and the study on hazards were finalised in accordance with applicable Gabonese legislation for all project phases, from the construction to the discontinuation of activities and integrating the post-operations rehabilitation process. The project was approved without reserves by Gabonese authorities in July.

In 2011, the construction stage started. The earthworks and hydraulic works were completed in September. The plant buildings are in the process of being constructed.

Technical decisions were made in coordination with technical, environmental and financial teams, taking into account the best techniques developed in the Group and the Best Available

Techniques (BAT) described in the European reference documents. For example:

- sulphur dioxide discharges comply with BAT (Best Available Techniques);
- the recycling of process water;
- residue from the hydrometallurgical process is filtered and stored in tips or containers;
- rainwater collection pools are adapted to the equatorial rains of Gabon.

5.6.3. The New Guilin Plant

The Manganese Division started the relocation of its Guilin site to a dedicated industrial zone outside the city, thus freeing up a zone for urban redevelopment. The project will allow a transition from blast-furnace technology to electric furnace technology which is more environmentally friendly. The project is in its final stage and has seen specialist teams working side by side with environmental, health and safety experts to draw up a high-performance industrial project, while controlling the impact and risks.

This industrial complex includes the total recycling of emitted dust and will function with zero aqueous discharge. As with the pyrometallurgical plant in Gabon, the best technologies developed for similar industrial activities within the Group were selected for use at Guilin. Construction is in progress and should be finalised in the first half of 2012.

In December 2011, facilities that were in the final stage of construction underwent an environmental assessment because, before starting up the plant, it was important to ensure that the engineering options were in line with the commitments made in the impact study carried out the previous year.

5.6.4. Mabounié project

ERAMET and Comilog are continuing surveys on recovery of the Mabounié deposit in Gabon. This deposit—to which Maboumine, a Comilog subsidiary, holds the mining exploration licence—offers very important potential resources of niobium, tantalum, rare earths and uranium. In collaboration with several French and international research laboratories, ERAMET is trying to develop a specific hydrometallurgical process to recover these resources. A prescribed study was started in 2011 to identify the environmental, social, societal and sanitary requirements. Surveys on the initial state of the environment will start in 2012 and will complete the first cursory environmental assessment conducted in 2007. This project's Sustainable Development strategy was presented to the Gabonese authorities which gave it their wholehearted support. A Committee to coordinate and monitor the project will be set up in 2012. The project development stage continues and will be carried out in accordance with Gabonese regulations and with the 10 Equator Principles, the International Financial Corporation's Performance Standards, the best international practices and Group policy, with the support of a network of Gabonese and international experts.

5.6.5. Major industrial expenditure

ERAMET Alloys continues to focus its development on new materials with specific characteristics which allow its customers to boost their performance and meet the challenges of sustainable development.

In October 2011, the Division inaugurated Durin, a new metallurgical facility for the production of powdered alloys at the Erasteel Söderfors site in Sweden. This new facility represents a capital expenditure of about €20 million; it allows Erasteel to expand its product range to include new grades of steel, to double its production capacity and thus strengthen its position as world leader in alloy powder metallurgy. It is also a good opportunity for the site to develop its process and its "Blue Tap" range of products which are technically and environmentally more efficient.

In 2011, €36 million were also invested in the IV30 project with the installation of a vacuum induction furnace near the Ancizes plant which produces super alloys and high-performance steels.

5.6.6. Mine exploration in Argentina

The ERAMET and Bolloré groups combined their skills over two years ago and became a leading player in the lithium market. ERAMET provides its skills in mining and hydrometallurgy and its research centre's ability in order to develop new processes for extracting and converting lithium.

Bolera Minera, the joint venture resulting from this consortium, studies different mining projects with regards the lithium-rich salt lakes in the north of Argentina. It assesses the resource with a view to producing lithium carbonate, a raw material from which the lithium salts and lithium metal used in rechargeable batteries are produced.

The exploration work, such as the drilling, the opening and closure of exploration sites and the installation of pilot units to recover lithium are conducted in compliance with the Group's policies and best practices and are accompanied by the Environment Department.

5.6.7. Joint venture in Senegal

In July 2011, ERAMET and Mineral Deposits Limited (MDL) signed the final agreements with regard to the creation of a joint venture bringing together ERAMET Titanium & Iron (ETI) with the MDL's "Grande Côte" mineral sands project in Senegal.

With a view to creating this joint venture, ERAMET carried out due diligence assessments of the environmental, social, societal and health aspects of the project to check the contingent liability and confirm that the operations proposed would be carried out in an environmentally and socially acceptable and sustainable manner.

Studies on surface water, ground water, waste water, waste, emissions, noise, visual impact, biodiversity, restoration, storage of hazardous and non-hazardous materials, health and safety, and social-economic impacts were conducted and the assessment was completed with a site inspection in May 2011.

The project is located on the Senegalese coast in the West of Africa. It is in the construction stage and production is expected to start at the end of 2013. 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.

5.6.8. UKAD inauguration in September 2011

The subsidiary Aubert & Duval joined up with the Kazakh group UKTMP to set up an industrial project called UKAD in Saint-Georges-de-Mons in the Puy-de-Dôme region of France, near the present Les Ancizes site. The new forging and conversion unit which is in the process of starting up will be devoted to the manufacture and sale of products made from titanium and nickel alloy, destined mainly for the aerospace market (landing gear, wings, fuselage, etc.).

This process will be used to change the physical and metallographic properties of the alloys to obtain highly-advanced products. The operating licence was obtained in October 2010 and integrates the Best Available Techniques (BAT) described in the appropriate reference documents.

5.7. RESPONSIBILITY FOR CHEMICALS

On 30 November 2010, the registration processes for the first part of the REACH regulation were completed and 2011 was devoted to ensuring that chemicals management is coherent. Indeed, the scientific work carried out when the chemical registration dossiers were put together resulted in classification changes and these changes had to be properly taken into account to ensure compliance with new regulatory requirements. In addition to these tasks, the year was put to good use to develop anticipatory, preventive and protective measures to reinforce chemicals management in the medium and long term. With regards product stewardship and related risks, ERAMET clearly adopts a voluntary, sustainable and responsible approach.

Because of the diversity of activities, the three REACH Managers, each of whom is in charge of one of the Group's Divisions, and members of the Communications and Sustainable Development Department (DC2D) continued to take part in the monitoring work of 10 consortia and relevant professional organisations.

In 2011, there was a great deal of activity which led all the Group's legal entities to comply with changes and with new stipulations on classification, labelling, marketing and the drafting of revised safety data sheets, and also to examine the operational consequences of the content of chemical safety assessment dossiers on the sites concerned.

5.7.1. At Group level

The Group's 2011 international HSE seminar held in October was based on the theme: "The sites, the Divisions and the ERAMET Group face-to-face with their responsibilities regarding chemicals". This seminar was specifically focussed on the missions of the Health, Safety & Environment teams at industrial sites and the Group's Sustainable Development Department with regards responsibility for chemicals and good management of chemicals. The discussions dealt with best practices to apply to ensure that products and their hazards are properly managed and anticipated, right throughout the value chain of the markets concerned.

More generally, during the year, many of the Group's teams, creating an inter-multidisciplinary network, took into account the impact of the application of REACH regulations: buyers, salespeople, plant representatives, R&D, logisticians, lawyers, IT experts, etc. Each Division's specific steering committee continued its work and took the necessary decisions to ensure its completion.

REACH regulations and its developments are closely monitored in order to ensure that certain specific characteristics of the substances used or produced by the Group are taken into account.

The Group focuses all its attention on identifying substances of very high concern and the whole resulting process.

Indeed, 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 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 2011. The Group paid particular attention to the monitoring of propositions made within this framework and actively contributed to public consultations organised by the ECHA and some national authorities.

Finally, in 2011, work was also carried out regarding compliance with European CLP regulations (Classification, labelling and Packaging). This involved updating all the Safety Data Sheets, changing all the hazardous substance packaging and updating exposure scenarios covering new uses for the registered dossiers.

This updating work, carried out by each Division, will continue in 2012 given the classification changes that should be made.

In 2011, the other key events for each of the three Divisions were as follows:

5.7.1.1. THE MANGANESE DIVISION

This year, there was a merger of the Norwegian ferromanganese and silicomanganese producing entities, *i.e.* ERAMET Norway (Sauda and Porsgrunn) and ERAMET Norway Kvinesdal. Following this merger, the number of corresponding REACH registrations dropped from thirteen to seven.

In order to optimise the number of registrations once again, Valdi and the recycling unit of Erachem Comilog developed arguments to justify their exemption from REACH registrations (Article 2.7.d) concerning waste recycling.

Within the framework of the Valdi dossier, ERAMET signed an agreement with the zinc consortium to make Valdi's single registration, *i.e.* zinc oxide (Waelz oxide).

Moreover, the Division continued to prepare its future registrations for 2013. In close collaboration with the Manganese consortium, Erachem Comilog will act as the exclusive representative of Erachem Comilog Inc, a subsidiary of the Group based in the United States, and register manganese chloride ($MnCl_2$), manganese nitrate ($Mn(NO_3)_2$) and manganese dioxide (MnO_2). Erachem Comilog SPRL should also file a dossier in its name for manganese dioxide (MnO_2) and for pour ammonium sulphate ($(NH_4)_2SO_4$).

5.7.1.2. THE NICKEL DIVISION

In 2011, the Nickel Division experienced a high level of activity related to the authorisation process. In June 2011, the ECHA launched a public consultation process on the prioritisation of five cobalt salts on the candidate list, with a view to adding them to Annex XIV of REACH and submitting them to the authorisation regime. On this occasion, ERAMET made various comments in relation to its knowledge on products, to provide as much information as possible and throw light on the authorities' choice. Despite the fact that eight members on the Member States Committee voted against it, in its recommendation to the Commission of 20 December 2011, ECHA maintained its proposal to include the five cobalt salts in Annex XIV of REACH. It is now up to the Commission to either ratify or reject this proposal.

Moreover, the Division took into account the guidelines published by ECHA on the notion of intermediates (December 2010) to adapt the registration dossiers for these substances, demonstrating that they are used in strictly controlled conditions.

5.7.1.3. THE ALLOYS DIVISION

In 2011, the REACH Candidate List of substances of very high concern with regards health and the environment was followed attentively by the Alloys Division whose legal entities are "down-stream users". Indeed, it will eventually be forbidden to sell these substances unless certain applications receive a specific authorisation. Comments were submitted to the European Chemicals Agency (ECHA) when public consultations were organised in relation to the selection of these substances which are particularly difficult to replace. We can cite the case of Refractory Ceramic Fibres which are widely used as thermal insulators in furnaces operating at high temperatures (> 1,000°C) and for which many substitutability criteria have to be taken into account.

In 2011, the Alloys Division continued its enquiry into the commitments of suppliers of raw materials and semi-finished products in the REACH registration process in order to confirm the obligations

of the Division's different legal entities in 2013 and 2018. The Division pre-registered some further substances or informed ECHA about them so that it could adapt to changes in the supply circuits or start up new activities on the production sites.

5.7.2. Strong involvement in professional bodies

ERAMET is highly involved and holds several key positions in professional bodies operating in its sphere, including:

- the DC2D Director, Vice-Chairwoman of Eurométaux, Chairwoman of the *Fédération des Minerais, Minéraux Industriels et Métaux Non Ferreux* (FEDEM), member of the Economic, Social and Environmental Council (CESE) for the MEDEF and member of the Environment Section;
- the General Manager of the Alloys Division, member of the Board of the *Fédération Française de l'Acier* (FFA);
- the General Manager of Aubert & Duval, member of board of the European Powder Metallurgy Association (EPMA);
- the Head of Institutional Relations, Chairwoman of FEDEM's Health, Safety and Environment committee (HSE), member of the Eurométaux HSE policy committee, and member of the committee working on cobalt consortium authorisations.
- Sales Director of the Nickel Division, member of the Steering Committee and the general assembly of REACH Nickel Consortia.
- ERAMET's Environment Department takes part in the scientific working groups of the Nickel Institute and the International Manganese Institute, including the groups working on the changing Exposure Limit Values, on the updating of the Best Available Techniques for non-ferrous metals in EU, on the development of environmental quality standards in Europe, and on the assessment of ore classifications.
- The Group's Environment Department chairs the technical groups of the Ni et Mn consortia.

5.7.3. ERAMET and the international scientific community

ERAMET is particularly active in the scientific field involving assessments of the toxicity of nickel compounds. ERAMET continues its involvement in the work on the “sediment” compartment in the last part of the European Risk Assessment dossier on Ni compounds.

In September 2011, the SCOEL (European committee to assess the workplace atmosphere) suggested that European occupational exposure limits be set at 0.01 mg of Ni/Nm³ (respirable dust containing compounds of Ni except Ni metal). ERAMET played an active role in the work initiated by the Nickel Institute to comment upon the scientific basis of this proposition. The Group continued its involvement *via* the work carried out by a tripartite advisory committee made up of authorities, employee representatives and industrial operators (Advisory Committee on Safety and Health at Work). An assessment of the social, economic and technical impact that it would produce is in its final stage.

With its active participation in the activities of Eurométaux, ERAMET contributed to the preparation of new methodologies for the assessment of the impact of metals on the environment and on health (HERAG & MERAG). The Group continued its activity in the framework of 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.

ERAMET also plays a key role with regard to manganese and actively contributes to the development of scientific knowledge. Through its Environment Department, the Group helped draft a five-year plan for the Manganese Institute to better integrate the notion of sustainability into the manganese industry. For this purpose, the Group will take part in studies on the life cycle of ferromanganese and silicomanganese.

5.7.4. Regulatory changes

Finally, ERAMET pays close attention to regulatory changes related to chemicals which could affect its present and future activities. The Group actively worked on some of the recent changes, including:

- the revision of the European Seveso II directive which required particular attention because recent changes to the classification of substances and mixtures has an impact on the regulations that apply to the facilities on some sites when the quantities of hazardous substances and mixtures stored exceed certain threshold quantities;
- the adoption of the European IED (Industrial Emission Directive) which will replace the IPPC directive, and the revision of the European reference document on Best Available Techniques (BREF) in the non-ferrous metals industry;
- the revision of the Framework Directive on water and in particular the definition of environmental quality standards for top-priority substances including certain metals like Ni and Cu. Documents dealing with ferronickel, ferromanganese and silicomanganese require special attention. The plan to index nickel hydrometallurgical processes was also carefully followed;
- the new regulations like the GHS (Global Harmonized System) and its European version, the EC 1272/2008 called the CLP, regarding the classification, labelling and packaging of hazardous substances and also the first adaptations to technical progress which were made. Within this framework, the different legal entities of the Manganese, Alloys and Nickel Divisions prepared and successfully submitted 106 notification files between December 2010 and January 2011;
- the transposition into French law of Directive 2006/21/EC on the storage of waste from extractive industries.

5.8. HEALTH AND SAFETY

5.8.1. Safety

5.8.1.1. FREQUENCY RATE TRENDS

The frequency rate is defined as the number of lost-time accidents per million hours worked.

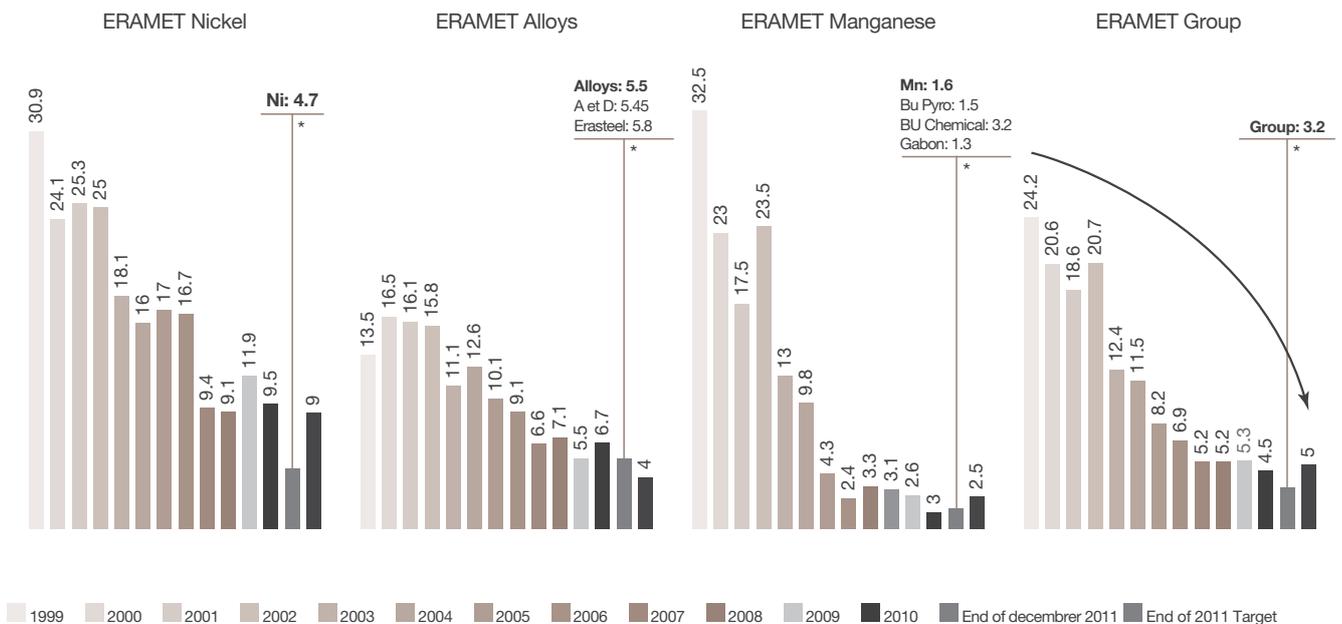
The chart below shows the Lost Time Injury (LTI) frequency rate (TF1) for the past thirteen years at a virtually constant scope (excluding Chinese metallurgical plants before 2003 and including successively Setrag in 2007 and Weda Bay in 2008).

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 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 totally wiped out in 2009 due to the considerable deterioration in the accident rate at the Nickel Division and more specifically at the SLN.



* Elements reviewed by Deloitte—moderate assurance.

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. This result corresponds respectively to 21 then 30 fewer employees suffering occupational injuries (82 in 2011 compared with 112 in 2010 and 133 in 2009).

This improved frequency rate is the result of:

- a very good overall improvement at the Manganese Division which first of all halved its accident rate (down from 2.6 to 1.3) before a slight rise in 2011 (up from 1.3 to 1.6);

- a positive break in the Nickel Division's trend (the accident rate fell by a factor of 1.2 then by a factor of over 2 in 2010 and 2011 respectively!)

Unfortunately, this improvement was offset by the results of two unstable years at the Alloys Division which saw its accident frequency rate go up to 6.7 at the end of 2010 (compared with 5.5 at the end of 2009) and then improve in 2011 (going from 6.7 back to 5.5).

After a bad year in 2008 marked by 5 fatal accidents and 2009 in which there was one fatal accident, none of the Group's employees were victims of fatal accidents in 2010 and 2011.

However, in February, one level-2 subcontractor's employee died on the construction site of the New-Guilin plant in China and two Maintenance (AFE) subcontractor's employees died in a furnace explosion in June 2011 at Valdi in Feurs.

Finally, we considered it necessary to introduce other indicators which give an overall view of accident rates at the sites (accidents which do not lead to time off work, nursing care, etc.). Therefore, we analysed the trend in 2010 and communicated the results throughout 2011:

- 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 very meaningful. Concerted action will be taken in 2012 to harmonise the systems;
- frequency rate 1 *bis*: this represents the completed lost-time-injuries, and the no-lost-time-injuries which would have been recorded as lost-time-injuries if the "adjusted positions" procedure had not been implemented in relation to one million hours. Examining the changes in this parameter gives a clearer picture of the reality of lost-time-injuries.

5.8.1.2. 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 Health and Safety policy signed by the Chairman.

INTRODUCTION OF V3 SAFETY AUDIT FRAMEWORK

As from 2009, the ERAMET Group carried out all H&S and Health Safety and Environment (HSE) audits with the HSE V3 framework (which is modular and 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. However, each closing meeting states the points that have improved and those that have not changed compared to the previous results.

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 & SAFETY AUDITS IN 2011

In 2011, following specific requests from sites, the teams of auditors (always made up of the Group H&S Manager and senior auditors such as the medical officer or the Environment Coordinators) carried out H&S or HSE audits on 9 sites:

- HSE audits on 4 sites (Brown-Europe, Firminy, Commentry and New Johnsonville);
- H&S audits on 5 sites (Tour Maine-Montparnasse, the distribution centres of Stahlschmidt in Mönchengladbach Germany, and ADES Acciai in Ferrara Italy, Setrag in Owendo and on the line and finally the SLN Doniambo plant) which for the first time included the TMM central and administrative departments and the Alloy Division's distribution centres (following on from the audit on the Romeoville site in the United States in December 2010).

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.

5.8.1.3. HSE SEMINAR (HEALTH, SAFETY AND THE ENVIRONMENT) IN 2011

The theme of the 2011 international Health Safety & the Environment seminar, held from 4 to 6 October 2011, was: "The sites, the Divisions and the ERAMET Group face-to-face with their responsibilities regarding chemicals".

Before this seminar, organised by the Nickel Division, there was a visit to the Sandouville site which is classified as a Seveso high-threshold site. About one hundred people attended the seminar, with nearly all the sites and projects represented. Introduced by the Group's Director of Human Resources, the Group's Director of Communications and Sustainable Development then by the Group's Director of Health and Safety and the Group's Director of the Environment, this seminar reminded everyone of the mission carried out by the Health, Safety and the Environment and Sustainable Development teams in the Group and subsidiaries: *i.e.* ensure that the products and their hazards are properly managed, controlled, understood and anticipated to contribute to the development of the Group and the future of the metals it uses.

Indeed, the risks inherent in the products used and sold may impact the life of the sites, health and the environment, commercial relations with customers, contracts with suppliers, supplies, in short, the whole of the value chain and the Group's reputation. Together with the REACH process, it is essential that these risks are controlled, for the sites, for the employees and for all the stakeholders that could be affected by them. Therefore, a policy on how to prevent these risks must be developed, and the HSE seminar enabled us to discuss the issues and define the actions to take.

The seminar was punctuated by several important events with one main guiding theme: let the sites speak for themselves, *via* feedback, concrete examples and first-hand accounts on the different themes—health, the environment, industrial hazards, safety, stakeholders. Small groups took part in workshops to discuss the actions to implement based on two main points: the criticality and the interest of taking the action. The conclusions reported back from the workshops helped establish an outline for the road map on “product stewardship”.

A new element was introduced to the seminar this year in the form of an HSE Challenge. This challenge involved giving a presentation of sites, the criteria being the interest of the subject and the quality of the exposé. The presentations were limited to 5 minutes and subjected to two votes, by the public and by a jury of experts on each theme (health, safety, the environment), the aim being to give feedback on the sites and to present the subjects in a lively way. This interactivity was a great success. At the end of the seminar, six sites received awards.

Well-known guests then attended round tables aimed at sharing the views, strategies and feedback of specialists in the sector. It was an opportunity for experts from customers’ and partners’ companies, from public bodies, and from consulting firms to discuss subjects facing the Group’s HSE specialists.

The seminar offered a great variety of first-hand accounts, feedback and interactivity and enabled 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 in 2012 in terms of product stewardship and related risks and thus ensure a sustainable and responsible approach to this theme.

5.8.1.4. SPECIAL TRAINING PROGRAMMES

In addition to “regulatory” training programmes (handling fire extinguishers, driving handling equipment, basic life-savings 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.

For example, in 2009, two groups of about 15 engineers from ERAMET Research in Trappes followed this training course, as did all members of the supervisory staff of the A&D site in Les Ancizes.

Other types of training courses were provided for those in charge of managing subcontractors, such as at the A&D Distribution Centre in Heyrieux and at A&D in Issoire.

Lastly, specific support was provided to newly-hired or promoted H&S organisers, such as at A&D in Imphy and at Eurotungstène in Grenoble.

In 2010, in response to increased demand from sites, the ERAMET Group continued providing the scheduled training modules (Les Ancizes & Imphy) and also introduced a trainer training course which will multiply the number of modules provided within the sites. Thus, a H&S training module for managers, which can be customised for each Division, was formalised and made available to the Divisions. Moreover, three teams of instructors (New Caledonia, France and Gabon) were put together and trained in the teaching methods needed to provide the above-mentioned modules. Instructors are carefully accompanied and shadowed during their first lessons.

In 2011, the team of instructors at the SLN gave the two-day H&S training course to all the members of the supervisory staff in the Company, *i.e.* about 600 managers, which proved a great success. Moreover, we continued the trainer training course by creating an operational team of H&S and HES instructors who were trained in Baltimore, USA, in October 2011.

Lastly, after training the supervisory staff at the two Valdi sites, at the request of the DHR at Erasteel, we trained all the members of the supervisory staff at the Erasteel sites in France (Commentry, Champagnole & TMM), Sweden, USA (grouped in Baltimore) and China (Tianjin).

5.8.1.5. WORK STATION RISK ANALYSIS

The first stage of this process was successfully conducted in 2010. It involved asking sites to:

- draw up a list of all the current work stations on the site;
- analyse and assess the risks that exist at these work stations, firstly concentrating on 33% of the work stations.

After this, we continued the analysis process, with an objective of 66% of workstations.

This essential process, allowing preventive action to be prioritised properly, was implemented and the objective was surpassed because **70% of the work stations were the subject of risk analysis and assessment at the end of 2011.**

5.8.1.6. HANDLING SAFETY CAMPAIGN

For the first time ever at ERAMET, from 20 June to 1 July 2011, in each of the Group’s sites and entities, the focus was placed on safety and more precisely risk-prevention in handling operations.

Indeed, handling-related risks are the most common cause of accidents in our Group, *i.e.* 40% of our lost-time-injuries over the 12-month period preceding the campaign. They may have extremely serious consequences. These risks exist at all our sites and may be related to handling heavy loads *via* overhead travelling cranes, handling *via* vehicles and manual handling.

This awareness-raising campaign lasted two or three weeks, depending on site constraints. It included meetings, safety quarter-hours, and above all activities, some of which were very original, combining several sites, subcontractors and partners.

A steering committee, supported by the Group's Director of Human Resources, Health and Safety, was put together to manage this "project" and the sites were given a set of appropriate PowerPoint presentations, visuals and posters, translated into seven languages, as backup material.

A satisfaction survey (the results of which were shared at the HSE Seminar in October) revealed the strong points and the points that need to be improved to ensure that the 2012 campaign on "working at heights" is even more pertinent.

5.8.2. Health and Safety

The health safety of employees, whatever their status, of personnel from outside companies, of visitors and people living in the vicinity of the industrial sites is a priority for the ERAMET Group.

The goal of the Group health policy is to control all health risks in order to minimise the frequency and seriousness of their consequences.

The ERAMET Group wants to have detailed and in-depth information on all the dangers associated with its activities. It wants to contribute to the development of knowledge on these subjects, distribute it and promote dialogue.

To this end, a Group health policy was established in 2007. The Group medical officer is responsible for its coordination.

As part of its Sustainable Development policy, adopted in 2010, the ERAMET Group confirmed its policy of protecting its employees and controlling the impact of its industrial processes on health and the environment. This Sustainable Development policy sets out the main principles of the Group's health policy.

5.8.2.1. HEALTH POLICY GUIDING PRINCIPLES

This policy is based on the following guiding principles:

- reducing work-related health risks or the health impact of ERAMET products or industrial activities through the involvement of all concerned and in liaison with occupational health specialists, management and health and safety and working condition committees and/or similar bodies;
- complying with local regulations, applicable rules and health standards drawn up by the Group;
- fostering everybody's responsibility in safeguarding health *via* clear, transparent information on health risks and the preventive measures in place;

- contributing actively to scientific works on risks inherent in products and processes;
- and implementing the measures needed to safeguard this health policy.

5.8.2.2. PRIORITY ACTIONS APPLYING THE PRINCIPLES OF THIS HEALTH POLICY

These priority actions are as follows:

- making health and working conditions a factor in all decisions 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, guides and procedures necessary for the health policy in cooperation with the workforce and their representatives;
- preparing a health action plan for each unit making it possible to respond to risk assessments. Implementing 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;
- ensuring a monitoring process to enable the early detection of health problems that could relate to production processes or products marketed. Measuring exposure and suitable medical monitoring of risks in line with current scientific data are essential to ensuring the traceability of occupational exposure;
- continuing scientific monitoring and benchmarking of new risks and best practices by means of an active contribution, especially within professional bodies, to the development of scientific knowledge relating to the health impact of the Group's activities and products.
- developing a policy to combat addictive behaviour;
- identifying the worst work stations for lumbago and musculoskeletal disorders *via* an analysis method in order to achieve the ergonomic set-up of the work posts in question.

5.8.2.3. THE RESOURCES IMPLEMENTED

The Group's health-related initiatives are implemented in line with the Health Policy using the network of Group doctors and health unit managers overseen by the Group Medical Officer, and also with the support of the site safety and/or environment contacts. These preventionists met during the 2011 HSE Seminar which was devoted to health-related aspects of chemicals. The 2011 health seminar for the doctors was devoted to dangerous chemicals and psychosocial risks.

The Group Medical Officer is also responsible for coordinating the network of occupational doctors and health department managers, for putting in place strategies for knowledge/skills sharing between the health units and the safety and/or environment units, for making the main operational managers aware of these initiatives and for providing advice on the use of toxic or hazardous products. He acts as an interface between professional and environmental health aspects and helps draft the health sections of impact studies.

The Medical Officer is called upon to approve the Group Product Safety Data Sheets.

The “*Projet Zéphyr*”, a Psychosocial Risk Prevention programme, is implemented by a dedicated sociologist, under the responsibility of the Group Medical Officer.

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.

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 to define the objectives for 2012-2016.

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 bio-monitoring. The traceability of exposure in certain establishments is ensured. Efforts to implement these practices in other sites continued in 2011 and practices were adapted to take account of changes in the classification of substances.

An operational adaptation of the exposure scenarios resulting from the REACH studies was developed.

In 2011, there were information campaigns on the new health and environmental recommendations aimed at companies which use Nickel and Nickel salts and these campaigns continue.

Scientific monitoring, benchmarking of new risks and best practices are developed through 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.

The benchmark on monitoring the health of workers exposed to manganese, drawn up by the International Manganese Institute (IMnI), was developed within the ERAMET Group and its implementation continues.

AWARENESS OF RISKS AND DANGERS

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 5 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 in relation to manganese, especially *via* the new research programme “Neurotoxicity Research Program”.

The Nickel Institute and NIPERA greatly contributed to discussions on occupational exposure threshold values proposed by SCOEL (Scientific Committee on Occupational Exposure Limits). This is also true of the Cobalt Development Institute with regards cobalt

ACTIONS AT SITE LEVEL

Being aware of its corporate social responsibility, ERAMET is involved in its establishments’ health policies and acts as a good corporate citizen:

- The Chinese establishments have dispensaries.
- Through its medical, surgical and maternity units, Comilog’s Moanda hospital in Gabon provides healthcare to the Company’s employees, to their beneficiaries and to a part of the population. Gynaecology and paediatric services are provided. Repair work on existing premises and renovation of the operating theatre continue. Following the work done in 2010, the new radiology department is now completely operational. At the end of 2011, an extra general practitioner joined the hospital team.
- 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 ensure the supply of medicines necessary for treatment. Setrag’s care facilities in the stations along the railway line are the subject of agreements with local doctors.
- The GAMMA Plan to combat AIDS, launched in Gabon in 2006, continues.

This programme is aimed at employees of Comilog, Setrag and Sodepal together with their families, and includes initiatives on communication and health education, preventive action, and support for those infected by HIV.

Following the success of the voluntary and anonymous screening campaigns (more than two-thirds of employees took part), the distribution of condoms to employees and their families continued. Since 2006, more than 1,800,000 condoms have been distributed to the 3,000 ERAMET employees in Gabon. Staff and members of their families who wish to be tested, or who are living with HIV, are supported by the Company, at Comilog and at Setrag, under partnerships with government health organisations. Three hundred and fifty people concerned by HIV are given health care support and kept in employment.

Communication and grassroots initiatives continued in 2011 with radio programmes and involvement in events like the Saint-Barbe festivities. In 2011, GAMMA supported sports associations and two local NGOs through awareness-raising initiatives and by providing information leaflets and condoms.

As part of the preparations for African Cup of Nations, condoms and information leaflets were given to the hotels in Moanda and the logistics for distributing condoms during the matches in Moanda were set up.

- In 2011, the steering committee made up of all the stakeholders involved in the SYSMIN Environment and Health study met twice in Moanda. Out of the twenty-four recommendations given by the experts in the final report, thirteen are to be implemented by Comilog. The work on six of them was completed. Three of them are the subject of a multi-year plan, in particular the rehabilitation of the river Mouilli and the Bangombé plateau. The steering committee visited these last two sites in 2011. Comilog is in the process of recruiting an occupational health officer and this should be done at the beginning of 2012.
- The Go Care programme has been in place since 2008. It provides better medical monitoring and preparation for the risks relating to foreign travel and expatriation for travellers and expatriates. Almost 380 people, including 260 expatriates (72 partners and 91 children) and 120 frequent travellers benefited from this programme in 2011.
- A Group steering committee on Carcinogenic, Mutagenic and Reprotoxic (CMR) products was set up to establish and coordinate a CMR action plan which was approved by the Comex Group and implemented in the industrial divisions and at the *centre de recherches* de Trappes. At the beginning of 2010, a multidisciplinary group of prevention officers was set up in order to harmonise the management and prevention of CMR products, particularly risk assessment, prevention and traceability methods with the support of a new IT solution.
- The *Zéphyr* psychosocial risk prevention plan was deployed. This plan includes a collective Psychosocial Risk assessment phase *via* a questionnaire. The WOCCQ (Working Condition and Control Questionnaire) is placed under the scientific control of the University of Liege (Belgium). This project concerns all the establishments in mainland France. Nine establishments out of fifteen have completed the assessment phase and are starting to draw up action plans based on the results of the WOCCQ questionnaire, in association with the health and safety and working condition committees. The other six establishments will be dealt with in 2012. A training course for all managers was prepared in 2011 and will be implemented in 2012. Managers will be taught how to manage their own stress, identify situations which may cause stress in their teams and take suitable action.

With regards the tertiary prevention of psychosocial risks, Monitoring Units have been set up at each site to quickly detect dangerous situations and help people in difficulty.

A joint monitoring committee meets annually to follow the progress of the *Zéphyr* project.

5.8.2.6. ASBESTOS-RELATED RISKS

In 2011, Asbestos-related risk prevention focused on environmental asbestos in particular.

In order to comply with recent New Caledonian regulations enforced on 1 May 2011 on environmental asbestos, the preventive action already implemented was reviewed and further action was developed with regards risk assessment, atmospheric measurements and preventive action in mining.

To ensure that these new rules are implemented in a harmonious, coherent fashion, work with other New Caledonian mining companies continued.

In order to treat its employees equally, ERAMET adopted the same approach with the Weda Bay Nickel project, despite the fact that no such obligations exist in Indonesia.

ERAMET 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 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 ERAMET'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) from 1983 to 2011 revealed 473 cases of asbestos-related occupational illnesses, primarily pleural plaques and pleural thickening (75%), 139 of which were recognised and attributed to Group companies. Of the 103 actions for gross negligence that were filed at the end of 2011, proceedings are still underway for 17 of them. Provisions for asbestos-related risks have been recognised based on the compensation typically awarded in such cases.

5.9. HUMAN RESOURCES

5.9.1. Social 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 the foundations of the future growth driven by enhanced technological leadership and the most comprehensive possible demonstration of their managerial and technical capabilities. Lastly, they are responsible for controlling management and operational excellence in each of their sectors.

The ERAMET Group's Human Resources strategy is an adaptation of the strategy adopted by the Group to deal with its business 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 64% 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, integration 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. Workforce

On 31 December 2011, the total workforce ⁽¹⁾ managed stood at **14,749 employees**, compared with 14,537 on 31 December 2010, thus remaining **stable**.

	France			Other European countries			North America			Asia			Other areas			Total		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	286	288	336	18	20	20	14	14	13	19	26	26	9	7	27	346	355	422
Nickel Division	369	366	383	0	0	0	0	0	0	301	341	377	2,403	2,305	2,301	3,073	3,012	3,061
Alloys Division	4,179	4,085	4,205	477	503	528	36	43	43	96	120	113	0	0	0	4,788	4,751	4,889
Manganese Division	135	246	257	1,008	903	883	581	697	657	1,902	1,862	1,699	2,837	2,711	2,881	6,463	6,419	6,377
TOTAL	4,969	4,985	5,181	1,503	1,426	1,431	631	754	713	2,318	2,349	2,215	5,249	5,023	5,209	14,670	14,537	14,749

(1) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, as a holding company, ERAMET represents 163 people.

* Elements reviewed by Deloitte—moderate assurance.

On 31 December 2011, 35% of ERAMET's total workforce were in France, 10% in the rest of Europe, 5% in North America, 15% in Asia and 35% in the rest of the world (Gabon and New Caledonia). Gabon had 2,763 employees listed on 31 December 2011 and New Caledonia had 2,301 employees.

The listed workforce remained generally stable between 2010 and 2011 for each Division.

The various Group companies also employed 1,271 temporary staff on 31 December 2011, representing the full-time equivalent of 1064.5 temporary workers. 46% of the temporary staff, *i.e.* 582 people, are employed in France and 363 are employed in Indonesia at the Weda Bay site.

5.9.2.1. HEADCOUNT BY TYPE OF EMPLOYMENT CONTRACT*

Out of the 14,749 Group employees on 31 December 2011, 13,106 (*i.e.* 88.9%) had open-ended contracts and 1,643 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 3.9% of the workforce outside Asia.

70.6% of fixed-term contracts concern Asia (China and Indonesia), 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.

	Open-ended contracts			Fixed-term contracts			Total		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	329	339	412	17	16	10	346	355	422
Nickel Division	2,954	2,870	2,905	119	142	156	3,073	3,012	3,061
Alloys Division	4,597	4,453	4,521	191	298	368	4,788	4,751	4,889
Manganese Division	5,454	5,358	5,268	1,009	1,061	1,109	6,463	6,419	6,377
TOTAL	13,334	13,020	13,106	1,336	1,517	1,643	14,670	14,537	14,749

(*) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, ERAMET as a holding company representing 163 people.

* Elements reviewed by Deloitte—moderate assurance.

5.9.2.2. HEADCOUNT BY GENDER*

Female employment in the mining and metallurgical sectors has traditionally been low. As the table below shows, the headcount is

predominantly male, with women representing some 15.1% of all employees. More precisely, they represent 14.2% of the workforce in France and in Europe, 12.1% in North America, 21.2% in Asia and 13.9% in the rest of the world.

	Men			Women			Total		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	210	224	272	136	131	150	346	355	422
Nickel Division	2,732	2,676	2,711	341	336	350	3,073	3,012	3,061
Alloys Division	4,103	4,103	4,211	685	648	678	4,788	4,751	4,889
Manganese Division	5,390	5,356	5,330	1,073	1,063	1,047	6,463	6,419	6,377
TOTAL	12,435	12,359	12,524	2,235	2,178	2,225	14,670	14,537	14,749

(1) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, ERAMET as a holding company representing 163 people.

* Elements reviewed by Deloitte—moderate assurance.

The percentage of women in managerial positions has improved, with 19.1% of these positions occupied by women in 2011, for the whole of the Group.

5.9.2.3. BREAKDOWN OF WORKFORCE BY SOCIO-PROFESSIONAL CATEGORY*

The concept of socio-professional category in the French sense of the term is difficult to transpose to each country in which the Group operates. However, companies located in mainland France, New Caledonia and Gabon share the same concepts. Given that this represents some 69.5% of the headcount, it seems appropriate to use the following definitions:

The staff breakdown by category has been relatively stable over the past three years, although there is a significant upward trend in the level of qualifications: accordingly, blue collar workers represented 63% in 2005 compared to 55.4% in 2011, supervisory level employees made up 26.3% in 2005 compared to the current 32.2% and, lastly, management accounted for 9.8% of headcount in 2005 but represents 12.4% today. This stemmed both from the rapid increase in managerial and technical requirements and the progression of Group plans.

Management:	<i>Executives, managers, post-graduate staff, civil engineers (white collar).</i>
Supervisory staff:	<i>Clerks, technicians, foremen (white collars).</i>
Workers:	<i>Workers (blue collars).</i>

	Workers			Supervisory staff			Management			Total		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	0	1	10	133	134	150	213	220	262	346	355	422
Nickel Division	1,700	1,613	1,577	1,116	1,145	1,210	257	254	274	3,073	3,012	3,061
Alloys Division	2,843	2,794	2,826	1,476	1,469	1,530	469	488	533	4,788	4,751	4,889
Manganese Division	3,966	3,950	3,758	1,751	1,762	1,861	746	707	758	6,463	6,419	6,377
TOTAL	8,509	8,358	8,171	4,476	4,510	4,751	1,685	1,669	1,827	14,670	14,537	14,749

(1) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, ERAMET as a holding company representing 163 people.

* Elements reviewed by Deloitte—moderate assurance.

5.9.2.4. AVERAGE AGE*

The average age, as can be seen from the table below, is relatively constant across professional categories and Divisions.

Employees over 50 account for 25.1% of the total workforce and those 30 or younger a little over 15% of the total, down on previous years.

Future Employment and Expertise Management is an HR tool undergoing progressive and significant development.

	Workers			Supervisory staff			Management		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	-	40	38	40	41	40	44	44	45
Nickel Division	34	34	34	42	42	42	43	42	43
Alloys Division	41	41	43	43	41	43	43	44	43
Manganese Division	44	43	42	44	45	45	47	48	46
TOTAL	40	41	42	42	43	43	45	45	44

(1) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, ERAMET as a holding company representing 163 people.

* Elements reviewed by Deloitte—moderate assurance.

5.9.2.5. LENGTH OF SERVICE*

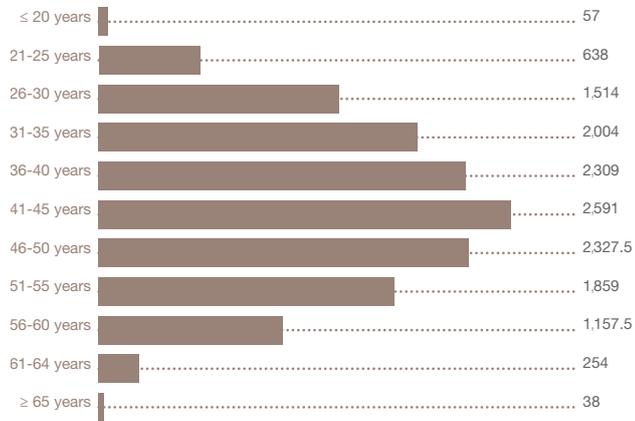
	Workers			Supervisory staff			Management		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Holding company ⁽¹⁾	-	8	9	11	10	8	9	8	9
Nickel Division	8	8	7	13	13	13	8	9	9
Alloys Division	13	14	14	15	15	15	10	11	11
Manganese Division	15	14	14	17	17	15	14	14	14
TOTAL	13	14	14	14	15	14	12	11	13

(1) ERAMET Holding including ERAMET Research, ERAMET Ingénierie and ERAMET International, ERAMET as a holding company representing 163 people.

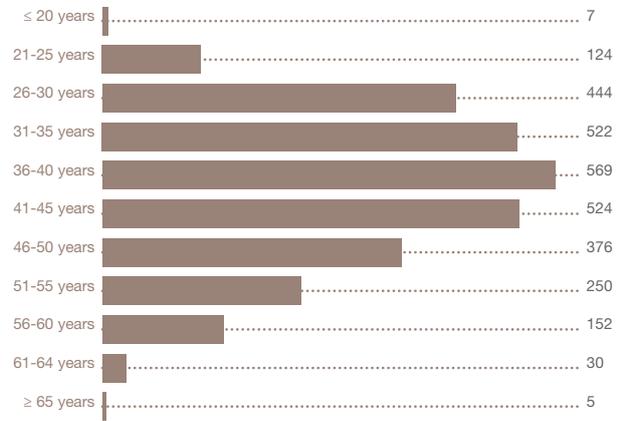
* Elements reviewed by Deloitte—moderate assurance.

5.9.2.6. AGE PYRAMID

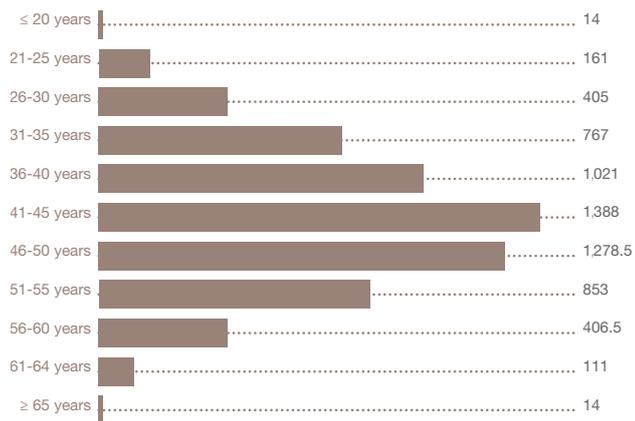
Group



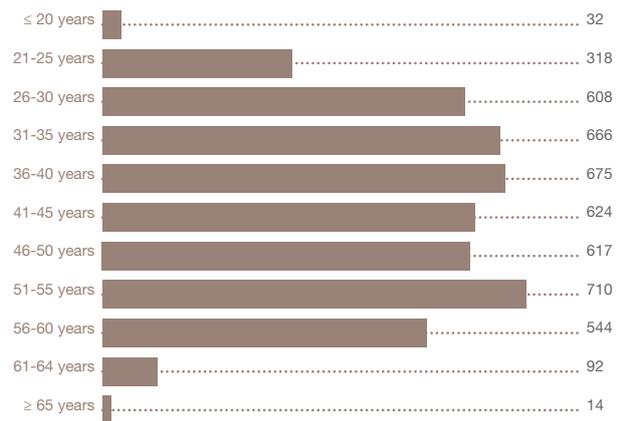
Nickel



Manganese



Alloys



5.9.2.7. EMPLOYMENT OF DISABLED WORKERS

The Group's companies employed 190 disabled people on 31 December 2011. 96% of them are employed in France, *i.e.* 182 people. Due to the local legislation of some countries (Sweden for example), a census cannot be taken of all the disabled workers.

5.9.2.8. WORKFORCE MANAGEMENT*

Group companies hired 1,355 employees in 2011, representing a rise of more than 61% compared to 2010. 46% of hiring took place in Europe (including France), 11.5% in North America, 13% in Asia and 29.5% in the rest of the world.

The total number of departures in 2011 reached 1,144, including 183 retirements (16% of departures) and 263 resignations (23% of departures).

The table below gives an indication of employee turnover within the Group by country.

Defined as the sum of departures during the year (excluding death and the end of temporary contracts), divided by the number of employees at the end of the year, workforce turnover was 6.7% in 2008, 7.6% in 2009 and 5.5% in 2010. It fell once again in 2011 reaching 5.1%.

The job creation balance (arrivals—departures), which was positive in 2007 and 2008, became negative in 2009 and 2010, amounted to 211 in 2011.

	Arrivals									Departures									
	Outside hiring and Others			Dismissals			Retirement and early retirement			Resignations			Others ⁽¹⁾				Total		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	
Mainland France	209	281	554	48	34	52	112	105	48	44	52	71	97	120	187	301	311	358	
New Caledonia	26	30	119	43	53	67	32	22	13	24	33	28	34	13	15	133	121	123	
Europe ex. France	35	22	69	80	3	2	47	27	24	37	17	27	46	10	11	210	57	64	
North America	78	165	156	68	33	29	9	11	14	14	34	32	214	62	122	305	140	197	
Gabon	57	84	133	13	13	13	48	50	33	43	35	13	29	14	22	133	112	81	
Asia	122	256	182	286	44	155	66	57	51	87	90	91	1	45	19	440	236	316	
Elsewhere	76	2	142	13	2	2	0	0	0	6	1	1	53	0	2	72	3	5	
TOTAL	603	840	1,355	551	182	320	314	272	183	255	262	263	474	264	378	1,594	980	1,144	

(1) This category includes, amongst others, the end of fixed-term contracts, together with deaths.

* Elements reviewed by Deloitte—moderate assurance.

5.9.3. Work organisation and remuneration

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 as possible. Wherever it operates, the ERAMET Group complies with applicable legislation on working hours. For information, working hours are as follows:

- in mainland France: 35 hours per week;

- in Norway: 37 hours 30 minutes per week;
- 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 2011, 1% of ERAMET's total workforce were employed on a part-time basis, *i.e.* a total of 142 people. 90.1% of these employees, *i.e.* 128 people, work in France, representing 2.4% of the workforce in mainland France.

5.9.3.3. WORK ORGANISATION

	France	Other European countries	North America	Asia	Other areas	Total
	2011	2011	2011	2011	2011	2011
Employees working daytime hours	2,939	779	321	1,216	3,737	8,992
Employees working on shifts	2,242	652	275	999	1,589	5,757
TOTAL	5,181	1,431	596	2,215	5,326	14,749

8,992 employees work daytime hours, *i.e.* 61% of the total workforce. The remaining 5,757 employees, *i.e.* 39% of the workforce, work on shifts.

5.9.3.4. ABSENTEEISM

In 2011, the rate of absenteeism in the Group's French companies varied between 1.5 and 4.5%, depending on the sites. On average, the rate was 5.9% in Europe, 4.9% in the USA and 5.77% in China.

5.9.3.5. A FAIR AND COMPETITIVE REMUNERATION POLICY

Employee expertise and level of responsibility are remunerated with a fixed salary in line with past experience and practice for 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.

A large number of the sales staff, and also Group executives, have variable remuneration arrangements based on annual quantitative and qualitative objectives. Moreover, these bonus arrangements were reviewed at the end of 2011, 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.

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.

PERSONNEL – PAYROLL CHARGES

Salaries account for the main part of employee remuneration. The average rate of social security contributions on wages and salaries at Group level was around 47% in 2011.

On average, these charges represented 48.5% of the payroll expenditure in mainland France. They are highly variable from one country to another (for example 40.7% in New Caledonia and 26.7% in Belgium).

In 2011, personnel costs for the ERAMET Group stood at €659 million, up 8.2%. They were €609 million in 2010 and €580 million in 2009.

The average cost of personnel, excluding temporary staff, was €46,000 in 2011, up 7% compared with 2010.

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, one of our most precious assets;
- 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.

The scheme is jointly financed by employees and ERAMET Group companies, which make 55% 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 US (42%), Norway (17%), New Caledonia (7%) and in France (very old specific plans). The other plans are defined contribution or employer contributions and 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 2011 was €32 million.

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. 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. EraShare is a programme designed to develop employee shareholding within the ERAMET Group in the 20 countries where the Group is represented. The General Shareholders' Meeting of 13 May 2009 authorised the Company to implement a plan to allocate 85,000 bonus ERAMET shares to the 15,000 Group employees (excluding corporate officers).

Since July 2011 in France and Italy, employees have been entitled to all rights associated with ERAMET shares and this will be the case for other countries from July 2013. 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.

Two new plans to allocate bonus shares was implemented in 2010 and 2011, involving the same scope, and allowing two extra shares to be allocated to over 14,000 employees each year.

PROFIT SHARING ARRANGEMENT FOR STAFF

In mainland France and New Caledonia, discretionary profit-sharing 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, and 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.

Profit-sharing for 2010, paid in 2011, made it possible to pay out about 6.11% of the payroll.

Equivalent provisions in Sweden are based on the ratio of total payroll to profit.

In Gabon, a profit-sharing system was also set up in 2010 in the company Comilog for a three-year period. It allowed a profit-sharing bonus to be paid to staff at Comilog in 2011.

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 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 type of 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 2011, 6,400 employees in France were members of an Employee Savings Plan, with assets of about €56 million,

i.e. an average of about €15,700 per saver. In 2011, the Group's French companies paid over €2.8 million top-up money into the Employee Savings Plan and the PERCO.

5.9.4. Comprehensive and constructive social dialogue

At a corporate level, the ERAMET Group hosts two employee representative bodies: Firstly, there is the Group Works Council, comprised of 30 delegates from companies operating under French labour law and, by extension, New Caledonian labour law, which meets once a year. Secondly, the European Works Council, which is comprised of delegates from companies based in Europe (France, Belgium and Sweden) plus the representatives of New Caledonia and Norway, totalling 34 delegates in all. This Council meets once a year. Its operation was streamlined through the creation of a select committee of six members, which meets more often in close cooperation with General Management and Human Resources Management out of a desire for regular communication and information.

At local level, employees are represented in each of the countries in which the ERAMET Group is located, with the exception of countries where ERAMET International has offices, where the size of teams, often less than 10 persons, is insufficient to set up representative bodies. Thus, more than 97% of Group employees are represented through representation, discussion and consultation bodies equivalent to Works Councils, Health, Safety and Working Conditions Committees or trade union organisations.

In 2011, industrial relations returned to normal once again in a rather gloomy global context, excepting China and emerging countries.

5.9.4.1. SOCIAL DIALOGUE DRIVEN BY MARKET TRENDS AND COMPETITIVENESS

Market developments in the Group's high-speed steels and manganese chemistry activities led to the redimensioning of industrial activities in Sweden, France and Belgium and also to a strategic exploration of new development prospects for the sites concerned.

In this context:

- Local Management kept up regular and sustained discussions with their social partners *via* negotiations on redundancy plans, the organisation of work and on areas of development under study.
- Centrally, these cases were supported, firstly by encouraging meetings and exchanges *via* a visit by the European Works Council Secretary and Assistant Secretaries to the sites concerned, and secondly *via* regular exchanges to monitor these cases in this European organisation.

Management teams at the Nickel Division and particularly at the SLN (New Caledonia) continue to pursue their multi-annual objectives with regards improvements and competitiveness. Discussions and negotiations were conducted on safety improvements (*via* the Working Conditions Plan of Action), the workforce and the organisation of work and they enabled several agreements to be reached.

5.9.4.2. WAGE ISSUES AND PURCHASING POWER MAINTENANCE

The effect of the economic situation in Europe and New Caledonia weighed heavily on industrial relations with high expectations with regards wages and purchasing power maintenance.

In France, Belgium, Norway, Sweden, Mexico and Gabon, a lot of negotiations were conducted or initiated on pay, working times and flexibility, changes in collective agreements, and employment. To a large extent, they enabled agreements to be reached with local social partners.

5.9.4.3. CONTINUED IMPLEMENTATION OF STRUCTURAL SOCIAL POLICY

Efforts to implement and harmonise social security and employee saving plans continued, and in 2011 further negotiations with social partners were pursued and intensified at Corporate level in mainland France.

The discussions and the resulting agreements and action plans led to the deployment of the PERCO-i (collective pension saving scheme), the Time Savings Account, the CESU (universal service employment cheque).

These new measures come on top of the initiatives already underway on psychosocial risk prevention, the Senior Staff Plan and the plan to prevent difficult working conditions.

The French subsidiaries pursued negotiations with their partners by re-negotiating their profit-sharing agreements. An employee profit-sharing plan based on company performance was introduced at Comilog (Gabon) for the first time.

For the whole of the Group, 41 collective agreements were concluded locally in 2011.

5.9.4.4. 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.

5.9.5. Training

ERAMET pays particular attention to the development of its employees, even considering the **maintenance, improvement and transfer of skills** as the Group's 7th value.

Integrating and improving our know-how, raising awareness of specific risks, sharing experience and best practices, developing a cross-company approach at Group level, promoting the application of our managerial methods and reaffirming our expertise and 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.

2011 saw the implementation of IMA^{GE} (the *Institut du Management du Groupe ERAMET*). This school 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.

As is the case every year, the ERAMET Discovery Days brought together more than one 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 8th session of the ERAMET Leaders Programme lasting one week. Since 2006, 157 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. The ELP 2011 hosted its Chinese colleagues for the first time, thanks to the French/English and Chinese interpreting service provided.

This year, for the first time ever, a development programme for the Group's executives was offered. The ERAMET Executive Development Program is a twelve-day course given in English (5 days in France and 7 days in India) in partnership with Duke Corporate Education. It aims to enhance the participants' leadership skills and prepare them for their career within the Group.

As part of the Leaders Programme, a one-day introductory course on project management culture was given to more than 800 people in the Group, enabling them to share the same framework and vocabulary with regards the main project management concepts. This course will be given once again in 2012.

Likewise, a one-day course on Benchmarking awareness was set up and deployed in 2011. More than 100 people attended it at Head Office in 2011 and sessions were organised in Asia and the USA.

A one-day training course on Sustainable Development designed and conducted by the Environment and Sustainable Development Department and the Group Health and Safety Department was also implemented within the Group, raising the participants' awareness and reminding them of the main principles of the Group's Sustainable Development policy.

Many training courses were deployed at all Group sites. In particular, we can note the training sessions on finance for non-specialists and management programmes given to Gabonese executives at the EM in Lyon, the significant management programme on the development of managerial skills organised at Comilog, the course on economics given to all SLN managers, the course on safety given to Erasteel managers and the course throwing light on Nickel, the economy and markets given to all SLN executives.

In China, a second management training session was given in 2011.

The Group is also getting itself organised to implement significant initiatives in the field of Lean Management and Knowledge Management.

Altogether, in 2011, ERAMET Group employees received more than 317,000 hours training, *i.e.* about 21.5 hours training per employee for the year. The numbers remain stable compared to 2010. In France, training costs in 2011 amounted to 3.75% of payroll expenditure, on average. They represented over 3.8% of payroll expenditure in New Caledonia, 5.6% in Gabon and between

2% and 5% of payroll expenditure in the other countries where the Group operates.

Thus, more than 8,000 employees, *i.e.* 54% of the total workforce, received training in 2011.

5.9.6. Performance monitoring

For several years, all members of Group management have had an annual assessment interview, 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 2011, more than 4,900 managerial and non-managerial staff had annual assessment interviews. Indeed, many sites have started to extend the benefits of this system to non-managerial staff.

Work has also been carried out by the Human Resources teams to provide global supporting material for the assessment interview, shared across all divisions and countries, ensuring consistency in performance assessment and monitoring.

Since late 2010, Talent@Work, the Group's Human Resources information system, has made this supporting material available to executives on sites where the tool has been implemented.

This has 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 it has optimised the follow-up.

5.10. ASSURANCE REPORT BY ONE OF THE STATUTORY AUDITORS ON A SELECTION OF ENVIRONMENTAL, SOCIAL AND SAFETY INDICATORS

YEAR ENDED 31 DECEMBER

For the attention of Executive Management,

Following the request made to us and in our capacity as Statutory Auditors of ERAMET, we have conducted a review enabling us to express limited assurance on the environmental, social and safety indicators selected by ERAMET and identified by the symbol* in Part 5 of the Reference Document for fiscal year 2011 (the "Data").

This Data was prepared under the responsibility of the Communications and Sustainable Development and Human Resources Departments, in accordance with the internal framework comprising all the procedures relating to the reporting of environmental, social and safety data, as available from the Communications and Sustainable Development Department (hereinafter the "Framework").

It is our responsibility, based on our work, to express a conclusion on this Data. The conclusions expressed below solely cover this Data and not the overall Reference Document.

5.10.1. Nature and scope of our work

We conducted our work in accordance with ISAE 3000, pursuant to the professional guidance applicable in France.

We conducted the following procedures, and as result were able to express limited assurance that the selected Data ⁽¹⁾, identified by the symbol*, did not contain any material anomalies. A higher level of assurance would have required more extensive procedures.

For the selected Data, we:

- assessed the Framework with respect to its relevance, reliability, neutrality, comprehensiveness and completeness;
- held discussions with the persons involved with the Framework's application at the Communications and Sustainable Development and Human Resources Departments;
- conducted tests covering the Framework's application in the selected entities, verified the reporting of the selected data with respect to the entities and various consolidation levels and tested the calculation through sampling and consistency checks.

To assist us with our work, we called on our firm's environment and sustainable development experts under the responsibility of Mr Éric Dugelay.

5.10.2. Conclusion

Based on our work, we did not detect any material anomaly likely call into question the fact that the Data identified by the symbol * was prepared, in all material respects, in accordance with the aforementioned Framework.

Neuilly-sur-Seine, 28 February 2012

One of the Statutory Auditors

Deloitte & Associés

Alain Penanguer

(1) The Data is as follows [The contribution to the Group consolidated data of the entities selected for our work is mentioned between parentheses. It takes into account the work conducted during site visits]: Total energy consumption (31%); Energy-related CO₂ emissions (23%); Total atmospheric dust emissions (68%); Chemical oxygen demand in water (36%); Hazardous waste (55%); Total number of employees recorded at the year-end (breakdown by geographical area and by Division, by type of contract, sex, socio-professional category, average age, length of service, employee management) (33%); Group accident frequency rate (29% of hours worked).

6

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6.1. 2011 CONSOLIDATED FINANCIAL STATEMENTS

6.1.1. Accounts

6.1.1.1. STATEMENT OF COMPREHENSIVE INCOME

<i>(in millions of euros)</i>	Notes	FY 2011	FY 2010	FY 2009
Sales	23.1	3,603	3,576	2,689
Other income	23.2	81	31	(35)
Cost of sales	-	(2,674)	(2,437)	(2,414)
Administrative and selling expenses	-	(174)	(155)	(142)
Research and development expenditure	-	(47)	(44)	(39)
EBITDA	-	789	971	59
Amortisation and depreciation of non-current assets	24.1	(230)	(225)	(210)
Impairment charges and provisions	24.2	(5)	(7)	(12)
Current operating profit (loss)	-	554	739	(163)
Other operating income and expenses	25	(63)	(19)	(104)
Operating profit (loss)	-	491	720	(267)
Net borrowing cost	26.1	22	3	11
Other financial income and expenses	26.2	8	(15)	(12)
Share in profit of associates	8	1	1	-
Income tax	27	(219)	(255)	7
Profit (loss) for the period	-	303	454	(261)
• Attributable to non-controlling interests	15	108	126	4
• Attributable to equity holders of the parent	-	195	328	(265)
Basic earnings per share (in euros)	28	7,42	12,43	(10,16)
Diluted earnings per share (in euros)			7,39	12,40
Profit (loss) for the period	-	303	454	(261)
Translation adjustments for financial statements of subsidiaries denominated in foreign currency	-	7	63	109
Change in revaluation reserve for hedging instruments	-	(51)	(20)	135
Change in fair value of held-for-sale financial assets	-	(10)	3	21
Income tax	27	21	6	(53)
Other components of comprehensive income	-	(33)	52	212
• Attributable to non-controlling interests	15	4	8	20
• Attributable to equity holders of the parent	-	(37)	44	192
TOTAL COMPREHENSIVE INCOME	-	270	506	(49)
• Attributable to non-controlling interests	-	112	134	24
• Attributable to equity holders of the parent	-	158	372	(73)

6.1.1.2. STATEMENT OF FINANCIAL POSITION

ASSETS

<i>(in millions of euros)</i>	Notes	31/12/2011	31/12/2010	31/12/2009
Goodwill	3	210	172	161
Intangible assets	4	612	521	432
Property, plant & equipment	5	2,119	1,903	1,795
Investments in associates	8	23	22	21
Other non-current financial assets	9 & 10	87	86	100
Deferred tax	19	25	30	68
Other non-current assets	12	5	5	5
Non-current assets	-	3,081	2,739	2,582
Inventories	11	1,093	996	824
Trade receivables and other current assets	12	664	642	514
Current tax receivables	-	33	12	43
Derivatives	22	46	128	90
Other current financial assets	13	473	359	405
Cash and cash equivalents	13	911	1,227	812
Current assets	-	3,220	3,364	2,688
TOTAL ASSETS	-	6,301	6,103	5,270

SHAREHOLDERS' EQUITY AND LIABILITIES

<i>(in millions of euros)</i>	Notes	31/12/2011	31/12/2010	31/12/2009
Share capital		81	81	80
Share premiums		372	371	341
Revaluation reserve for held-for sale assets		-	7	6
Hedging instrument revaluation reserve		(24)	10	24
Translation adjustments		28	24	(32)
Other reserves		2,579	2,465	2,116
Attributable to equity holders of the parent	14	3,036	2,958	2,535
Attributable to non-controlling interests	15	1,043	1,016	970
Shareholders' equity	-	4,079	3,974	3,505
Employee-related liabilities	16	129	123	128
Provisions	17	379	360	314
Deferred tax	19	406	342	297
Borrowings—long-term portion	20	151	203	199
Other non-current liabilities	21	37	33	36
Non-current liabilities	-	1,102	1,061	974
Provisions—short-term portion	17	29	29	29
Borrowings—short-term portion	20	80	88	72
Trade payables and other current liabilities	21	833	731	590
Current tax liabilities	-	77	149	74
Derivatives	22	101	71	26
Current liabilities	-	1,120	1,068	791
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	-	6,301	6,103	5,270

6.1.1.3. STATEMENT OF CASH FLOWS

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Operating activities			
Profit (loss) for the period	303	454	(261)
Elimination of non-cash and non-operating income and expenses			
• Depreciation, amortisation and provisions	245	227	340
• Financial instruments	3	3	(13)
• Deferred tax	86	83	(60)
• Proceeds from asset disposals	(2)	4	(48)
• Share in profit of associates	(1)	(1)	-
Cash generated by operating activities	634	770	(42)
(Increase)/decrease in inventories	(99)	(142)	455
(Increase)/decrease in trade receivables	33	(82)	78
Increase/(decrease) in trade payables	56	38	(111)
Change in other assets and liabilities	191	223	(86)
Interest income	21	15	22
Interest paid	(19)	(16)	(15)
Tax paid	(226)	(79)	(189)
Net change in current operating assets and liabilities	(43)	(43)	154
Net cash generated by operating activities	591	727	112
Investing activities			
Payments for non-current assets	(481)	(314)	(294)
Proceeds from non-current asset disposals	1	8	-
Capital grants received	-	-	-
(Proceeds from)/repayment of borrowings	5	(4)	(3)
Net change in other current financial assets	(115)	46	(4)
Dividends received from associates	-	-	-
Impact of additions to consolidation scope ⁽¹⁾	(58)	(15)	(17)
Impact of removals from consolidation scope	-	-	-
Net cash used by investing activities	(648)	(279)	(318)
Financing activities			
Dividends paid to ERAMET SA shareholders	(92)	(47)	(136)
Dividends paid to non-controlling interests in consolidated companies	(94)	(105)	(27)
Proceeds from share capital increases	1	31	1
Proceeds from treasury share sales/(payments for purchases) ⁽²⁾	(41)	(5)	1
Changes of percentage interests in subsidiaries ⁽³⁾	52	86	93
Proceeds from borrowings	18	400	194
Repayment of borrowings	(71)	(397)	(94)
Net change in current financial assets and liabilities	(2)	-	18
Net cash used by financing activities	(229)	(37)	50
Exchange-rate impact	(30)	4	24
Increase (decrease) in cash and cash equivalents	(316)	415	(132)
Opening cash and cash equivalents	1,227	812	944
Closing cash and cash equivalents	911	1,227	812

The ERAMET Group management looks at the closing net cash (debt) position, shown below and in Note 20.6, when reviewing the Company's performance.

Net cash (or net debt) position	1,153	1,295
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(1) Impact of new consolidations relates to:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Consolidation of Eralloys Holding A/S & Tinfos A/S	-	(2)	(21)
• Acquisition cost	-	(2)	(88)
• Cash acquired	-	-	(11)
• Issue of ERAMET shares	-	-	73
• Allocation of ERAMET shares	-	-	5
Consolidation of UKAD	-	-	4
• Acquisition cost	-	-	-
• Cash acquired	-	-	4
Consolidation of Valdi	-	(13)	-
• Acquisition cost	-	(13)	-
• Cash acquired	-	-	-
Integration of TiZir Ltd	(58)	-	-
• Acquisition cost	(70)	-	-
• Cash acquired	12	-	-
TOTAL	(58)	(15)	(17)

(2) Changes in treasury shares include:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Purchases and sales—liquidity contract	(5)	1	1
Purchases and sales—purchasing agency instructions	(36)	(6)	-
Purchase options exercised by employees	-	-	-
TOTAL	(41)	(5)	1

(3) Changes in percentage interests in subsidiaries break down as follows:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Sale, 33.4% of shares in Strand Minerals Pte Ltd	-	-	93
Sale, 2.17% of shares in Comilog S.A.	-	86	-
Sale, 1.37% of shares in Comilog S.A.	52	-	-
TOTAL	52	86	93

First-time application of the revised IAS 27 standard for the 2010 financial year caused reclassification as a financing flow of the impact of the disposal in 2009 of 33.4% of the Strand Minerals Ltd shares.

6.1.1.4. STATEMENT OF CHANGES IN EQUITY

<i>(in millions of euros)</i>	Number of shares	Share capital	Share premiums	Reserves/ assets held for sale	Reserves/ hedging instruments	Translation adjustments	Other reserves	Attributable to equity holders of the parent	Attributable to non-controlling interests	Total shareholders' equity
Shareholders' equity at 1 January 2009	26,215,231	80	345	(8)	(54)	(132)	2,430	2,661	1,071	3,732
Profit (loss) for the period	-	-	-	-	-	-	(265)	(265)	4	(261)
Translation adjustments of subsidiaries' financial statements denominated in foreign currency	-	-	-	-	-	100	-	100	9	109
Change in revaluation reserve for hedging instruments	-	-	-	-	78	-	-	78	11	89
Change in fair value of financial assets held for sale	-	-	-	14	-	-	-	14	-	14
Other components of comprehensive income	-	-	-	14	78	100	-	192	20	212
Total comprehensive income	-	-	-	14	78	100	(265)	(73)	24	(49)
Dividends paid—€5.25 per share	-	-	-	-	-	-	(136)	(136)	(27)	(163)
Proceeds from share capital increases	407,467	1	47	-	-	-	26	74	-	74
Share-capital reduction	(252,885)	(1)	(51)	-	-	-	-	(52)	-	(52)
Treasury shares	-	-	-	-	-	-	58	58	-	58
Share-based payment	-	-	-	-	-	-	2	2	-	2
Changes in percentage interests in subsidiaries	-	-	-	-	-	-	-	-	(97)	(97)
Other movements	-	-	-	-	-	-	1	1	(1)	-
Total transactions with shareholders	-	-	(4)	-	-	-	(49)	(53)	(125)	(178)
Shareholders' equity as at 31 December 2009	26,369,813	80	341	6	24	(32)	2,116	2,535	970	3,505
Profit (loss) for the period	-	-	-	-	-	-	328	328	126	454
Translation adjustments of subsidiaries' financial statements denominated in foreign currency	-	-	-	-	-	56	-	56	7	63
Change in revaluation reserve for hedging instruments	-	-	-	-	(14)	-	-	(14)	1	(13)
Change in fair value of financial assets held for sale	-	-	-	2	-	-	-	2	-	2
Other components of comprehensive income	-	-	-	2	(14)	56	-	44	8	52
Total comprehensive income	-	-	-	2	(14)	56	328	372	134	506
Dividends paid—€1.80 per share	-	-	-	-	-	-	(47)	(47)	(105)	(152)
Proceeds from share capital increases	143,653	1	30	-	-	-	-	31	-	31
Treasury shares	-	-	-	-	-	-	(5)	(5)	-	(5)
Share-based payment	-	-	-	-	-	-	5	5	-	5
Changes in percentage interests in subsidiaries	-	-	-	-	-	-	67	67	17	84
Other movements	-	-	-	(1)	-	-	1	-	-	-
Total transactions with shareholders	-	1	30	(1)	-	-	21	51	(88)	(37)

<i>(in millions of euros)</i>	Number of shares	Share capital	Share premiums	Reserves/ assets held for sale	Reserves/ hedging instruments	Translation adjustments	Other reserves	Attributable to equity holders of the parent	Attributable to non-controlling interests	Total shareholders' equity
Shareholders' equity as at 31 December 2010	26,513,466	81	371	7	10	24	2,465	2,958	1,016	3,974
Profit (loss) for the period	-	-	-	-	-	-	195	195	108	303
Translation adjustments of subsidiaries' financial statements denominated in foreign currency	-	-	-	-	-	4	-	4	3	7
Change in revaluation reserve for hedging instruments	-	-	-	-	(34)	-	-	(34)	1	(33)
Change in fair value of financial assets held for sale	-	-	-	(7)	-	-	-	(7)	-	(7)
Other components of comprehensive income	-	-	-	(7)	(34)	4	-	(37)	4	(33)
Total comprehensive income	-	-	-	(7)	(34)	4	195	158	112	270
Dividends paid—€3.50 per share	-	-	-	-	-	-	(92)	(92)	(94)	(186)
Proceeds from share capital increases	5,650	-	1	-	-	-	-	1	-	1
Treasury shares	-	-	-	-	-	-	(41)	(41)	-	(41)
Share-based payment	-	-	-	-	-	-	12	12	-	12
Changes in percentage interests in subsidiaries	-	-	-	-	-	-	41	41	9	50
Other movements	-	-	-	-	-	-	(1)	(1)	-	(1)
Total transactions with shareholders	-	-	1	-	-	-	(81)	(80)	(85)	(165)
SHAREHOLDERS' EQUITY AS AT 31 DECEMBER 2011	26,519,116	81	372	-	(24)	28	2,579	3,036	1,043	4,079

Translation reserves recognise the translation differences deriving from the translation into euros of the financial statements of foreign subsidiaries. They also comprise the fair value changes of the net investment hedges of foreign subsidiaries (Notes 1.5 and 22).

Premiums essentially consist of issue premiums, representing the difference between the par value of the shares issued (Note 14) and the amount of the cash or in-kind contributions received on issue. In 2009, a €46 million premium was generated by the capital increase carried out as part of the two-step acquisition of Eralloys Holding A/S and Tinfos A/S.

The change in the financial instruments revaluation reserve is mainly due to the recognition of cash-flow hedges pursuant to IAS 32 and IAS 39. The offsetting entry is under "Hedging instruments", recognised as an asset or a liability depending on whether hedging losses or gains are involved (Note 22).

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 22).

ERAMET treasury shares are classified under "Other reserves" and recognised at purchase cost (Note 14) for -€54 million (-€14 million at 31 December 2010). The change for the 2009 financial year arises mainly from the cancellation of 252,885 shares representing an amount of €52 million (Note 14).

The reserves called "Assets held for sale" include the cumulative changes to the fair value of the bonds classified as "Other current financial assets" (Note 13).

In accordance with the revised standards IFRS 3 and IAS 27, the "Percentage changes in interests in subsidiaries" correspond to the impact of changes in the scope of consolidation not resulting in a change in control at the relevant subsidiaries. In 2010 and 2011, they only involved the disposal of 1.37% and 2.17% of Comilog S.A. shares to the Gabonese State respectively for €41 million and €67 million, attributable to equity holders of the parent, and €9 million and €17 million, attributable to non-controlling interests (Notes 2 and 15).

6.1.2. Notes to the consolidated financial statements

NOTES TO THE FINANCIAL STATEMENTS

ERAMET is a French public limited company (*société anonyme*) with a Board of Directors, governed by the provisions of Articles L. 225-17 and R. 225-1 *et seq.* of the French Commercial Code and by the provisions of 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 all of 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 2011 were reviewed by the Audit Committee on 14 February 2012, and closed by the Board of Directors on 15 February 2012. They will be submitted for the approval of the General Shareholders' Meeting of 14 May 2012.

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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 2011 have been prepared in millions of euros in accordance with IFRS (International Financial Reporting Standards) as adopted by the European Union at 31 December 2011.

The accounting principles applied for the preparation of the annual financial statements are in line with IFRS and the related interpretations as adopted by the European Union at 31 December 2011 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 2011 are:

- the revision of IAS 24—“Related party disclosures” applicable as from 1 January 2011;
- the amendments to IAS 32—“Classification of rights issues” applicable as from 1 February 2010;
- the amendment to IFRIC 14—“Prepayments of a minimum funding requirement” applicable as from 1 January 2011;
- IFRIC 19—“Extinguishing financial liabilities with equity instruments” applicable as from 1 July 2010;

the following improvements:

- the amendment to IFRS 3—“Business combinations” applicable as from 1 July 2010,
- the amendment to IFRS 7—“Improving disclosures about financial instruments” applicable as from 1 January 2011,
- the amendment to IAS 1—“Presentation of financial statements” applicable as from 1 January 2011,
- the amendment to IFRIC 13—“Customer loyalty programmes” applicable as from 1 January 2011,
- the amendment to IAS 34—“Interim financial reporting” applicable as from 1 January 2011.

These amendments to standards and interpretations do not apply to the Group or did not have a material impact on the annual consolidated financial statements as of 31 December 2011.

The ERAMET Group did not opt to apply early the standards, interpretations and amendments that were not mandatory at 1 January 2011, namely:

The standards not yet adopted by the European Union:

- IAS 19 (Revised)—“Employee benefits” applicable as from 1 January 2013;
- IAS 28—“Investments in associates and joint ventures” applicable as from 1 January 2013;

- IFRS 10—“Consolidated financial statements” applicable as from 1 January 2013;
- IFRS 11—“Joint arrangements” applicable as from 1 January 2013;
- IFRS 12—“Disclosure of interests in other entities” applicable as from 1 January 2013;
- IFRS 13—“Fair value measurement” applicable as from 1 January 2013;
- IFRS 9—“Financial instruments” applicable as from 1 January 2013;
- the amendment to IAS 12—“Recovery of underlying assets” applicable as from 1 January 2012;
- IFRIC 20—“Stripping costs in the production phase of a surface mine” applicable as from 1 January 2013.

The standards adopted by the European Union:

- The amendment to IFRS 7—“Improving disclosures about financial instruments” applicable as from 1 July 2011.

The potential impact on the consolidated financial statements of the ERAMET Group of these changes would be:

- IAS 19 (Revised): the amount of the provision recognised under liabilities in the statement of financial position would increase offset in shareholders’ equity by the pre-tax amount of actuarial gains and losses and unrecognised past service cost totalling some €65 million (€39 million at 31 December 2010) (Note 16);
- IFRS 11: proportionally consolidated companies (Note 2) in these financial statements would be accounted for under the equity method.

The other standards and interpretations 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 provided in certain Notes.

The ERAMET Group regularly reviews its estimates and assessments to take account of past experience and other factors that are deemed relevant having 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 the impairment tests, provisions for employee benefits and for site restoration and deferred taxes. In principle, the ERAMET Group only reviews these estimates 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. Goodwill is impairment-tested at least once a year. In the event that the recoverable amount is below the net carrying amount, an impairment loss is recognised for the difference. The recoverable amount is estimated on the basis of the value in use determined by applying the method of future cash flows expected from the use of the assets projected over a five-year period plus a terminal value (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—“Employee benefits”, all these liabilities are estimated on the basis of assumptions such as discount rates, rates of return on financial investments under these plans, 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 16).

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 17.5). In the absence of regulatory and constructive obligations, no provision is funded for sites for which the end of operation is not determined (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 19). These deferred tax assets are recognised whenever it is likely that the ERAMET Group will have sufficient future taxable profit to absorb these temporary 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 only applied where required under a standard or interpretation and where it provides for more reliable and more relevant 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 separate 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 recognition in the balance sheet. “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 8). Jointly controlled companies (joint ventures) are consolidated proportionally.

The list of consolidated companies is provided in Note 2. 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). Accordingly, the assets, liabilities and contingent liabilities constituting a present obligation for 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 on the assets side of the statement of financial position (Note 1.6).

Where the ERAMET Group acquires assets and liabilities from non-controlling interests in a company that is 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 shareholders’ equity (Note 1.6).

1.4. Operating segments

In accordance with IFRS 8—“Operating Segments”, the 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 based on performance indicators that are common to all segments. The management data used to assess a segment’s performance are 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, encompassing mining, production and sales subsidiaries focused on nickel and its derivative applications (ferronickel, high purity nickel, cobalt and nickel salts, cobalt and tungsten powders);
- the Manganese Division, encompassing mining, production and sales subsidiaries focussed on manganese alloys (ferromanganese, silicomanganese and refined alloys) and manganese chemical derivatives (oxides, sulphate, chloride). The Manganese Division also encompasses 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;
- the Alloys Division, encompassing 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 Division and eliminations” comprises the Group’s corporate departments as well as the financial entities Metal Securities (treasury management) and Metal Currencies (foreign currency 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 within the Holding Division (Note 2):

- 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 foreign currency risks.

1.5. Translation of foreign currency denominated transactions and financial statements

Transactions in currency are translated at the exchange rate prevailing at the time of the transaction. Payables and receivables in currency are translated at the exchange rate prevailing at the balance-sheet date, in accordance with IAS 21—“The effects of changes in foreign exchange rates”. The currency translation differences arising from translation are recognised in net income for the period (Notes 1.24 and 1.25), except those concerning loans and borrowings between Group companies regarded as falling wholly within net investment in a foreign subsidiary. Such transactions are recognised directly in equity as “currency translation differences” and identified as relating to the foreign subsidiary concerned.

The financial statements of foreign entities with operating currencies other than the euro are translated for the statement of financial position on the basis of the official exchange rates obtaining at the year-end date, except for equity items, to which historic exchange rates are applied. The items in the comprehensive income statement and the cash-flow statement are translated at the average rates for the period. Goodwill on acquisition is regarded as an item inherent in the acquired entity, and is therefore expressed in its operating currency; this goodwill is therefore translated on the same basis as the other items in the statement of financial position. Translation differences due to fluctuations in the exchange rates used to translate equity capital and comprehensive income are recognised in reserves. Translation differences are recognised in equity and apportioned between the Group and the non-controlling interests. Where a foreign subsidiary ceases to be consolidated, the cumulative amount of translation differences is recognised in net income for the period under “Other financial income and expenses” (Note 26.2).

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” on the assets side of the statement of financial position. 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 25).

Since 1 January 2010, in the event of 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 shareholders' equity.

Goodwill in associates is recognised under investments in associates (Note 8).

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 "mineral deposits" (Note 4). 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 4). 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 24.1).

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 reserves initially estimated or the length of the concession (Note 4). The ERAMET Group does not perform valuations of mining resources separately from those conducted and recognised locally in the individual financial statements of the companies owning those resources.

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 asset 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 4).

1.9. Property, plant and equipment

Items of property, plant and equipment are recognised in the statement of financial position at acquisition or production cost (Note 5). Items of property, plant and equipment 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 intangible assets	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. 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, offset by the recognition of a 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 5).

Leases transferring to the Group substantially all the risks and benefits inherent in ownership (finance leases) are recognised as items of property, plant and equipment, offset by a debt (Note 18). 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—"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 “Other operating income and expenses” (Note 25). 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 calculated largely from the final year of the plan. The pre-tax discount rate used to determine the value in use is the weighted average cost of the Group’s capital, namely 11.5% for mining and 10.5% for metallurgical activities (as against 12% and 10% respectively previously).

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 cash flows that are largely independent of the cash flows from other assets or groups of assets. 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 7).

1.11. Other non-current financial assets

Other non-current financial assets include available-for-sale financial assets (Notes 1.11.1 and 9) and other investments (Notes 1.11.2 and 10).

1.11.1. Available-for-sale financial assets

These assets mainly consist of non-consolidated investments (Note 8) and are measured at fair value. Investments in companies that are not consolidated 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 income for the period under “other financial income and expenses” (Note 26.2).

Other investments are deemed to be available for sale assets and recognised at fair value. These investments 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 10) 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 (definition in Note 1.14), less any impairment losses, offset in income under “Other financial income and expenses” (Note 26.2).

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.

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 on a separate line 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 cost or FIFO (first in, first out) method.

Inventories and work in progress 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.

The impairment of spare parts that does 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.

Fixed production costs relating to recognised or planned sub-normal 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 method. The effective interest rate is the rate that precisely discounts the expected future cash flows. Foreign currency receivables and debts are re-measured at the rate prevailing at the reporting 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, aging and a risk assessment. This impairment, offset in income under "current operating profit (loss)" (Note 23), 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 benefits inherent in these assets are transferred. Where the risks are retained without prejudicing derecognition of the assets, they remain recognised in the balance sheet under other operating receivables together with the related security deposits (Note 12).

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 13.1) that do not meet the criteria for cash equivalents defined in IAS 7. These securities are measured at fair value upon 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 recyclable [transferable] shareholders' equity under "Change in fair value of held-for-sale financial assets". Where those assets exhibit objective evidence of significant or lasting impairment, the cumulative impairment loss, previously recognised in shareholders' equity, is recognised in income for the period under "other financial income and expenses" (Note 26.2).

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 income under net borrowing cost (Note 26.1).

1.17. Employee liabilities

Defined contribution plans: For the defined contribution plans granted in certain Group subsidiaries, employer contributions are expensed in the period to which they relate.

Defined benefit plans: ERAMET Group companies offer their employees various long-term 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 actuarial projected unit credit method. The provision recognised for the defined benefit pension plans represents the present value of the defined benefit liability adjusted for unrecognised actuarial gains and losses and unrecognised past service cost, less the fair value of plan assets.

Main actuarial assumptions and methods

The Group's liabilities are measured by independent actuaries in line with IAS 19—"Employee benefits". The actuarial assumptions used (employee turnover, mortality tables, retirement age, salary trends, etc.) vary according to the prevailing demographic and economic conditions in the countries in which the plan is in force. 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 measurement date. In the Euro Zone, the United Kingdom and the United States, the discount rates were determined using a software tool developed by our actuary. This software incorporates data for several hundred first-rank corporate bonds with maturities from one to thirty years (benefit-flow returns for longer maturities are prudently regarded as equal to the benefit-flow return for the longest maturity on the market). The expected benefit flows are then discounted using the average rates for each maturity. Lastly, the software returns a single rate which, applied to all the expected flows, leads to a single present value for all these future benefit flows. In countries with insufficient market liquidity for AA+ rated corporate bonds, such as Norway or Sweden, IAS 19—"Employee benefits" requires the use of government bonds taking bond maturity into account. The expected return on plan assets was calculated by taking into account the structure of the investment portfolio for each country.

Actuarial differences arise where the estimates differ from actual performance (for example, the expected value of plan assets versus the actual closing value) and where actuarial assumptions (such as the discount rate) are adjusted.

For long-term benefits (such as long-service bonuses), actuarial differences are immediately recognised at each reporting date. For post-employment benefits, actuarial differences are not recognised unless they represent over 10% of the higher of the present value of liabilities and the fair value of plan assets; this excess is amortised over the expected average remaining working life of employees in the plan (corridor method). Plan amendment costs are apportioned over the remaining vesting period.

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 tax 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 assets and liabilities in the statement of financial position (Note 18). Deferred tax is deemed to be non-current and classified as such.

In the statement of financial position, deferred tax assets and liabilities are offset within each tax entity, *i.e.* within the legal entity or tax consolidation group (Note 19).

Deferred tax liabilities on investments in subsidiaries, associates and joint ventures are only recognised where the Group can determine the timetable for the reversal of the related temporary differences. Provisions are recognised for non-recoverable levies on dividends planned in respect of the previous financial year.

1.19. Provisions

Provisions are recognised, 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 recognised 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 the income statement under Other financial income and expenses (Note 26.2).

As regards industrial sites, insofar as there are no plans to discontinue operations, no provision is recognised for site restoration.

Provisions are funded 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”.

Risks: The Group uses financial instruments to hedge certain risks. 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. Overall 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 unwind current contracts on the reporting date. The fair value of commodity derivatives is estimated on market terms. Derivatives are presented as assets or liabilities in the statement of financial position (Note 22).

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 remeasured in respect of the hedged risk and the hedging instrument is measured and recognised at fair value. The changes in both items are recognised simultaneously in 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 the income statement when income is affected by the hedged item. The ineffective portion is retained in income for the period.
- Hedge of a net investment in a foreign operation: 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 shareholders' equity as translation adjustments, and recycled 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.

In accordance with the revised IFRS 7, the fair values of financial instruments are ranked 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.

1.21. Concession

The *Transgabonais* railway concession was recognised as follows: own property held by the company holding the concession is recognised as an asset in the balance sheet 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 recognised to cover the risk of non-renewal of the concession in line with investment assumptions.

1.22. Revenue

Revenue 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 23).
- Other income including other revenue assigned to current operating profit (loss) (Note 23) such as translation adjustments on sales, rental income and insurance indemnities received.
- Interest income recognised in income for the period under “Net borrowing costs” (Note 26.1).
- Dividends included in income for the period under “Other financial income and expenses” (Note 26.2).

The revenue 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, have been established by the Group and are all equity-settled plans. 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 a Black & Scholes or Monte Carlo type 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 end 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.

In line with the transitory provisions in IFRS 1, only stock option plans subsequent to 7 November 2002 that had not vested by 1 January 2005 were recognised using the above-mentioned measurement and recognition principles laid down in IFRS 2 – “Share-based payment” and are subject to measurement.

1.24. Current operating profit (loss) and other operating income and expenses

In accordance with IAS 1 (paragraphs 88 and 89), ERAMET presents its comprehensive income statement using a composite “function and nature” approach to reflect Group internal management reporting. In particular, ERAMET uses EBITDA (earnings before interest, tax, depreciation and amortisation) and operating profit and performance indicators. EBITDA includes gross margin (the difference between sales and the cost of goods sold), sales and administrative expenses and research and development costs excluding depreciation and provisions, which are presented separately. Current operating profit takes account of EBITDA, depreciation and provisions; it includes among others the cost of staff-related commitments including the financial component, employee incentive and profit-sharing expenses, translation differences between the exchange rates at recognition and the

exchange rates at the year-end date for the operating activity (customer receivables and supplier payables).

Other operating income and expenses include income and expense items of a very limited number, unusual, abnormal or infrequent and for particularly significant amounts that the Group presents separately in its income statement in order to facilitate understanding of ordinary operating performance. These items particularly include the following:

- restructuring costs;
- costs incurred on projects under development for which profitability is not yet proven;
- capital gains and losses, and impairments of assets;
- impairment of goodwill, other intangible assets, 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; and
- other financial income and expenses, such as dividends, provisions for securities, accretion expenses and gains/losses on instruments that are ineligible for hedging purposes under IAS 39.

1.26. Earnings per share

Basic earnings per share are obtained by dividing the Group profit (loss) for the period 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 recognised, 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 17.5).

Provisions are recognised for any other environmental contingencies on the basis of estimated future costs without, however, making any allowance for insurance indemnities receivable (Note 17.5).

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 on the reporting date are recognised in the statement of financial position, with no set-off (Note 22).

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 20). In addition, the Group uses derivatives to limit its exposure to foreign 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 22).

Commodities risks: The Group holds derivatives for the purposes of reducing its exposure. For this purpose, ERAMET mainly uses futures, combined call and put options (collars) and call options (Note 22).

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 22).

Liquidity risk: The Group is obliged to repay its borrowings and to settle its other liabilities. To cover its liquidity risks, ERAMET has additional sources of finance consisting of credit facilities and commercial-paper facilities (Note 22).

Note 2. Scope of consolidation

2.1. Changes in the scope of consolidation

The scope of consolidation at 31 December 2011 changed as follows from 31 December 2010:

2.1.1. Setting up of the TiZir Ltd joint venture

On 27 July 2011, ERAMET and Mineral Deposits Ltd (MDL) reached an agreement to set up a joint venture, TiZir Ltd, comprising the Norwegian company ERAMET Titanium & Iron A/S, previously wholly-owned by ERAMET, and the mineral sands project run by Grande Côte Opérations SA in Senegal, 90% owned by MDL (the other 10% being held by the Republic of Senegal). The definitive agreements were finalised on 25 October 2011. The new entity, notably consisting of the wholly-owned subsidiaries ERAMET Titan & Iron A/S and the 90% owned Grande Côte Opérations SA, has been 50% proportionally consolidated since 1 October 2011. The assets transferred by ERAMET Titanium & Iron A/S generated a gain on disposal on the portion attributable to the Group (*i.e.* 50%) in accordance with the provisions of interpretation SIC 13—Jointly Controlled Entities—Non-Monetary Contributions by Venturers. This €19 million gain was recognised in

income (Note 26.2). The impact on the Group's financial statements not being material, no pro-forma was prepared. The allocation of the acquisition price is currently being carried out by independent experts and will be primarily allocated to intangible assets within mineral deposits.

2.1.2. Disposal of 1.37% of Comilog S.A.

As part of the agreement signed on 20 October 2010 between ERAMET and the Gabonese Republic, at end-June 2011 ERAMET sold 31,935 shares, representing 1.37% of the share capital of Comilog S.A., cutting its interest from 65.08% to 63.71% (Note 30—Other commitments). The gain on the disposal was allocated to shareholders' equity.

2.1.3. Setting up of ERAMET Comilog Shanghai Consultancy Services Co Ltd

The Chinese company ERAMET Comilog Shanghai Consultancy Services Co Ltd was set up in early July 2011. It is wholly-owned by Comilog Far East Development Ltd and fully consolidated within the Manganese Division.

2.2. List of consolidated companies at 31 December 2011

At 31 December 2011, 68 companies were consolidated (at 31 December 2010: 65), 61 of them being fully consolidated, 6 proportionally consolidated and 1 company accounted for under the equity method (at 31 December 2010: 62 companies fully consolidated, 2 companies proportionally consolidated and 1 company accounted for under the equity method).

Company	Countries	Method of consolidation	Percentage (%)	
			control	interest
ERAMET	France	Parent	-	-
Nickel				
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 Minerals Pty Ltd	Australia	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 Manganèse	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
ERAMET Norway Kvinesdal A/S	Norway	Fully consolidated	100	100
Valdi	France	Fully consolidated	100	100
Eralloys Holding A/S	Norway	Fully consolidated	100	100
Eralloys Energi A/S	Norway	Fully consolidated	100	100
DNN Industrier A/S	Norway	Fully consolidated	100	100
ERAMET Titan 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	83.88	54.09
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	97.26	61.96
Erachem Comilog S.A.	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
ERAMET Titanium & Iron A/S	Norway	Proportional consolidation	50	50

Company	Countries	Method of consolidation	Percentage (%)	
			control	interest
Mineral Deposits 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				
ERAMET Alliages	France	Fully consolidated	100	100
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 Innovative Materials Co Ltd	China	Fully consolidated	100	100
Société Industrielle de Métallurgie Appliquée	France	Fully consolidated	100	100
Interforge	France	Fully consolidated	94	94
Aubert & Duval	France	Fully consolidated	100	100
UKAD	France	Proportional consolidation	50	50
Airforge	France	Fully consolidated	100	100
Holding Division and miscellaneous				
Eras SA	Luxembourg	Fully consolidated	100	100
Metal Securities	France	Fully consolidated	100	100
Metal Currencies	France	Fully consolidated	100	100
Eramine	France	Fully consolidated	100	100
Bolera Minera SA	Argentina	Proportional consolidation	50	50
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 3. Goodwill

3.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
ERAMET Norway A/S	154	154	151
Mineral Deposits Mauritius Ltd	38	-	-
Valdi	8	8	-
Eurotungstène Poudres	6	6	6
Erasteel Stubs Ltd	-	-	-
Port Minéralier d'Owendo SA	-	-	-
Bear Metallurgical Corp.	-	-	-
Aubert & Duval	3	3	3
Other companies (less than €1 million)	1	1	1
TOTAL	210	172	161
Of which impairment losses	(31)	(31)	(31)

3.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	172	161	264
Business combinations	36	10	(35)
Other changes in scope	-	-	-
Impairment losses in period	-	-	(10)
Translation adjustments and other movements	2	1	(58)
AT PERIOD END	210	172	161

In 2009, the acquisition of an additional interest in the Norwegian company Eralloys Holding A/S accounted for the business combinations in that financial year. As a result of the impairment testing of Erasteel's High-speed steel cash-generating unit (CGU), the goodwill of Erasteel Stubs Ltd was impaired for its residual value of €5 million. 2010 business combinations comprised the €8 million acquisition of Valdi and the €2 million additional payment for Eralloys Holding A/S.

2011 business combinations involved the arrangements associated with the setting up of the TiZir Ltd joint venture for the portion contributed by Mineral Deposits Ltd (Note 2).

No other impairment loss was recognised at 31 December 2011.

Note 4. Intangible assets

4.1. By category

<i>(in millions of euros)</i>	Gross amount	Amortisation & depreciation	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Mining reserves	335	(68)	-	267	262	248
Software	55	(50)	-	5	3	4
Other intangible assets	358	(46)	-	312	241	175
Work in progress, down-payments	28	-	-	28	15	5
TOTAL	776	(164)		612	521	432

4.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	521	432	345
Business combinations	20	2	-
Other changes in scope	-	-	-
Capital expenditure for the period	84	78	42
Disposals for the period	(7)	-	-
Amortisation, depreciation and impairment losses for the period	(16)	(8)	(10)
Translation adjustments and other movements	10	17	55
AT PERIOD END	612	521	432
• Gross amount	776	662	557
• Amortisation & depreciation	(164)	(139)	(123)
• Impairment losses	-	(2)	(2)

The Group allocates the acquisition cost of a business combination to the fair value of the assets, liabilities and identifiable contingent liabilities, in particular to mineral deposits for the Nickel and Manganese Divisions.

Mineral deposits are split across Gabon (Manganese Division), New Caledonia and Indonesia (Nickel Division), for €34 million, €13 million and €219 million respectively (€36 million, €14 million and €213 million at 31 December 2010).

Investments include expenditure contracted on mining projects (geology, exploration, prospecting, technical and economic studies).

Investments over the period (€84 million) were primarily comprised of €64 million (€66 million in 2010) in expenses in Indonesia (Pt Weda Bay Nickel) and €1 million on software (€4 million in 2010).

2010 business combinations concerned Valdi, acquired in early 2010.

In 2011, they involved the setting up of the TiZir Ltd joint venture (Note 2) and comprised €19 million in research and development expenses and €1 million in expenditure on mineral deposits in Senegal. The €38 million in goodwill (Note 3) determined as part of the transaction will mainly be booked under mineral deposits following the allocation of the acquisition price in 2012 (Note 2).

No impairment loss was recognised in 2011.

4.3. Research & development expenditure—expenses during the period

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Non-capitalised research and development expenditure	47	44	39
of which geological expenses:			
• Nickel	12	14	12
• Manganese	-	-	-
Percentage of sales	1.3%	1.2%	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 5. Property, plant & equipment

5.1. By category

<i>(in millions of euros)</i>	Gross amount	Amortisation & depreciation	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Land and buildings	888	(484)	(46)	358	378	357
Industrial and mining facilities ⁽¹⁾	2,829	(1,654)	(69)	1,106	1,058	1,004
Other property, plant & equipment	593	(379)	(3)	211	219	220
Work in progress, down-payments	444	-	-	444	248	214
TOTAL	4,754	(2,517)	(118)	2,119	1,903	1,795
<i>(1) of which:</i>						
• Capital grants deducted				-	-	-
• Dismantling assets—site restoration (Note 16.4)				98	88	76

Capital grants deducted from items of property, plant and equipment mainly relate to the strategic capital expenditure programmes discussed in Section 5.3.

5.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	1,903	1,795	1,763
Business combinations	6	9	(6)
Other changes in scope	-	(2)	-
Capital expenditure for the period	408	248	244
Disposals for the period	(12)	(4)	(3)
Amortisation, depreciation and impairment losses for the period	(228)	(205)	(242)
Translation adjustments and other movements	42	62	39
AT PERIOD END	2,119	1,903	1,795
• Gross amount	4,754	4,363	4,076
• Amortisation & depreciation	(2,517)	(2,346)	(2,157)
• Impairment losses	(118)	(114)	(124)

As a result of impairment tests carried out in previous financial years, items of property plant & equipment, chiefly in the Manganese and Alloys Divisions, were impaired by €28 million and €17 million respectively. In 2009, following the carrying out of impairment tests on Erasteel's "High-speed steel" business (Alloys Division) and on Erachem Comilog S.A. (Manganese Division),

extraordinary impairment losses of, respectively, €42 million and €12 million were recognised.

In 2011, impairment losses were recognised in the Manganese Division, primarily involving the recycling business for €17 million.

5.3. Breakdown of main strategic capital expenditure programmes

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
Nickel production expansion—Le Nickel-SLN	-	3	3
Manganese production expansion—Comilog S.A.	13	7	20
CMM plants—Comilog S.A.	39	15	1
EMD plant in China—Guangxi ERAMET Chemetals Ltd	-	-	8
New Guilin plant—Guilin Comilog Ferro Alloys Ltd	50	15	10
Titanium ingot processing plant—UKAD	14	11	1
TOTAL	116	51	43

The main capital expenditure programmes are financed from cash and borrowings.

The amount of finance leased non-current assets in the balance sheet breaks down as follows:

<i>(in millions of euros)</i>	Gross amount	Amortisation & depreciation	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
40,000-tonne press—Airforge	77	(19)	-	58	61	65
Industrial facilities—Aubert & Duval	15	(14)	-	1	2	3
Administrative buildings—Aubert & Duval	7	(4)	-	3	3	4
53· Tour Montparnasse—ERAMET	5	(3)	-	2	2	3
TOTAL	104	(40)	-	64	68	75

Future finance lease payments are presented in Note 20—Borrowings.

Note 6. Mining projects

Weda Bay project in Indonesia

Since May 2006, the ERAMET Group has been involved in a project to develop a world-class nickel deposit at the Halmahera site in Weda Bay, Indonesia.

The final investment decision should be taken following the results of the final studies on the technical and economic feasibility of the project in early 2013.

The net value of the Weda Bay assets breaks down as follows:

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Mining reserves	219	213	197
Geology, prospecting expenses and study costs	243	176	103
Property, plant & equipment	13	5	5
TOTAL ASSETS	475	394	305

Capitalised project expenditure mainly consists of the costs of geology, exploration, prospecting, technical and economic studies.

The project's value in use is regularly reassessed on the basis of studies done on the cost of the project, its main markets and nickel price forecasts.

ERAMET's partners on 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 Pt Antam group which owns 10% of Pt Weda Bay Nickel, the owner of the deposit.

Pt Antam has a number of call options allowing it to increase its interest, the terms and conditions of exercise of which can be found in Note 30—Other commitments.

Furthermore, ERAMET agreed put options when Mitsubishi Corporation took an interest in Strand Minerals Pte Ltd. These options can be exercised up to the final investment decision, subject to certain terms and conditions detailed in Note 17.5—Other contingencies and losses.

Note 7. Impairment of assets

At 31 December 2011, the ERAMET Group is broken down into 20 cash generating units (CGUs) corresponding to the different production sites of the three divisions:

- 3 CGUs in the Nickel Division;
- 14 CGUs in the Manganese Division;

- 3 CGUs in the Alloys Division;

The following are the main components of goodwill included in the carrying amounts of the cash generating units (CGUs) tested at 31 December 2011:

<i>(in millions of euros)</i>	31/12/2011		31/12/2010		31/12/2009	
	Net amount	Of which impairment	Net amount	Of which impairment	Net amount	Of which impairment
Cash generating units						
Nickel Division	6	-	6	-	6	-
• "Powders" business	6	-	6	-	6	-
Manganese Division	200	(14)	162	(14)	151	(14)
• "Recycling" business	8	(2)	8	(2)	-	(2)
• Port Minéralier d'Owendo SA	-	(10)	-	(10)	-	(10)
• Erachem Mexico	-	(2)	-	(2)	-	(2)
• Norwegian business (incl. Tinfos)	154	-	154	-	151	-
• TiZir Ltd and its subsidiaries	38	-	-	-	-	-
Alloys Division	4	(17)	4	(17)	4	(17)
• High-speed steel business	-	(9)	-	(9)	-	(9)
• "Forged rolled manufactured products" business	3	(8)	3	(8)	3	(8)
• "Closed die-forged products" business	1	-	1	-	1	-
TOTAL	210	(31)	172	(31)	161	(31)

The data and assumptions used to carry out impairment tests on non-current assets in cash generating units (CGUs) are as follows.

- the discount rate used is the weighted average cost of capital (WACC), namely:
 - 11.5% for mining business,
 - 10.5% for metallurgy business;

- cash flows are forecast over 5 years. The growth rates used are the same as those used in budgets and the growth rates to infinity used for the terminal values are between 0% and 1%, depending on the CGU.

The following main impairment losses were recognised:

<i>(in millions of euros)</i>	Carrying amount before impairment			Value in use or fair value		
	31/12/2011	31/12/2010	31/12/2009	31/12/2011	31/12/2010	31/12/2009
Cash generating units						
Manganese Division	182	170	159	107	107	98
• “Special products” business	27	26	24	-	-	-
• “Recycling” business	126	123	113	89	97	88
• Guangxi Comilog Ferro Alloys Ltd	7	-	-	5	-	-
• Erachem Comilog S.A.	14	13	14	5	2	2
• Comilog Dunkerque	8	8	8	8	8	8
Alloys Division	111	97	90	68	49	30
• “High-speed steel” business	111	97	90	68	49	30
Individual assets						
Nickel Division	2	2	2	-	-	-
Manganese Division	17	19	16	-	-	-
Alloys Division	2	3	4	-	-	-
Holding Division and miscellaneous	2	2	2	-	-	-
TOTAL	316	293	273	175	156	128

The figures shown in this statement include goodwill, intangible assets and property plant & equipment for the relevant cash generating units (CGUs).

Impairment losses were recognised on goodwill (€31 million—unchanged on 2010) (Note 3) and on property, plant & equipment (€118 million compared with €114 million) (Note 5).

The changes were primarily due to the following items:

Cash generating units

The following are the changes in the impairment losses recognised for the main cash generating units (CGUs):

<i>(in millions of euros)</i>	FY 2011				FY 2010				FY 2009			
	Total	Goodwill	Intangibles	PP&E	Total	Goodwill	Intangibles	PP&E	Total	Goodwill	Intangibles	PP&E
At beginning of period	(111)	(7)	-	(104)	(121)	(7)	-	(114)	(79)	-	-	(79)
• (Impairment)/net reversals for the period	(16)	-	-	(16)	10	-	-	10	(44)	(5)	-	(39)
• Translation adjustments and other movements	9	(1)	-	10	-	-	-	-	2	(2)	-	4
AT PERIOD END	(118)	(8)	-	(110)	(111)	(7)	-	(104)	(121)	(7)	-	(114)

Impairment losses in the Manganese Division primarily included €31 million recognised for the recycling business in 2008 and €4 million for the “Special product” business in the US (Notes 5 and 23). In 2009, impairment losses of certain business lines were reversed: the recycling business (€7 million) and Comilog Dunkerque (€8 million), whereas an additional impairment loss of €12 million was recognised for Erachem Comilog S.A. in Belgium.

In 2009, the main impairment losses in the Alloys Division were recognised in the Erasteel “High-speed steels” business, amounting to €47 million (Notes 3, 5 and 24).

In 2010, impairment reversals were recognised mainly in the Alloys Division and in the Erasteel “High-speed steel” business, reflecting an upswing in business and the restructuring undertaken.

In 2011, impairment losses mainly stemmed from the recycling business in the Manganese Division (€17 million).

A 10% increase or decrease in business volumes or a 5% increase or decrease in prices would not impact the amount of the impairment loss recognised.

Individual assets

The impairment losses affecting individual assets at the Alloys Division related to the shutdown of a production line in Sweden, substantially unchanged from previous years.

No other material impairment losses were recognised at 31 December 2011.

Note 8. Investments in associates

8.1. By category

<i>(in millions of euros)</i> Companies	Countries	% interest	Share of profit (loss)	Share of shareholders' equity		
				31/12/2011	31/12/2010	31/12/2009
Tinfos A/S	Norway	33.35%	1	23	22	21
TOTAL			1	23	22	21

Upon completion of the second phase announced on 14 May 2009, the shareholding in Tinfos A/S was reduced from 55.78% to 33.35%.

8.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	22	21	-
Business combinations	-	-	20
Other changes in scope	-	-	-
Capital expenditure for the period	-	-	-
Disposals for the period	-	-	-
Share of profit (loss) for the period	1	1	-
Dividends paid	-	-	-
Translation adjustments and other movements	-	-	1
AT PERIOD END	23	22	21

Note 9. Non-consolidated subsidiaries

9.1. By category

<i>(in millions of euros)</i> Companies	Country	% interest	Gross amount	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Tinfos International A/S	Norway	100%	-	-	-	-	16
Brown Europe	France	100%	8	-	8	8	8
Cooltech	France	10%	2	-	2	-	-
Metallied	Spain	51%	1	-	1	-	-
Aubert & Duval USA Inc. (formerly HTM Inc.)	US	100%	3	(1)	2	1	2
Erasteel GmbH	Germany	100%	3	(2)	1	1	3
ERAMET Alloys UK Ltd	Great Britain	100%	4	-	4	4	3
Aubert & Duval Mold and Die Technology	China	85%	3	(1)	2	2	2
Stahlschmidt GmbH	Germany	100%	3	-	3	3	3
La Petite-Faye	New Caledonia	100%	2	-	2	2	2
Exeltium	France	-	3	-	3	3	-
Somivab	Gabon	83.00%	2	-	2	2	2
ERAMET Research	France	100%	1	-	1	1	1
ERAMET Ingénierie	France	100%	1	-	1	1	1
Sogaferro	Gabon	69.99%	1	-	1	1	1
Other companies (less than €1 million)	-	-	11	(4)	7	5	6
TOTAL			48	(8)	40	34	50

Non-consolidated subsidiaries are mainly controlled companies and are recognised in the balance sheet at their acquisition cost less any impairment provision. Since the Group is unable to measure fair value reliably, this is measured on the basis of the Group's share in the net equity.

Investments in the controlled companies discussed earlier are not consolidated since they have no material impact on the Group financial statements. These investments are recognised at the acquisition cost or for the value of the equity interest held in them on the date of their deconsolidation. Tinfos International A/S, an international metallurgical products trading company, was disposed of in early January 2010 for €16 million.

9.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	34	50	74
Business combinations	-	(16)	(21)
Other changes in scope	-	-	-
Capital expenditure for the period	4	4	1
Disposals for the period	(1)	(4)	(1)
Impairment losses for the period recognised through profit & loss	1	-	(4)
Impairment for the period recognised in equity	-	-	-
Translation adjustments and other movements	2	-	1
AT PERIOD END	40	34	50

2009 business combinations included a €17 million fair-value adjustment to the shares in Tinfos International A/S, reducing the fair value from €33 million to €16 million. In 2010, business combinations concerned the disposal of this investment.

Simplified financial statements (statutory accounts) for the main controlled but non-consolidated companies at 31 December 2010 are set out below:

(in millions of euros)
(Base: financial statements as at 31 December 2010)

	Stahlschmidt GmbH	Erasteel GmbH	ERAMET Alloys UK Ltd	Forges de Montplaisir	Brown Europe	ERAMET Ingénierie	ERAMET Research
Sales	20	15	9	4	11	8	17
Current operating profit (loss)	(1)	-	1	1	1	-	-
Profit (loss) for the period	(2)	-	1	-	1	-	2
Non-current assets	1	1	1	1	5	-	12
Working capital requirement	2	1	3	1	6	-	-
Shareholders' equity	(1)	(1)	(5)	(3)	(16)	(4)	(7)
Provisions	(1)	(1)	-	-	-	-	(1)
Net borrowings	(1)	-	1	1	5	4	(4)

These companies are mainly sales and research and development entities, the services of which are wholly for the ERAMET Group

and the industrial subsidiaries of S.I.M.A. (shaping, wire drawing and drawing of metallurgical products).

Note 10. Other investments

10.1. By category

(in millions of euros)

	Gross amount	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Deposits and guarantees	31	(13)	18	23	19
Pension-plan assets	2	-	2	1	4
Employee loans	4	-	4	5	5
Current accounts—Tinfos International A/S	8	-	8	9	8
Current accounts—Enercal	-	-	-	-	2
Current accounts—ERAMET International & subsidiaries	-	-	-	1	3
Financial investments/US pensions	2	-	2	2	2
Current accounts—A&D Mold and Die Technology	2	-	2	2	2
Current accounts—Stahlschmidt GmbH	5	(4)	1	1	-
Current accounts—ERAMET Research	2	-	2	4	-
Current accounts—Somivab	1	(1)	-	1	1
Other loans and current accounts	9	(1)	8	3	4
TOTAL	66	(19)	47	52	50

Other investments relate to loans or current accounts granted to non-consolidated companies.

Since 10 October 2008, deposits and guarantees included €14 million (US\$20 million) paid by ERAMET on the call option

for the purchase of 75.1% of the Otjozondou manganese mining project in Namibia, which was fully impaired in 2009 owing to the decision to abandon the project.

10.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	52	50	63
Business combinations	-	-	(1)
Other changes in scope	-	-	-
Changes in cash	(5)	4	3
Impairment losses for the period	(1)	3	(16)
Translation adjustments and other movements	1	(5)	1
AT PERIOD END	47	52	50
Breakdown of impairment losses:			
• At beginning of period	(18)	(19)	(3)
• Impairment losses	(1)	-	(16)
• Reversals of impairment, used	-	3	-
• Reversals of impairment, unused	-	-	-
• Translation adjustments and other movements	-	(2)	-
• At period end	(19)	(18)	(19)

10.3. By currency

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Euro	26	31	16
US dollar	5	3	11
CFA franc	1	1	1
Pacific franc	6	7	8
Norwegian krone	9	10	14
TOTAL	47	52	50

10.4. By interest rate

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Interest-free	15	25	21
Fixed interest rates	13	25	15
Floating interest rates	19	2	14
TOTAL	47	52	50

Interest free items mainly relate to deposits and guarantees and certain loans to employees.

Note 11. Inventories

11.1. By category

<i>(in millions of euros)</i>	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Raw materials	326	341	281
Merchandise and finished products	394	327	307
Work in progress and semi-finished products	344	296	214
Consumables and spare parts	29	32	22
TOTAL	1,093	996	824
Of which impairment losses	(103)	(106)	(113)

Impairment provisions mainly relate to raw materials and merchandise and finished products. Inventories pledged to secure liabilities appear in Note 29—Off-balance sheet commitments.

11.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	996	824	1,242
Business combinations	-	3	-
Other changes in scope	(11)	-	(3)
Changes in working capital requirement	95	132	(506)
Impairment losses for the period	4	10	51
Translation adjustments and other movements	9	27	40
AT PERIOD END	1,093	996	824
Breakdown of impairment losses:			
• At beginning of period	(106)	(113)	(163)
• Impairment losses	(45)	(48)	(73)
• Reversals of impairment, used	49	57	124
• Reversals of impairment, unused	-	-	-
• Translation adjustments and other movements	(1)	(2)	(1)
• At period end	(103)	(106)	(113)

Following poor trading in 2009, in 2010 the Group had matched market upturn with an increase in production levels. This was reflected in a €172 million increase in gross inventories. In 2011, the three divisions, and in particular the Alloys Division,

continued their efforts to increase production. Gross inventories rose €94 million. The ratio of inventories to sales rose to 111 days from 102 days in 2010.

Note 12. Trade and other receivables

12.1. By category

<i>(in millions of euros)</i>	Gross amount	Impairment losses	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Trade receivables	437	(6)	431	465	364
Payroll and tax receivables	93	-	93	80	59
Other operating receivables	134	(56)	78	51	60
Receivables on non-current assets	32	-	32	28	16
Dividends receivable	-	-	-	-	1
Prepaid expenses	35	-	35	23	19
TOTAL	731	(62)	669	647	519
• Non-current assets	5	-	5	5	5
• Current assets	726	(62)	664	642	514

12.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	647	519	603
Business combinations	-	3	-
Other changes in scope	(1)	5	(2)
Changes in working capital requirement	56	37	(43)
Impairment losses for the period	(16)	25	(23)
Translation adjustments and other movements	(17)	58	(16)
AT PERIOD END	669	647	519
Breakdown of impairment losses on receivables:			
• At beginning of period	(51)	(76)	(54)
• Impairment losses	(20)	(10)	(30)
• Reversals of impairment, used	4	34	7
• Reversals of impairment, unused	-	-	-
• Business combinations	-	-	-
• Translation adjustments and other movements	5	1	1
• At period end	(62)	(51)	(76)

The bulk of trade and other receivables are due in less than one year. Other non-current receivables of €5 million (unchanged on 31 December 2010) relate to a Setrag SA receivable vis-à-vis the Gabonese State in connection with the concession agreement. In 2010, trade receivables had risen €101 million on the back of the recovery following the 2009 recession. In 2011, trade receivables were down €18 million in the Nickel Division, as a result of a slight

improvement in collection times, and €36 million in the Manganese Division reflecting the fall-off in sales. In the Alloys Division, trade receivables were up €22 million (+26%) automatically reflecting higher sales (+19%). At Group level, trade receivables were down €33 million and the ratio of trade receivables to sales improved by 3 days to 52 days.

On 5 July 2007, the Group's wholly-owned subsidiary Aubert & Duval concluded a debt securitisation agreement with a bank with ceilings of €115 million and US\$50 million. This agreement provided for the securitisation during a five-year period of recei-

vables from major customers, primarily located in Europe and North America. The receivables thereby assigned were derecognised for the following amounts:

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Trade receivables—Invoices assigned and deconsolidated	(79)	(72)	(66)
Other operating receivables—Security deposit	16	18	23

Note 13. Other current financial assets and cash and cash equivalents

13.1. Other current financial assets

13.1.1. By category

<i>(in millions of euros)</i>	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Other current financial assets	473	359	405
TOTAL	473	359	405

Other current financial assets consisted of bonds issued by some twenty listed European companies.

13.1.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2011	FY 2011
At beginning of period	359	405	388
Business combinations	-	-	-
Other changes in scope	-	-	-
Capital expenditure for the period	124	-	-
Disposals for the period	-	(49)	(3)
Impairment losses for the period recognised through profit and loss	-	-	-
Change in fair value recognised in equity	(10)	3	20
Translation adjustments and other movements	-	-	-
AT PERIOD END	473	359	405

At 31 December 2009, a plus €20 million change was recognised by a counterpart adjustment in shareholders' equity. At 31 December 2010, the change was plus €3 million. In 2011, a change of minus €10 million was recorded.

13.2. Cash and cash equivalents

13.2.1. By category

<i>(in millions of euros)</i>	Net amount 31/12/2011	Net amount 31/12/2010	Net amount 31/12/2009
Cash	120	95	59
Cash equivalents	791	1,132	753
TOTAL	911	1,227	812

13.2.2. By currency

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Euro	806	1,137	657
US dollar	74	27	120
Yuan Ren Min Bi (China)	11	40	15
Norwegian krone	10	16	14
Other currencies	10	7	6
TOTAL	911	1,227	812

13.2.3. By interest rate

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Interest free	63	15	14
Fixed interest rates	30	28	22
Floating interest rates	818	1,184	776
TOTAL	911	1,227	812

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

Cash includes cash in hand and at bank. Cash equivalents, largely managed by Metal Securities, mainly consist of money-market securities totalling €332 million (compared with €891 million at 31 December 2010) bearing interest based on the EONIA rate

(EURIBOR OverNight Index Average), negotiable debt securities totalling €426 million (compared with €221 million at 31 December 2010) bearing interest based on the EONIA rate.

The change from one period to the next is analysed *via* a cash flow statement drawn up using the indirect method.

Note 14. Shareholders' equity

14.1. Changes in share capital

The share capital is comprised of 26,519,116 fully paid-up shares with a €3.05 par value each, broken down as follows:

Breakdown	FY 2011				FY 2010				FY 2009			
	Capital		Voting rights		Capital		Voting rights		Capital		Voting rights	
	%	No. of shares										
Registered shares												
SORAME and Compagnie d'Études Industrielles du Rouvray (CEIR)	37.00	9,811,091	43.94	19,417,098	36.89	9,781,091	43.73	19,384,006	36.43	9,606,007	43.50	19,208,922
AREVA	25.68	6,810,317	30.70	13,567,594	25.69	6,810,317	30.61	13,567,594	25.63	6,757,277	30.60	13,514,554
S.T.C.P.I.	4.04	1,070,586	4.85	2,141,172	4.04	1,070,586	4.83	2,141,172	4.06	1,070,586	4.85	2,141,172
Holta Investment SA	-	-	-	-	-	-	-	-	0.48	126,978	0.29	126,978
ERAMET SA	0.98	259,546	-	-	0.39	103,851	-	-	0.31	81,732	-	-
ERAMET SA share fund	0.13	33,854	0.13	56,464	0.12	31,138	0.11	50,748	0.09	22,610	0.10	42,220
Other	1.38	364,722	1.90	839,468	1.35	356,915	1.86	824,459	1.46	384,308	1.83	807,139
Total registered shares	69.20	18,350,116	81.51	36,021,796	68.47	18,153,898	81.14	35,967,979	68.45	18,049,498	81.16	35,840,985
Other bearer shares	30.80	8,169,000	18.49	8,169,000	31.53	8,359,568	18.86	8,359,568	31.55	8,320,315	18.84	8,320,315
TOTAL NUMBER OF SHARES	100.00	26,519,116	100.00	44,190,796	100.00	26,513,466	100.00	44,327,547	100.00	26,369,813	100.00	44,161,300
• Shares with single voting rights	33.36%	8,847,436	20.02%	8,847,436	32.81%	8,699,385	19.63%	8,699,385	32.53%	8,578,326	19.42%	8,578,326
• Shares with double voting rights	66.64%	17,671,680	79.98%	35,343,360	67.19%	17,814,081	80.37%	35,628,162	67.47%	17,791,487	80.58%	35,582,974

The 17 June 1999 shareholders' agreement, which expired on 30 June 2006, was tacitly extended for one-year periods. On 29 May 2008, the shareholders (SORAME and CEIR) and AREVA announced the signing of an amendment to the shareholders' agreement. The amended shareholders' agreement, initially entered into for a period expiring at 31 December 2009, is tacitly renewable for six-month periods, unless one of the parties gives fifteen calendar days' notice of termination. It was renewed for six months as from 1 January 2012. This shareholders' agreement

(constituting a sub-concert between SORAME and CEIR) represents an agreement to act in concert, and prior approval notice 199CO577 was issued on 18 May 1999 by the French Financial Markets Board (CMF). For the amendment of 29 May 2008, the AMF issued approval and notice No. 208C1042.

Since 1 January 2002, registered shares meeting the required conditions have qualified for double voting rights.

14.1.1. Dividends paid

	FY 2011	FY 2011	FY 2011
Net dividends	3.50	1.80	5.25
Total return	3.50	1.80	5.25
TOTAL NET DISTRIBUTION	92	47	136

The dividends paid during the first half of 2011 in respect of the 2010 financial year amounted to €92 million. This represented a net dividend per share of €3.50 (dividends paid in 2010 in respect of the 2009 financial year amounted to €47 million, namely €1.80 per share).

The ERAMET SA parent company's distributable reserves amounted to €1,086 million prior to the appropriation of 2011 earnings (€1,032 million at 31 December 2010).

14.1.2. Treasury shares

At 31 December 2011, ERAMET held 259,546 treasury shares (103,851 shares at 31 December 2010). In July 2007, in imple-

mentation of the Le Nickel-SLN shareholders' agreement dated 13 September 2000, ERAMET received 252 885 shares; these shares were cancelled by resolution of the Board of Directors on 29 July 2009. 83,596 shares (48,135 shares at 31 December 2010) were purchased under a liquidity contract entered into with Exane BNP Paribas and were not yet registered at the date of preparation of this table. In November 2010, Exane BNP Paribas was instructed to buy back 170,000 shares for the purposes of a bonus share award to employees, 23,610 of which were purchased in FY 2010 and 146,390 in FY 2011. 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 2008		53,689	-	335,786	389,475
As a percentage of share capital	26,215,231	0.20%	-	1.28%	1.49%
Allocated to stock options/bonus shares:					
• grants/bonus shares—2007 Plans		-	-	(25,830)	(25,830)
• grants/future bonus shares		-	32,106	(32,106)	-
Purchases		241,360	-	-	241,360
Sales		(245,423)	-	-	(245,423)
Share cancellations/capital reduction		-	-	(252,885)	(252,885)
Share allocation/acquisition of Eralloys non-controlling interests		-	-	(24,965)	(24,965)
Position at 31 December 2009		49,626	32,106	-	81,732
As a percentage of share capital	26,369,813	0.19%	0.12%	-	0.31%
Purchases		269,075	23,610	-	292,685
Sales		(270,566)	-	-	(270,566)
Position at 31 December 2010		48,135	55,716	-	103,851
As a percentage of share capital	26,513,466	0.18%	0.21%	-	0.39%
Allocated to stock options/bonus shares:					
• grants/bonus shares—2009 Plans		-	(25,397)	-	(25,397)
• grants/bonus shares—2010 & 2011 Plans		-	(759)	-	(759)
Purchases		320,912	146,390	-	467,302
Sales		(285,451)	-	-	(285,451)
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%

14.2. Stock subscription & purchase options and bonus shares

14.2.1. Subscription options

	Date of General Shareholders' Meeting	Date of Board meeting	Subscription price	No. of beneficiaries			Awarded at outset	Exercised or lapsed before 1 Jan. 2011	Exercised in 2011	Lapsed in 2011	Still to be exercised as from 1 Jan. 2012	Number of beneficiaries at 1 Jan. 2012	Expiry date of plans
				at outset	at 1 Jan. 2011	at 1 Jan. 2011							
1	23 May 2002	15 Dec. 2004	64.63 EUR	81	25	130,000	(100,248)	(5,650)	-	24,102	20	15 Dec. 2012	
TOTAL						130,000	(100,248)	(5,650)	-	24,102			

Exercisable only as from 12 December 2006. The shares could not be sold prior to 14 December 2008.

The exercise of 5,650 subscription options during the financial year at an average price of €64.63 contributed to the increase in shareholders' equity offset in cash by the creation of the same number of shares.

14.2.2. Bonus shares

(1)	Date of General Shareholders' Meeting	Date of Board meeting	Subscription price	No. of beneficiaries			Subscribed or lapsed before 1 Jan. 2011	Definitively awarded in 2011	Lapsed in 2011	Expired in 2011	Still to be exercised as from 1 Jan. 2012	Number of beneficiaries at 1 Jan. 2012	Expiry date of plans
				at outset	at 1 Jan. 2011	Awarded at outset							
1	11 May 2005	25 April 2007	bonus	1	-	10,000	(10,000)	-	-	-	-	-	-
2	11 May 2005	23 July 2007	bonus	61	-	16,000	(16,000)	-	-	-	-	-	-
3	13 May 2009	29 July 2009	bonus	14,766	14,109	73,830	(3,285)	(25,010)	(2,380)	-	43,155	8,631	29 July 2013
4	20 May 2010	20 May 2010	bonus	14,405	14,405	28,810	(256)	(462)	(882)	-	27,210	13,605	20 May 2014
5	20 May 2010	20 May 2010	bonus	162	162	65,008	-	-	(680)	(5,415)	58,913	159	20 May 2015
6	20 May 2010	16 Feb. 2011	bonus	14,298	-	28,596	-	(292)	(608)	-	27,696	13,848	16 Feb. 2015
7	20 May 2010	16 Feb. 2011	bonus	205	-	71,665	-	-	(425)	(5,957)	65,283	201	16 Feb. 2016
Total						293,909	(29,541)	(25,764)	(4,975)	(11,372)	222,257		

(1) Definitive grant date: 3 = 29 July 2011 France & 29 July 2013 World; 4 = 20 May 2012 & 20 May 2014; 5 = 20 May 2013 & 20 May 2015; 6 = 16 February 2013 and 16 February 2015; and 7 = 16 February 2014 & 16 February 2016.

The shares cannot be sold prior to: 3 = 29 July 2013; 4 = 20 May 2014; 5 = 20 May 2015; 6 = 16 February 2015; and 7 = 16 February 2016.

14.3. Share-based payments

Share-based payments relates only to stock option and bonus share plans granted to employees. They represented a €13 million expense (€6 million at 31 December 2010) recognised in income under current operating profit (loss).

The applicable rules are common to all plans:

- the vesting or grant date is the date of the decision of the Board of Directors;
- the exercise period follows a lock-out period from the date of the grant of 2 years for French employees and of 4 years for foreign employees, as from the date of grant.

All the plans are equity settled. Only stock option plans established subsequent to 7 November 2002, for which the rights have not vested by 1 January 2005, are recognised in accordance with IFRS 2 – "Share-based payment". Accordingly, only the stock

subscription option plans established at the 15 December 2004 Board meeting (plan No. 1, Note 14.2.1) and all the bonus share plans (plans Nos. 1 to 4 and 6, Note 14.2.2) fall within the scope of IFRS 2. The fair values of stock options are calculated using the Black & Scholes method.

A bonus share plan was established on 20 May 2010 (plan No. 5, Note 14.2.2) and another on 16 February 2011 (plan No. 7, Note 14.2.2), with two performance conditions attaching to the shares: one intrinsic based on ERAMET's financial performance and the other external and pertaining to the performance of the ERAMET stock price. Pursuant to IFRS 2, the fair value was determined using the "Monte Carlo" model.

They are apportioned on a straight-line basis over the vesting period of the plan under personnel costs, offset by an increase in shareholders' equity.

Plan measurement: the assumptions used 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 government bond rate over the term of the plan;

- a future payout ratio based on the average for the past five years.

Based on these assumptions, the results of each plan are shown in the table below:

(in millions of euros)		Number of options	Exercise price (in euros)	Maturity (in years) (*)	Expected volatility	Risk free rate	Average dividend yield	Fair value of option (in euros)	Accounting expenses of plans over three years			
									Total	FY 2011	FY 2010	FY 2009
Plan No. 1— Note 14.2.2.	France	10,000	bonus	2+2	40.75%	4.15%	3.00%	155.19	1.6	-	-	0.3
Plan No. 2— Note 14.2.2.	France	16,000	bonus	2+2	40.75%	4.15%	3.00%	194.10	3.1	-	-	0.9
Plan No. 3— Note 14.2.2.	France	24,430	bonus	2+2	-	2.50%	2.35%	151.48	3.5	1.0	1.8	0.7
	World	46,115	bonus	4+0	-	2.50%	2.35%	145.00	6.5	1.6	1.6	0.8
Plan No. 4— Note 14.2.2.	France	9,930	bonus	2+2	-	0.79%	2.50%	174.88	1.6	0.8	0.5	-
	World	18,886	bonus	4+0	-	0.79%	2.50%	180.02	3.3	0.8	0.5	-
Plan No. 5— Note 14.2.2.	France	48,230	bonus	3+2	-	0.79%	2.50%	(1)	6.8	2.3	1.4	-
	World	16,778	bonus	4+0	-	0.79%	2.50%	(2)	2.4	0.6	0.4	-
Plan No. 6— Note 14.2.2.	France	9,870	bonus	2+2	-	1.99%	2.00%	235.09	2.2	1.0	-	-
	World	18,744	bonus	4+0	-	2.35%	2.00%	235.93	4.3	0.9	-	-
Plan No. 7— Note 14.2.2.	France	53,650	bonus	3+2	-	1.99%	2.00%	(3)	10.1	2.9	-	-
	World	18,015	bonus	4+0	-	2.35%	2.00%	(4)	3.4	0.8	-	-

(*) Maturity = vesting period + lock-in period.

(1) Each bonus share allocated to the French beneficiaries was measured at €187.05 with the intrinsic condition and €113.02 with the external condition.

(2) Each bonus share allocated to the foreign beneficiaries was measured at €194.86 with the intrinsic condition and €117.74 with the external condition.

(3) Each bonus share allocated to the French beneficiaries was measured at €249.87 with the intrinsic condition and €151.28 with the external condition.

(4) Each bonus share allocated to the foreign beneficiaries was measured at €255.38 with the intrinsic condition and €154.62 with the external condition.

Note 15. Non-controlling interests

15.1. By category

(in millions of euros)	% non-controlling interests	31/12/2011		31/12/2010	31/12/2009
		Profit (loss)	Total	Total	Total
Le Nickel-SLN	44.00%	51	711	683	629
Comilog S.A.	36.29%	64	284	278	284
Strand Minerals Inc.	33.40%	(3)	39	40	39
Pt Weda Nickel Ltd	10.00%	-	15	15	14
Guangxi Comilog Ferro Alloys Ltd	30.00%	(3)	(6)	(2)	-
Interforge	6.00%	-	1	1	1
Other companies	-	(1)	(1)	1	3
TOTAL		108	1,043	1,016	970

15.2. Changes over the period

(in millions of euros)

	FY 2011	FY 2010	FY 2009
At beginning of period	1,016	970	1,071
Business combinations	-	-	-
Other changes in scope	-	-	-
Dividends paid	(94)	(105)	(27)
Profit (loss) for the period	108	126	4
Change in revaluation reserve for hedging instruments	1	1	11
Changes in percentage interests in subsidiaries	9	17	(97)
Translation adjustments and other movements	3	7	8
AT PERIOD END	1,043	1,016	970

Changes in percentage interests in subsidiaries for the 2009 financial year comprised the disposal of 33.4% in Strand Minerals Pte Ltd to Mitsubishi Corporation. In 2010 and 2011, those

changes respectively reflected the disposal of 2.17% and 1.37% of Comilog S.A. shares to the Gabonese State (Note 2).

Note 16. Employee 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 liabilities of Group companies was carried out using a standard actuarial framework (assumptions and methods) defined by the Group in accordance with the principles set out in IAS 19—“Employee benefits”. 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 main Group liabilities in respect of employee benefits are as follows:

- **Belgium:**

- Pension plan providing for the payment of a lump sum from the age of 65 for managerial staff with 25 years' service, including scope for drawing it early on a reduced basis.
- Long-service bonuses: payment of one month's salary to all employees completing 25 years of service.

- **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 ERAMET's 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.
- Supplementary pension plan for certain senior managers of ERAMET.

- **Gabon:**

- A pension plan providing for the payment of an employee retirement indemnity after a minimum of three years' service calculated on the basis of salary and length of service.
- Plan providing for the payment of an employee termination benefit (retirement, death, redundancy) after two years' seniority based on a percentage of the average monthly salary over the previous 12 months per year of seniority.
- Long-service bonuses: payment of a lump sum after 10, 20 and 30 years of service.

- **Mexico:**

- Retirement indemnity representing 26 days' salary paid to all employees aged over 60 and having 15 years' seniority (28 days' salary for seniority of 18 years or more).

- **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' seniority (reduced to 15 years, 22 years and 6 months, 26 years and 3 months, and 30 years if the employee's service is outside mainland France).
- Allocation of flight tickets of a number, value and frequency varying according to occupational category.

- **Norway:**

- Long-service bonuses: payment of a lump sum to all employees after 25, 30, 40 and 50 years of service and upon retirement.
- Retirement indemnities: payment of an employee retirement annuity based on the employee's terminal salary and seniority on retirement.
- Early retirement plan: defined benefit plan covering employees 62 to 67 years of age following agreement between the employer and employees.
- Supplementary pension plan: three defined benefit plans covering employees 67 years of age and over.

- **Sweden:**

- Pension plan offered to former employees of Stora providing for the payment of a percentage (over 65%) of the final salary.

- **United Kingdom:**

- Pension plan providing for the payment of a lump sum or benefits based on final salary, revised annually for inflation.

- **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.
- Healthcare for pensioners of certain sites, part of a closed plan.
- Life insurance plan for employees of certain sites.

The ERAMET Group's defined benefit plan liabilities presented above break down as follows: the US (35% of liabilities), France (28% of liabilities), Norway (22% of liabilities) and New Caledonia (7% of liabilities).

The following actuarial assumptions are used for measurement purposes:

As at 31 December 2011	Europe	North America	New Caledonia	Gabon
Discount rate	0.9%-5.1%	4.2%-5.5%	4.75%	6.2%
Inflation rate	2%-3.7%	2.2%-3.4%	0	0
Salary increase rate	2.1%-4.5%	3.4%-3.5%	0	0
Return on plan financial assets	3.5%-6.3%	7%-8%	3.5%	n/a

As at 31 December 2010	Europe	North America	New Caledonia	Gabon
Discount rate	2.1%-5.3%	5%-7.1%	4.9%	5.4%
Inflation rate	2%-3.7%	2.3%-3.4%	0	0
Salary increase rate	2.3%-4.25%	3%-4.4%	0	0
Return on plan financial assets	3.8%-6.25%	7.8%-8%	0	n/a

As at 31 December 2009	Europe	North America	New Caledonia	Gabon
Discount rate	3.4%-5.9%	5.75%-8.7%	0	5.8%
Inflation rate	2%-3.75%	2.5%-3.4%	0	0
Salary increase rate	3%-4.25%	3%-5%	0	0
Return on plan financial assets	4.5%-6.4%	7.8%-8.5%	4.5%	n/a

The results of the measurements are as follows:

<i>(in millions of euros)</i>	Actuarial value of liabilities			Fair value of plan assets			Financial position (surplus)/deficit		
	FY 2011	FY 2010	FY 2009	FY 2011	FY 2010	FY 2009	FY 2011	FY 2010	FY 2009
Pension plans	249	216	202	163	155	144	86	61	58
Retirement indemnities	101	95	87	47	45	44	54	50	43
Awards and bonuses	25	25	26	-	-	-	25	25	26
Healthcare plans	27	25	23	-	-	-	27	25	23
TOTAL	402	361	338	210	200	188	192	161	150

<i>(in millions of euros)</i>	Unrecognised actuarial gains/(losses)			Unrecognised past service cost			Balance sheet provisions (asset)/liability		
	FY 2011	FY 2010	FY 2009	FY 2011	FY 2010	FY 2009	FY 2011	FY 2010	FY 2009
Pension plans	(55)	(27)	(14)	-	(2)	(4)	31	32	40
Retirement indemnities	1	-	(5)	(8)	(9)	(3)	47	41	35
Awards and bonuses	-	-	-	-	-	-	25	25	26
Healthcare plans	(3)	(1)	-	-	-	-	24	24	23
TOTAL	(57)	(28)	(19)	(8)	(11)	(7)	127	122	124
• Provisions							129	123	128
• Pension plan assets/Other financial assets (Note 10)							2	1	4

Total liabilities amounted to €402 million at 31 December 2011 (€361 million at 31 December 2010) and the fair value of plan assets to €210 million at 31 December 2011 (€200 million at 31 December 2010). The net position (surplus/deficit) of the plans, which was €192 million at 31 December 2011 (€161 million at 31 December 2010) does not reflect the impact of plan changes (€65 million at 31 December 2011). The greater of actuarial differences exceeding 10% of the present value of the liability in

respect of defined benefits and 10% of the fair value of plan assets at the previous reporting date is apportioned over the remaining working life of plan members. In the event of changes to the plan, the past service cost is apportioned on a straight-line basis over the average remaining period until the corresponding rights vest for employees. Liabilities for which there are no covering assets amount to €87 million (€85 million at 31 December 2010).

The pension funds are invested as follows:

<i>(in millions of euros)</i>	FY 2011		FY 2010		FY 2009	
Equities	57	27%	64	32%	63	34%
• Europe	19	9%	20	10%	17	9%
• North America	37	18%	41	21%	45	24%
• New Caledonia	1	0%	3	2%	1	1%
• Gabon	-	-	-	-	-	-
Bonds	132	63%	117	59%	104	55%
• Europe	76	36%	72	36%	69	37%
• North America	48	23%	39	20%	28	15%
• New Caledonia	8	4%	6	3%	7	4%
• Gabon	-	-	-	-	-	-
Other investments	21	10%	19	10%	21	11%
• Europe	19	9%	18	9%	20	11%
• North America	1	0%	-	-	-	-
• New Caledonia	1	0%	1	1%	1	1%
• Gabon	-	-	-	-	-	-
TOTAL	210	100%	200	100%	188	100%

The pension fund asset allocation policy depends on country specific practices.

The table below breaks down the provision by component for 2011:

<i>(in millions of euros)</i>	Present value of liabilities	Fair value of plan assets	Financial position (surplus)/deficit	Unrecognised actuarial gains/ (losses)	Unrecognised past service cost	Balance sheet provision (asset)/ liability
Position at 31 December 2008	338	172	166	(40)	(10)	116
Business combinations	-	-	-	-	-	-
Other changes in scope	(1)	-	(1)	-	-	(1)
Expenses recognised	13	4	9	21	3	33
• Service cost	9	-	9	-	-	9
• Net interest expense	17	-	17	-	-	17
• Return on plan assets	-	14	(14)	4	-	(10)
• Amortisation of actuarial gains and losses	(5)	-	(5)	18	-	13
• Amortisation of past service cost	2	-	2	-	3	5
• Other	(10)	(10)		(1)		(1)
Contributions paid	(21)	6	(27)	-	-	(27)
Translation adjustments and other movements	9	6	3	-	-	3
Position at 31 December 2009	338	188	150	(19)	(7)	124
Business combinations	-	-	-	-	-	-
Other changes in scope	-	-		-	-	
Expenses recognised	31	11	20	(8)	(4)	8
• Service cost	9	-	9	-	-	9
• Net interest expense	17	-	17	-	-	17
• Return on plan assets	-	11	(11)	(1)	-	(12)
• Amortisation of actuarial gains and losses	6	-	6	(6)	-	-
• Amortisation of past service cost	7	-	7	-	(4)	3
• Other	(8)	-	(8)	(1)	-	(9)
Contributions paid	(22)	(9)	(13)	-	-	(13)
Translation adjustments and other movements	14	10	4	(1)	-	3
Position at 31 December 2010	361	200	161	(28)	(11)	122
Business combinations	-	-	-	-	-	-
Other changes in scope	-	-		-	-	
Expenses recognised	57	11	46	(26)	2	22
• Service cost	10	-	10	-	-	10
• Net interest expense	16	-	16	-	-	16
• Return on plan assets	-	11	(11)	-	-	(11)
• Amortisation of actuarial gains and losses	29	-	29	(26)	-	3
• Amortisation of past service cost		-		-	2	2
• Other	2		2		-	2
Contributions paid	(21)	(4)	(17)	-	-	(17)
Translation adjustments and other movements	5	3	2	(3)	1	
POSITION AT 31 DECEMBER 2011	402	210	192	(57)	(8)	127

The breakdown of actuarial differences on the basis of experience is presented below:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Actuarial value of liabilities (DBO)	402	361	338
Fair value of plan assets	210	200	188
(Surplus)/deficit	192	161	150
Experience gains and losses on liabilities	1	(4)	(42)
Other gains or losses on liabilities	31	11	37
Experience gains and losses on assets	(2)	1	(4)
Other gains and losses on assets	-	-	-

A one percentage point increase in medical expenses would result in the liability changing by around €1 million but no material impact on the expense for the period, primarily in the United States. The impact on the liability of a 0.25% increase in the discount rate or the inflation rate would be -€10 million and +€1 million respectively, with no major impact on the expense for the financial year.

The amount of provisions for expected contributions and for benefits to be paid by the Group for 2012 in respect of post-employment plans is estimated at €10 million.

Note 17. Provisions

17.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Personnel	19	25	10
Environmental contingencies and site restoration	307	283	254
Other contingencies and losses	82	81	79
TOTAL	408	389	343
• Long-term portion	379	360	314
• Short-term portion	29	29	29

17.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	389	343	303
Business combinations	-	-	(7)
Other changes in scope	-	-	-
Provisions (reversals) for the period	(3)	23	50
• Provisions for the period	20	42	71
• (Reversals) for the period, used	(32)	(24)	(28)
• (Reversals) for the period, unused	(2)	(5)	(2)
• Accretion expenses	11	10	9
Dismantling assets	18	20	2
Translation adjustments and other movements	4	3	(5)
AT PERIOD END	408	389	343

17.3. Personnel

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Restructuring and redundancy plans	16	21	5
Other payroll contingencies and losses	3	4	5
TOTAL	19	25	10
• Long-term portion	11	15	4
• Short-term portion	8	10	6

Restructuring and redundancy plans: All restructuring and redundancy costs are fully provided for whenever IFRS criteria are satisfied. These provisions break down as follows:

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Erachem Comilog S.A. redundancy plan	8	7	2
Aubert & Duval redundancy plan	4	5	-
Erasteel redundancy plan (Commentry site)	2	7	-
Other restructuring and redundancy plans—Manganese Division	2	2	3
Other restructuring and redundancy plans—Alloys Division	-	-	-
TOTAL	16	21	5

The changes over the period were as follows:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	21	5	13
Business combinations	-	-	-
Other changes in scope	-	-	-
Provisions (reversals) for the period	(5)	16	(8)
• Provisions for the period	3	17	-
• (Reversals) for the period, used	(8)	(1)	(7)
• (Reversals) for the period, unused	-	-	(1)
Translation adjustments and other movements	-	-	-
AT PERIOD END	16	21	5

The increase in provisions for restructuring at 31 December 2010 (€21 million as against €5 million at 31 December 2009) took place in the Manganese and Alloys Divisions (in France and in Belgium). At 31 December 2011, the implementation of redundancy plans,

mainly in the Alloys Division in France, helped reduce the amount of restructuring costs that had previously been set aside (€16 million as against €21 million at 31 December 2010).

Other labour contingencies and losses: These provisions relate primarily to disputes with employees and social security bodies, which changed as follows:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	4	5	7
Business combinations	-	-	-
Other changes in scope	-	-	-
Provisions (reversals) for the period	(1)	(1)	(2)
• Provisions for the period	1	1	3
• (Reversals) for the period, used	(2)	(2)	(5)
• (Reversals) for the period, unused	-	-	-
Translation adjustments and other movements	-	-	-
AT PERIOD END	3	4	5

17.4. Environmental contingencies and site restoration

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Environmental contingencies	30	30	28
Site restoration ⁽¹⁾	277	253	226
TOTAL	307	283	254
<i>(1) of which provisions with dismantling asset as counterpart</i>	<i>215</i>	<i>184</i>	<i>156</i>
• Long-term portion	299	277	247
• Short-term portion	8	6	7

Environmental contingencies: The provision amounted to €30 million at 31 December 2011 (unchanged on 31 December 2010) and mainly related to the Manganese Division (€16 million compared with €13 million at 31 December 2010) and the Alloys Division (€7 million compared with €9 million at 31 December 2010).

In 2009, the US company GCMC (Gulf Chemical & Metallurgical Corp.), a Group subsidiary, began negotiations with the TCEQ (Texas Commission on Environmental Quality) on the terms and conditions of its operating permit. The authorities identified a certain number of necessary corrective measures and notified

GCMC thereof. In February 2011, the Attorney General of the State of Texas initiated enforcement proceedings against GCMC in the District Court of Travis County (Texas), with respect primarily to the corrective measures requested by the TCEQ. On 15 June 2011, the District Court of Travis County found that GCMC was in compliance with its obligations under the settlement agreement signed by the parties in May 2011. A civil suit and discussions are still ongoing with the local authorities with a view to settling the dispute. A €2 million provision was funded under environmental contingencies, calculated on the basis of the risk assessment.

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	30	28	38
Business combinations	-	-	(7)
Other changes in scope	-	-	-
Provisions (reversals) for the period	(4)	2	(3)
• Provisions for the period	2	5	2
• (Reversals) for the period, used	(6)	(3)	(5)
• (Reversals) for the period, unused	-	-	-
Translation adjustments and other movements	4	-	-
AT PERIOD END	30	30	28

Site restoration: Site restoration for mines currently in operation involved Le Nickel-SLN in New Caledonia (Nickel Division) for €202 million (31 December 2010: €187 million), Comilog S.A. in Gabon (Manganese Division) for €28 million (31 December 2010: €18 million) and since 2006 ERAMET Mariette Inc. in the US for €21 million (31 December 2010: €25 million). The increase in the provision for New Caledonia over the three financial years is due to the re-measurement of certain dismantling costs and the increase in the areas to be treated. In 2009, a provision of €7 million was recognised for the possible closure of the Doniambo plant in a 30-year timeframe. In 2010 and 2011, €11 million and €9 million in additional provisions were recognised in Gabon, offset by a dismantling asset. At Boulogne-sur-Mer, provisions

were recognised in 2003 and 2007 for regulatory and constructive obligations with regard to the demolition and restoration of the site following the decision to shut down the plant (Note 17.5).

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. These provisions are discounted at a rate of 4.75% in New Caledonia, 6.2% in Gabon and 5% in the United States. A one percentage point increase or decrease in the discount rate would respectively result in a €34 million decrease and a €43 million increase in provisions.

The Group has no decommissioning fund as defined by IFRIC 5.

(in millions of euros)

	FY 2011	FY 2010	FY 2009
At beginning of period	253	226	220
Business combinations	-	-	-
Other changes in scope	-	-	-
Provisions (reversals) for the period	8	6	5
• Provisions for the period	2	2	1
• (Reversals) for the period, used	(3)	(6)	(4)
• (Reversals) for the period, unused	(2)	-	(1)
• Accretion expenses	11	10	9
Dismantling assets	18	20	2
Translation adjustments and other movements	(2)	1	(1)
AT PERIOD END	277	253	226

17.5. Other contingencies and losses

The other provisions for contingencies and losses include, in particular, €46 million (US\$60 million) for financial contingencies associated with the put options granted by ERAMET to Mitsubishi Corporation as part of 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 up to the date of the final project investment decision, which was scheduled for end-2012, unless the parties agree otherwise. The exercise price of these puts is an agreed price that varies in line with the circumstances provided for in the contracts (between US\$58 million and US\$118 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. This provision will be reversed when the final project investment decision is made.

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-2010), commercial contingencies/disputes (€8 million compared with €14 million at end-2010), various supplier lawsuits in New Caledonia for €1 million (unchanged on 31 December 2010) and provisions for tax contingencies of €7 million (compared with €3 million at 31 December 2010).

(in millions of euros)

	FY 2011	FY 2010	FY 2009
At beginning of period	81	79	25
Business combinations	-	-	-
Other changes in scope	-	-	-
Provisions (reversals) for the period	(1)		58
• Provisions for the period	12	17	65
• (Reversals) for the period, used	(13)	(12)	(7)
• (Reversals) for the period, unused	-	(5)	-
• Accretion expenses	-	-	-
Translation adjustments and other movements	2	2	(4)
AT PERIOD END	82	81	79

17.6. Ongoing disputes

To the best of the Company's knowledge, there are no other extraordinary situations (except the Carlo Tassara France proceedings described in Section 33—Additional information) or disputes likely to have a material impact on the financial position, results or assets of the Company or Group.

Note 18. Contingent liabilities

Four NGOs (Non-Governmental Organisations), a residents' group and a former member of Parliament brought separate civil proceedings in February and March 2011 in Gabon seeking damages from Comilog S.A. and ERAMET for alleged environmental harm caused as a result of the operation of the Moanda mining site. Proceedings are ongoing at the Libreville Court of First Instance with the parties exchanging pleadings. The submissions made by the applicants do not bear out their claims. It should be recalled that in all of its subsidiaries the ERAMET Group complies with the applicable environmental standards, including in Gabon, and undertakes all environmental actions in line with the Group charter detailed in the 2011 Registration Document.

A dispute has arisen as to the determination of the financial terms and conditions applicable from 1 January 2012 to electricity supplied by Enercal to Le Nickel-SLN as per the 1956 concession agreement for the operation of its metallurgical plant in Doniambo, Nouméa (New Caledonia). Given the failure to reach agreement despite negotiations between the parties, the arbitration procedure provided for in the agreement was activated in December 2011.

Comilog S.A. is undergoing a tax audit for 2007 to 2010. A tax assessment notice was received on 30 December 2011 with respect to the 2007 and 2008 financial years. The audit will continue in 2012 with respect to the 2009 and 2010 financial years. A response to this initial notice is currently being prepared and will be supplemented upon receipt of the notice for 2009 and 2010. It is not possible as of yet to predict the outcome of these audits.

Note 19. Deferred tax

19.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Difference between tax and consolidated amounts of non-current assets	152	136	143
Restatement of tax entries	281	257	212
Other temporary differences	145	152	112
Hedging instruments	14	25	21
Other	55	26	8
Deferred tax liabilities	647	596	496
Temporary differences	143	157	155
Tax loss carry-forwards *	66	68	86
Elimination of gains (losses) on internal disposals	28	40	20
Hedging instruments	26	19	6
Other	3	-	-
Deferred tax assets	266	284	267
Total	381	312	229
* Limited or written off deferred tax assets	71	62	43
Capitalised deferred tax assets	66	68	86

The increase in 2011, following that of 2010, in deferred tax arising on restatements of tax accounting entries is explained by the regulated provisions set aside in Gabon, New Caledonia and France.

The other temporary differences recognised at 31 December 2011 amount to a net liability of €2 million (€145 million in liabilities and €143 million in assets), mainly relating to inventories valuation (net liability: €21 million), finance leasing (net liability: €11 million), reinsurance underwriting reserves (net liability: €10 million), unrealised gains on UCITS (net liability: €5 million), staff benefits (net asset: €31 million), provisions (net asset: €17 million) and expenses and

provisions not deductible from taxable earnings of subsidiaries (net liability: €3 million).

In 2011, the increase in net deferred tax assets on hedging instruments mainly arises from the lowering of currency hedging positions (Note 22).

Other deferred tax liabilities mainly relate to provisions for withholding tax on future dividend payments. The 2010 increase mainly arose from the exceptional dividend payment planned for 2011 in connection with ERAMET's disposal in June 2011 of 1.37% of its interest in Comilog S.A. to the Gabonese State (Note 30).

19.2. Changes over the period

<i>(in millions of euros)</i>	Liabilities	Assets	Net FY 2011	Net FY 2010	Net FY 2009
At beginning of period	596	284	312	229	208
Business combinations	(2)	(1)	(1)	1	-
Other changes in scope	-	-	-	-	-
Deferred tax offset in shareholders' equity	(1)	20	(21)	(6)	53
Deferred tax on profit (loss) for the period	42	(44)	86	82	(60)
Translation adjustments and other movements	12	7	5	6	28
AT PERIOD END	647	266	381	312	229
Net deferred tax after offsetting by tax entity					
• Deferred tax assets			25	30	68
• Deferred tax liabilities			406	342	297

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 19.3) and the United States (Note 19.4), every company is an independent tax entity.

19.3. Tax consolidation in France

The tax losses, totalling €95 million, mainly arose in the 2009 and 2010 financial years, with deferred tax of €33 million being recognised. No tax losses arising in earlier financial years remained outstanding. Furthermore, the net deferred tax position following tax consolidation in France is a liability of €50 million (€164 million

in liabilities and €114 million in assets) compared with a €42 million liability (€94 million in liabilities and €52 million in assets) at 31 December 2010.

19.4. Tax consolidation in the United States

The tax consolidation group in the US had a net tax liability of €4 million (€27 million in liabilities and €23 million in assets) compared with a €2 million net liability (€9 million in liabilities and €7 million in assets) at 31 December 2010. A total of €37 million in tax loss carry-forwards were generated in 2009 and 2011, representing a deferred tax asset of €13 million.

Note 20. Borrowings

20.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Bank loans ⁽¹⁾	78	125	13
Bank overdrafts and creditor banks	28	26	31
Finance lease liabilities	36	41	46
Other borrowings and financial liabilities	89	99	181
TOTAL	231	291	271
<i>(1) of which commercial paper</i>	15	-	-

ERAMET has had a commercial paper programme since 2005. The amount of commercial paper issued is included under "Bank loans".

20.2. By currency

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Euro	108	76	94
US dollar	16	15	18
CFA franc	24	25	24
British pound	4	3	2
Norwegian krone	58	120	120
Other currencies	21	52	13
TOTAL	231	291	271

20.3. By maturity

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Less than one year	80	88	72
One to five years	129	157	147
Over five years	22	46	52
TOTAL	231	291	271

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.

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Unused confirmed credit facilities ⁽¹⁾	800	600	600
Unissued commercial paper	385	400	400
Repos ⁽²⁾	180	210	210

(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 €800 million on 18 January 2011.

(2) Based on the criteria associated with the repo programme (Note 22.3.4—“Liquidity risks”), only €180 million in bonds would be eligible.

20.4. By interest rate

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Interest-free	8	1	5
Fixed interest rates	55	56	40
• Under 5%	16	-	-
• 5%-10%	39	56	40
• Over 10%	-	-	-
Floating interest rates	168	234	226
• Under 5%	109	117	113
• 5%-10%	59	115	112
• Over 10%	-	2	1
TOTAL	231	291	271

20.5. Finance lease liabilities

<i>(in millions of euros)</i>	31/12/2011		31/12/2010		31/12/2009	
	Nominal value	Present value	Nominal value	Present value	Nominal value	Present value
Less than one year	6	5	6	5	6	5
One to five years	24	23	24	22	25	21
Over five years	8	8	14	14	20	20
TOTAL	38	36	44	41	51	46
Interest expense	-	2	-	3	-	5
TOTAL	38	38	44	44	51	51

Finance lease liabilities mainly relate to capital expenditure on the 40,000-tonne press in Pamiers (Airforge—Alloys Division) of €40 million, mainly arising on capital expenditure in 2006.

20.6. Net cash or debt position

20.6.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Borrowings and financial liabilities	(231)	(291)	(271)
Bonds—Other current financial assets	473	359	405
Cash equivalents	791	1,132	753
Cash	120	95	59
TOTAL	1,153	1,295	946

20.6.2. Statement of net cash flows or (net debt)

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Operating activities			
EBITDA	789	971	59
Elimination of non-cash and non-operating income and expenses	(155)	(201)	(101)
Cash generated from operating activities	634	770	(42)
Net change in current operating assets and liabilities	(43)	(43)	154
Net cash generated by operating activities	591	727	112
Cash flows from investing activities			
Industrial capital expenditure	(492)	(326)	(286)
Net financial disposals (investments)	(65)	76	11
Proceeds from non-current asset disposals	3	5	3
Changes in receivables and payables on non-current assets	12	4	(11)
Changes in scope and loans	17	(11)	(10)
Dividends received from associates	-	-	-
Net cash used in investing activities	(525)	(252)	(293)
Cash flows from financing activities			
Dividends paid	(186)	(152)	(164)
Proceeds from share capital increases	1	31	74
Change in working capital requirement arising from financing activities	(2)	-	19
Net cash used in financing activities	(187)	(121)	(71)
Exchange-rate impact	(21)	(5)	65
Decrease (increase) in net cash or borrowings	(142)	349	(187)
Opening net cash (debt) position	1,295	946	1,133
Closing net cash (debt) position	1,153	1,295	946

Note 21. Trade and other payables

21.1. By category

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Trade payables	473	408	352
Tax and payroll liabilities	217	215	152
Other operating liabilities	109	83	80
Payables on non-current assets	62	48	32
Payables to associates—dividends	-	1	-
Unearned income	9	9	10
TOTAL	870	764	626
• Non-current liabilities	37	33	36
• Current liabilities	833	731	590

Most of the trade and other payables are due in less than one year. The €37 million (€33 million at 31 December 2010) in non-current liabilities related to Setrag SA's 25-year debt to the Gabonese State in connection with the purchase of own property and a portion of the spare parts inventory for €10 million (€11 million at 31 December 2010) as well as with the €1 million (€2 million at 31 December 2010) in tax breaks relating to the financing of

furnace No. 10 (2004 agreement) and for the washing plant (2006 agreement) as part of the Le Nickel-SLN project, apportioned over five to six years. Since the disposal of 33.4% of the shares in Strand Minerals Pte Ltd to Mitsubishi Corporation, non-current liabilities include the US\$27 million (€22 million) debt relating to mining project expenses in Indonesia (Note 6).

21.2. Changes over the period

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	764	626	929
Business combinations	-	6	(2)
Other changes in scope	(24)	4	-
Changes in working capital requirement	198	160	(190)
Translation adjustments and other movements	(68)	(32)	(111)
AT PERIOD END	870	764	626

Foreign-currency denominated debt is translated at the closing rate.

Note 22. Risk management and derivatives

22.1. Financial instruments recognised in the statement of financial position

<i>(in millions of euros)</i>	31/12/2011 Statement of position financial	Breakdown by type of instrument				
		Fair value through P&L	Available for-sale assets	Loans and receivables	Liabilities at amortised cost	Derivatives
Investment securities	40	-	40	-	-	-
Other non-current financial assets	47	-	-	47	-	-
Other non-current assets	5	-	-	5	-	-
Trade receivables	431	-	-	431	-	-
Other current assets	266	-	-	266	-	-
Derivatives	46	-	-	-	-	46
Other current financial assets	473	-	473	-	-	-
Cash and cash equivalents	911	911	-	-	-	-
ASSETS	2,219	911	513	749	-	46
Borrowings—long-term portion	151	-	-	-	151	-
Other non-current liabilities	37	-	-	37	-	-
Borrowings—short-term portion	80	28	-	-	52	-
Trade payables	473	-	-	473	-	-
Other current liabilities	437	-	-	437	-	-
Derivatives	101	-	-	-	-	101
LIABILITIES	1,279	28	-	947	203	101

	31/12/2010 Statement of position financial	Breakdown by type of instrument				
		Fair value through P&L	Available for-sale assets	Loans and receivables	Liabilities at amortised cost	Derivatives
<i>(in millions of euros)</i>						
Investment securities	34	-	34	-	-	-
Other non-current financial assets	52	-	-	52	-	-
Other non-current assets	5	-	-	5	-	-
Trade receivables	465	-	-	465	-	-
Other current assets	189	-	-	189	-	-
Derivatives	128	-	-	-	-	128
Other current financial assets	359	-	359	-	-	-
Cash and cash equivalents	1,227	1,227	-	-	-	-
ASSETS	2,459	1,227	393	711	-	128
Borrowings—long-term portion	203	-	-	-	203	-
Other non-current liabilities	33	-	-	33	-	-
Borrowings—short-term portion	88	26	-	-	62	-
Trade payables	408	-	-	408	-	-
Other current liabilities	477	-	-	477	-	-
Derivatives	71	-	-	-	-	71
LIABILITIES	1,280	26	-	918	265	71

	31/12/2009 Statement of position financial	Breakdown by type of instrument				
		Fair value through P&L	Available for-sale assets	Loans and receivables	Liabilities at amortised cost	Derivatives
<i>(in millions of euros)</i>						
Investment securities	50	-	50	-	-	-
Other non-current financial assets	50	-	-	50	-	-
Other non-current assets	5	-	-	5	-	-
Trade receivables	364	-	-	364	-	-
Other current assets	193	-	-	193	-	-
Derivatives	90	-	-	-	-	90
Other current financial assets	405	-	405	-	-	-
Cash and cash equivalents	812	812	-	-	-	-
ASSETS	1,969	812	455	612	-	90
Borrowings—long-term portion	199	-	-	-	199	-
Other non-current liabilities	36	-	-	36	-	-
Borrowings—short-term portion	72	31	-	-	41	-
Trade payables	352	-	-	352	-	-
Other current liabilities	312	-	-	312	-	-
Derivatives	26	-	-	-	-	26
LIABILITIES	997	31	-	700	240	26

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), except for shares in companies that are controlled but not consolidated, amounting to €40 million (Notes 1.11.1, 1.15 and 9). Other financial assets are measured at amortised cost calculated using the effective interest rate (EIR) (Note 1.11.2).

Borrowings are recognised at amortised cost calculated using the effective interest rate or EIR (Note 1.14). Securities and borrowings may, as appropriate, be interest-rate hedged with the portion linked to interest-rate changes being re-measured. Their fair value is close to their balance sheet carrying amount, owing to their small amount and the hedges (Notes 20 and 22.4.2).

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 12 and 21).

Fair value of financial instruments broken down by fair-value category:

<i>(in millions of euros)</i>	31/12/2011 Value in the balance sheet	Breakdown by fair-value category		
		Level 1	Level 2	Level 3
Available-for sale assets	473	473	-	-
Derivatives	46	-	46	-
ASSETS	519	473	46	-
Derivatives	101	-	101	-
LIABILITIES	101	-	101	-

<i>(in millions of euros)</i>	31/12/2010 Value in the balance sheet	Breakdown by fair-value category		
		Level 1	Level 2	Level 3
Available-for sale assets	359	359	-	-
Derivatives	128	-	128	-
ASSETS	487	359	128	-
Derivatives	71	-	71	-
LIABILITIES	71	-	71	-

<i>(in millions of euros)</i>	31/12/2009 Value in the balance sheet	Breakdown by fair-value category		
		Level 1	Level 2	Level 3
Available-for sale assets	405	405	-	-
Derivatives	90	-	90	-
ASSETS	495	405	90	-
Derivatives	26	-	26	-
LIABILITIES	26	-	26	-

22.2. Impact of financial instruments on income

<i>(in millions of euros)</i>	FY 2011 Effects on profit (loss)	Financial income and (expenses)	Fair value	Translation adjustments	Gain (loss) on disposal	Net impairment
Investment securities	25	6	-	-	18	1
Other financial assets	(2)	(1)	-	-	-	(1)
Derivatives	25	-	25	-	-	-
Cash/net financial liabilities	19	-	(2)	12	9	-
TOTAL	67	5	23	12	27	-

<i>(in millions of euros)</i>	FY 2010 Effects on profit (loss)	Financial income and (expenses)	Fair value	Translation adjustments	Gain (loss) on disposal	Net impairment
Investment securities	(2)	2	-	-	(4)	-
Other financial assets	-	(3)	-	-	-	3
Derivatives	9	-	9	-	-	-
Cash/net financial liabilities	3	(1)	-	1	3	-
TOTAL	10	(2)	9	1	(1)	3

<i>(in millions of euros)</i>	FY 2009 Effects on profit (loss)	Financial income and (expenses)	Fair value	Translation adjustments	Gain (loss) on disposal	Net impairment
Investment securities	(1)	2	-	-	1	(4)
Other financial assets	(11)	5	-	-	-	(16)
Derivatives	(2)	-	(2)	-	-	-
Cash/net financial liabilities	15	7	8	(3)	3	-
TOTAL	1	14	6	(3)	4	(20)

The finance income on investments in associates came from 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 ineligible for hedging pursuant to IAS 39 is recognised in Other financial income and expenses (Notes 1.25 and 26.2).

Breakdown of hedges—assets:

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Financial instrument assets ⁽³⁾	5	53	28
Financial instruments—currency hedges	27	24	39
Financial instruments—interest-rate hedges	-	-	-
Financial instruments—commodity hedges	14	51	23
TOTAL	46	128	90

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	128	90	111
Business combinations	-	-	-
Changes in hedging instruments for the period—shareholders' equity ⁽¹⁾	4	(24)	14
Changes in hedging instruments for the period—financial gain/loss ⁽²⁾	(37)	37	3
Changes in financial instrument assets ⁽³⁾	(49)	25	(38)
AT PERIOD END	46	128	90

Breakdown of hedges—liabilities:

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Financial instrument liabilities ⁽³⁾	17	15	2
Financial instruments—currency hedges	70	5	9
Financial instruments—interest-rate hedges	10	7	10
Financial instruments—commodity hedges	4	44	5
TOTAL	101	71	26

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
At beginning of period	71	26	158
Business combinations	-	-	-
Changes in hedging instruments for the period—shareholders' equity ⁽¹⁾	63	(8)	(124)
Changes in hedging instruments for the period—financial gain/loss ⁽²⁾	(34)	40	(10)
Changes in financial instrument liabilities ⁽³⁾	1	13	2
AT PERIOD END	101	71	26

(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".

22.3. Risk management

The Group uses derivatives 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* special purpose entities such as Metal Currencies, created specifically to manage the Group's foreign currency risk (Notes 1.5 and 2).

22.3.1. Foreign currency risks

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

- transactional foreign currency risks where a Group 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 changes in the 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 and the Swedish Krona. These hedges are designed to protect the Group's structurally long present and future positions on trading transactions, more than 50% of which are invoiced in foreign currencies, whereas production costs are for the most part denominated in euros. Since 2007, transactions have been carried out *via* Metal Currencies. The subsidiaries in question determine the amount of their net exposure based on multiyear forecasts and budgets. The associated risks are then hedged within a maximum horizon of thirty-six months if the amount is greater than €2 million or the equivalent thereof per currency, unless exemptions apply. The Group uses various instruments to hedge its foreign currency exposure: forwards/futures and options.

Balance sheet risks: ERAMET 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 US\$232 million, to hedge the foreign currency risk on the translation 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 2011

(in millions of foreign currency units)	2011 sales			2012 sales			2013 sales and beyond		
	Amount	Currency	Rate	Amount	Currency	Rate	Amount	Currency	Rate
Commercial hedges									
EUR/USD	159	USD	1.41	770	USD	1.36	268	USD	1.33-1.23
EUR/NOK	25	EUR	7.76	24	EUR	8.15	10	EUR	8.49
EUR/GBP	(1)	GBP	0.92	6	GBP	0.86	3	GBP	0.86
GBP/USD	1	USD	1.59	-	-	-	-	-	-
GBP/SEK	2	GBP	10.49	-	-	-	-	-	-
JPY/SEK	58	JPY	0.09	-	-	-	-	-	-
EUR/SEK	(13)	EUR	8.89	-	-	-	-	-	-
USD/SEK	19	USD	6.70	15	USD	6.84	-	-	-
EUR/JPY	143	JPY	111.21	75	JPY	114.91	-	-	-
Other hedges									
EUR/USD	393	USD	1.35						
EUR/SEK	(22)	EUR	10.01						
EUR/NOK	(588)	NOK	8.64						
EUR/CAD	11	CAD	1.37						
USD/CNY	438	CNY	6.41						
USD/MXN	12	USD	14.20						
	(12)	MXN	13.25						

As at 31 December 2010

<i>(in millions of foreign currency units)</i>	2010 sales			2011 sales			2012 sales and beyond		
	Amount	Currency	Rate	Amount	Currency	Rate	Amount	Currency	Rate
Commercial hedges									
EUR/USD	329	USD	1.36	1,018	USD	1.32	253	USD	1.25-1.39
EUR/NOK	12	EUR	8.28	112	EUR	8.36	20	EUR	8.36-8.49
EUR/GBP	-	-	-	4	GBP	0.85	-	-	-
GBP/USD	1	USD	1.56	-	-	-	-	-	-
GBP/SEK	2	GBP	10.79	-	-	-	-	-	-
JPY/SEK	57	JPY	0.08	-	-	-	-	-	-
EUR/SEK	12	EUR	9.14	-	-	-	-	-	-
USD/SEK	25	USD	7.13	-	-	-	-	-	-
EUR/JPY	69	JPY	121.70	-	-	-	-	-	-
Other hedges									
	284	USD	1.35						
EUR/USD	(5)	EUR	1.50						
EUR/SEK	(22)	EUR	9.83						
EUR/NOK	1,736	NOK	8.22						
EUR/GBP	23	GBP	0.89						
USD/CNY	344	CNY	6.53						

As at 31 December 2009

<i>(in millions of foreign currency units)</i>	2009 sales			2010 sales			2011 sales and beyond		
	Amount	Currency	Rate	Amount	Currency	Rate	Amount	Currency	Rate
Commercial hedges									
EUR/USD	223	USD	1.4333	718	USD	1.3675	38	USD	1.3459
EUR/NOK	8	EUR	8.70	89	EUR	8.7919	30	EUR	9.08
EUR/GBP	-	GBP	0.902	1	GBP	0.904	-	-	-
GBP/USD	-	USD	1.8501	-	-	-	-	-	-
GBP/SEK	2	GBP	12.0744	-	-	-	-	-	-
JPY/SEK	46	JPY	0.0759	-	-	-	-	-	-
EUR/SEK	1	EUR	9.2338	-	-	-	-	-	-
USD/SEK	10	USD	7.1231	-	-	-	-	-	-
EUR/JPY	69	JPY	136.38830	95	JPY	129.02	-	-	-
Other hedges									
	246	USD	1.4578						
EUR/USD	5	EUR	1.502						
EUR/SEK	14	EUR	10.48						
	824	NOK	8.9001						
EUR/NOK	740	NOK	9.0498						
EUR/GBP	5	GBP	0.9176						

At 31 December 2011, the fair value of currency hedges for transactional risks represented a €42 million liability (31 December 2010: net asset of €19 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, 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 23.2) or purchases (under "Cost of goods sold").

A change of plus or minus 10% in the rates of the main currencies to which the Company is exposed would have a pre-tax impact on the hedges offset in shareholders' equity of +€106 million should exchange rates rise and approximately -€147 million should those rates fall.

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

As at 31 December 2011

<i>(in millions of foreign currency units)</i>	FY 2011			
	Forward/future sales	Forward/future purchases	Call options	Put options ⁽¹⁾
Currency vs. EUR				
• USD ⁽¹⁾	978	128	1,127	743
• JPY	218	-	-	-
• GBP	4	8	4	7
• NOK	-	588	-	-
• CAD	11	-	-	-
Currency vs. NOK				
• EUR	59	-	-	-
Currency vs. SEK				
• JPY	75	18	-	-
• GBP	2	-	-	-
• USD	34	-	-	-
• EUR	-	35	-	-
Currency vs. USD				
• MXN	-	12	-	-
• CNY	-	159	280	559
Currency vs. GBP				
• USD	1	-	-	-
Currency vs. MXN				
• USD	12	-	-	-

(1) Of which USD176 million in exotic call options and USD69 million in exotic put options.

As at 31 December 2010

<i>(in millions of foreign currency units)</i>	FY 2010			
	Forward/future sales	Forward/future purchases	Call options	Put options ⁽¹⁾
Currency vs. EUR				
• USD ⁽¹⁾	1,048	73	1,001	1,058
• JPY	69	-	-	-
• GBP	26	4	2	4
• NOK	343	1,393	-	-
Currency vs. NOK				
• EUR	81	-	85	62
Currency vs. SEK				
• JPY	57	-	-	-
• GBP	2	-	-	-
• USD	21	3	8	7
• EUR	-	34	-	-
Currency vs. USD				
• EUR	-	5	-	-
• CNY	-	344	-	-

(1) Of which USD155 million in exotic put options.

As at 31 December 2009

<i>(in millions of foreign currency units)</i>	FY 2009			
	Forward/future sales	Forward/future purchases	Call options	Put options
Currency vs. EUR				
• USD	888	62	670	408
• JPY	128	14	85	50
• GBP	7	1	1	1
• NOK	3	1,568	-	-
Currency vs. NOK				
• EUR	39	-	88	88
Currency vs. SEK				
• JPY	46	-	-	-
• GBP	2	-	-	-
• USD	10	-	-	-
• EUR	5	21	-	-
Currency vs. USD				
• EUR	-	5	-	-

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

	Currency hedges					
	FY 2011		FY 2010		FY 2009	
(in millions of euros)	Transaction risks	Balance-sheet risks	Transaction risks	Balance-sheet risks	Transaction risks	Balance-sheet risks
At beginning of period	57	24	56	(32)	(10)	(132)
Change in unexpired hedging portion ⁽¹⁾	(51)	-	15	-	57	-
Change in ineffective portion via income ⁽²⁾	(9)	-	-	-	12	-
Change in effective portion via income ⁽³⁾	(52)	-	(14)	-	(3)	-
Translation adjustments and other movements	-	4	-	56	-	100
At period end	(55)	28	57	24	56	(32)
Changes recognised in shareholders' equity:						
• Fair value reserve	-	-	-	-	-	-
• Hedging reserve	(103)	-	1	-	54	-
• Translation adjustments	-	4	-	56	-	100
TOTAL	(103)	4	1	56	54	100
Changes recognised via income:						
• Current operating profit	52	-	14	-	3	-
• Net financial income	(9)	-	-	-	12	-
TOTAL	43	-	14	-	15	-

(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 financial income corresponds to the fair value of currency instruments ineligible as hedges.

22.3.2. 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 2011, as in 2010, the Group had not arranged any interest rate hedging of its gross debt.

The cash surpluses managed by Metal Securities are invested in:

- floating-rate 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 13.1) and are hedged using interest rate futures (fixed rates against floating rates). Other cash surpluses generated by Metal Securities are primarily invested in floating-rate instruments linked to the EONIA (Euro OverNight Index Average) rate (Note 13.2).

The Group's surplus cash is invested short-term, and its exposure to a 10 basis point decline in interest rates would have less than a €1 million negative pre-tax impact on the net borrowing cost.

The pre-tax impact on shareholders' equity and earnings of financial instruments hedging interest rate risks is shown below:

(in millions of euros)	Interest rate hedges		
	FY 2011	FY 2010	FY 2009
At beginning of period	(7)	(10)	(9)
Change in unexpired hedging portion ⁽¹⁾	-	(3)	(6)
Change in ineffective portion via income ⁽²⁾	-	-	-
Change in effective portion via income ⁽³⁾	(3)	6	5
Translation adjustments and other movements	-	-	-
At period end	(10)	(7)	(10)
Changes recognised in shareholders' equity:			
• Fair value reserve	-	-	-
• Hedging reserve	(3)	3	(1)
• Translation adjustments	-	-	-
TOTAL	(3)	3	(1)
Changes recognised via income:			
• Current operating profit	-	-	-
• Net financial income	3	(6)	(5)
TOTAL	3	(6)	(5)

(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 financial income corresponds to the fair value of interest-rate instruments ineligible as hedges.

22.3.3. 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 (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 and coke is not hedged since there is no organised (over the counter) market in these commodities.

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, an average 50% and a maximum 80% of the budget is hedged). The Group uses various instruments to hedge and limit its exposure: futures and options.

At 31 December 2011, the fair value of hedges put in place for the various commodities breaks down as follows:

- €6 million asset for nickel (€4 million liability at 31 December 2010);
- €5 million asset for fuel oil (unchanged on 31 December 2010);
- no impact for aluminium (unchanged on 31 December 2010);
- €1 million liability for electricity (€6 million asset at 31 December 2010).

The main commodities contracts outstanding are set out below:

As at 31 December 2011:

<i>(in tonnes)</i>	FY 2011		
	Swaps	Call options	Put options
Nickel	894	504	1,190
Fuel oil	66,760	15,000	16,000

Excluding options on 1,008 tonnes maturing in 2013 and exercisable by the counterparty, where applicable, in November 2012, the fair value of which was minus 216,000 at 31 December 2011.

As at 31 December 2010:

<i>(in tonnes)</i>	FY 2010		
	Swaps	Call options	Put options
Nickel	1,224	4,740	6,450
Fuel oil	189,755	63,208	48,583

Excluding options on 2,500 tonnes maturing in 2012 and exercisable by the counterparty, where applicable, in November 2011, the fair value of which was minus 680,000 at 31 December 2010.

As at 31 December 2009:

<i>(in tonnes)</i>	FY 2009		
	Swaps	Call options	Put options
Nickel	857	2,257	2,257
Fuel oil	98,582	236,191	178,691

Leaving out of account options on 4,560 tonnes maturing in 2011 and exercisable by the counterparty, where applicable, in November 2010, the fair value of this item was nil at 31 December 2009.

The pre-tax impact on shareholders' equity and earnings of financial instruments relating to commodity risks is shown below:

<i>(in millions of euros)</i>	Commodity and energy risks											
	FY 2011				FY 2010				FY 2009			
	Nickel	Fuel oil	Aluminium	Electricity	Nickel	Fuel oil	Aluminium	Electricity	Nickel	Fuel oil	Aluminium	Electricity
At beginning of period	(4)	5	-	6	14	5	2	(3)	32	(55)	(1)	(4)
Change in unexpired hedging portion ⁽¹⁾	(8)	(23)	-	(1)	5	-	(2)	6	9	29	3	(1)
Change in ineffective portion via income ⁽²⁾	7	(1)	-	-	(5)	-	-	2	(2)	5	-	(2)
Change in effective portion via income ⁽³⁾	10	24	-	(6)	(4)	-	-	1	(24)	26	-	4
Translation adjustments and other movements	1	-	-	-	(14)	-	-	-	(1)	-	-	-
At period end	6	5	-	(1)	(4)	5	-	6	14	5	2	(3)
Changes recognised in shareholders' equity:												
• Fair value reserve	-	-	-	-	-	-	-	-	-	-	-	-
• Hedging reserve	3	1	-	(7)	(13)	-	(2)	7	(15)	55	3	3
• Translation adjustments	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	3	1	-	(7)	(13)	-	(2)	7	(15)	55	3	3
Changes recognised via income:												
• Current operating profit	(10)	(24)	-	6	4	-	-	(1)	24	(26)	-	(4)
• Net financial income	7	(1)	-	-	(5)	-	-	2	(2)	5	-	(2)
TOTAL	(3)	(25)	-	6	(1)	-	-	1	22	(21)	-	(6)

(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 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 the following summarised pre-tax impact on the hedges charged to shareholders' equity:

<i>(in millions of euros)</i>	Nickel	Fuel oil	Aluminium	Electricity
+20% change in price	(3)	10	n/s	n/s
-20% change in price	3	(9)	n/s	n/s

A change of plus or minus 10% in nickel prices would impact sales for the 2011 financial year by plus or minus USD110 million (€85 million).

22.3.4. 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. In addition, the Group has two additional sources of financing, as required, from a revolving credit facility and the issue of commercial paper.

Revolving credit facilities: In 2011, ERAMET renewed the multi-currency revolving credit facility agreement signed in 2005, raising it from €600 to €800 million, for a five-year period, with the option of extending it to six years. In accordance with the terms of the agreement, the Group asked the lenders for a one-year extension to the facility. In early 2012, this credit facility was extended to 18 January 2017. This credit facility is intended to finance operations and investment in assets and was entered into on terms congruent with market conditions at the time of its signature. This facility is subject to a single covenant (Note 20—Borrowings).

Commercial paper: In 2005, ERAMET set up a €400 million commercial paper programme, €15 million of which was raised in 2011.

Repos: On 20 December 2011, ERAMET renewed its commitment to set up a repo programme. The draw-down amount is €180 million, with a revolving three-month maturity. This facility is confirmed. Nothing had been drawn down at 31 December 2011.

In addition, while its net cash position is clearly positive, the Group is liable to repay its borrowings, primarily comprising finance leases and bank borrowings following the acquisition in early August 2008 of the Norwegian company Eralloys Holding A/S (Note 20), its other liabilities and derivatives, the maturity schedule for all of which is set out below:

<i>(in millions of euros)</i>	Statement of position financial	Future payment schedule			Total
		Less than one year	One year to five years	More than five years	
Bank loans	78	23	60		83
Bank overdrafts and creditor banks	28	28	-	-	28
Finance lease liabilities	36	6	24	8	38
Other borrowings and financial liabilities	89	28	49	15	92
TOTAL BORROWINGS	231	85	133	23	241
Derivatives	101	76	6	-	82
Trade and other payables	870	833	24	14	871
Current tax liabilities	77	77	-	-	77
TOTAL OTHER FINANCIAL LIABILITIES	1,048	986	30	14	1,030

The schedule of future receipts on financial assets is set out below:

<i>(in millions of euros)</i>	Statement of position financial	Future receipts schedule			Total
		Less than one year	One year to five years	More than five years	
Other current financial assets	473	475	-	-	475
Cash and cash equivalents	911	917	-	-	917
TOTAL CASH AND CASH EQUIVALENTS	1,384	1,392	-	-	1,392
Derivatives	46	28	4	-	32
Trade and other receivables	669	664	-	5	669
Current tax receivables	33	33	-	-	33
TOTAL OTHER FINANCIAL ASSETS	748	725	4	5	734

Where appropriate, financial liabilities are covered by banking covenants at Group level or locally; the main characteristics of those covenants are described below:

Company	Type of credit facility	Ratio	Amount
ERAMET	Revolving credit facility	Net borrowings/ Shareholders' equity	< 1 €800m

On 31 December 2011, all these covenants were fulfilled.

22.3.5. 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 with the Group's specialist 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 putting in place 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:

<i>(in millions of euros)</i>	31/12/2011		31/12/2010		31/12/2009	
	Gross amount	Impairment losses	Gross amount	Impairment losses	Gross amount	Impairment losses
On-time or not due	354	-	393	-	252	(1)
Overdue:						
• less than a month	58	(1)	62	(1)	73	(1)
• one to three months	14	-	12	(1)	38	(2)
• three to six months	5	-	1	(1)	6	(1)
• six to nine months	1	-	-	-	2	(2)
• nine to twelve months	1	(1)	-	-	1	(1)
• Over one year	4	(4)	2	(2)	28	(28)

No material unpaid or impaired receivables have been renegotiated.

22.3.6. 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 8). At 31 December 2011, ERAMET held 259,546 treasury shares (103,851 shares at 31 December 2010), representing an investment recognised as a €54 million deduction from shareholders' equity (€14 million at

31 December 2010) (Note 14). 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 2011 there was an unrealised capital loss on the Company's treasury stock of €30 million (unrealised capital gain of €13 million at 31 December 2010).

Note 23. Sales and other income

23.1. Sales

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Sales of goods	3,511	3,480	2,580
Sales of services	92	96	109
TOTAL	3,603	3,576	2,689

2011 consolidated sales amounted to €3,603 million compared with €3,576 million in 2010, an increase of 0.8%, including the minus €94 million negative impact of foreign currency losses.

23.2. Other income

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Translation adjustments on sales	64	11	(54)
Other	17	20	19
TOTAL	81	31	(35)

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 24. Depreciation, amortisation and provisions

24.1. Depreciation, amortisation and provisions on non-current assets

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Intangible assets	(5)	(8)	(8)
Property, plant & equipment	(215)	(207)	(192)
Intangible assets—acquisition price allocation	(8)	(8)	(8)
PP&E—acquisition price allocation	(2)	(2)	(2)
TOTAL	(230)	(225)	(210)

24.2. Provisions

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Pension and related liabilities	(10)	(8)	(11)
Other payroll contingencies and losses	1	1	1
Environmental contingencies	5	(1)	1
Site restoration	4	3	1
Other contingencies and losses	(5)	(2)	(4)
TOTAL	(5)	(7)	(12)

Note 25. Other operating income and expenses

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Restructuring and redundancy plans	(2)	(18)	(2)
Losses on impairment tests	(17)	11	(51)
Development projects	(29)	(14)	(37)
Employee benefits	(3)	9	(8)
Other items	(12)	(7)	(6)
TOTAL	(63)	(19)	(104)

Losses on impairment tests: The goodwill recognised on the acquisition of the shares in the Gabonese company Port Minéralier d'Owendo SA (Manganese Division) was impaired for €5 million (Notes 3 and 7) in 2008 and 2009. In 2009, an impairment test was carried out on the "High-speed steel" business of Erasteel (Alloys Division) and an extraordinary impairment loss of €47 million was recognised on the non-current assets (Notes 3, 4, 5 and 7). In 2010, in view of both the appreciable upswing in business and the restructuring measures undertaken, a reversal of €10 million was recognised. In 2011, a further €18 million was recognised in net impairment losses on the recycling business in the Manganese Division.

Restructuring and redundancy plans: In 2010, additional provisions of €10 million were recognised in the Manganese and Alloys Divisions. In 2011, a further €5 million in provisions was recognised in the Manganese and Alloys Divisions.

Development projects: In 2009, the main projects were the manganese development project in Namibia (€23 million), since abandoned, and the niobium development project in Gabon (€6 million). In 2010, €6 million was for the niobium development project in Gabon. In 2011, in addition to the €9 million for the niobium project in Gabon, other projects basically consisted of €6 million on the lithium project in South America.

Employee benefits: The adjustments associated with employee benefits mainly related to the effects of plan changes and plan retirements or changes to and discontinuation of employee benefits. In 2009, this impact primarily stemmed from the US and Norwegian subsidiaries in the Manganese Division. In 2010 and 2011, these adjustments involved the Management Division's Norwegian subsidiaries.

Other items: In 2009, other items mainly consisted of commercial disputes in the Manganese Division, for which €7 million was set aside. In 2010, other items consisted of €5 million for commercial and tax disputes in the Nickel and Manganese Divisions. In 2011, €6 million was recognised for tax and labour disputes in the Nickel and Alloys Divisions along with €3 million for the scrapping of property, plant and equipment in the Manganese Division.

Note 26. Net borrowing cost and other financial income and expenses

26.1. Net borrowing cost

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Interest income	21	15	22
Interest expense	(19)	(16)	(15)
Net income on marketable securities	9	3	3
Changes in fair value of marketable securities	(2)	-	4
Net translation adjustments	13	1	(3)
TOTAL	22	3	11

26.2. Other financial income and expense

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Investment and dividend income	6	2	2
Gains (losses) on the disposal of investments in associates	18	(4)	1
Net allowances to/reversals of financial provisions	1	3	(6)
Accretion expenses	(11)	(10)	(9)
Financial instruments ineligible as hedges	(3)	(3)	13
Securitisation financial expense	(2)	(2)	(2)
Other	(1)	(1)	(11)
TOTAL	8	(15)	(12)

Accretion expenses relate to provisions for mining site restoration (Note 17.4).

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 21).

In 2009, other items included the effects of cancelling foreign currency and electricity hedges following the downward revision of sales and purchase budgets, representing losses of €7 million and €2 million respectively. In 2011, the gains (losses) on the disposal of investments in associates mainly consisted of the gains on the transfer of shares in ERAMET Titan & Iron A/S to the TiZir Ltd joint venture (Note 2).

Note 27. Income tax

27.1. By category

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Current tax	(133)	(172)	(53)
Deferred tax	(86)	(83)	60
TOTAL	(219)	(255)	7

27.2. Effective tax rate

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Operating profit (loss)	491	720	(267)
Net borrowing cost	22	3	11
Other financial income and expenses	8	(15)	(12)
Pre-tax profit (loss) for the period of consolidated companies	521	708	(268)
Standard tax rate in France (in %)	33.33%	33.33%	33.33%
Theoretical tax expense	(174)	(236)	89
Impact on theoretical tax of:			
• permanent differences between accounting and taxable profit	28	16	(17)
• additional levies in France	(1)	-	-
• standard tax differences in foreign countries	(4)	4	(14)
• reduced tax rates	1	4	4
• tax credits	5	7	2
• withholding tax on dividends	(60)	(51)	(10)
• unrecognised or limited deferred tax assets	(13)	5	(17)
• tax audits	-	-	(36)
• miscellaneous items	(1)	(4)	6
Actual tax charge	(219)	(255)	7
EFFECTIVE TAX RATE	42%	36%	3%

In 2011, the income tax rate applicable in France was 33.33%, excluding additional social security contributions of 3.3% and 8.3% for companies generating sales of at least €250 million, recognised under "Additional contributions in France". The overall tax rate in France is thus 34.43% and 36.1%, respectively.

Permanent differences primarily constitute the portion of the provision for reconstituting mining reserves in New Caledonia and Gabon definitively allocated to investments. In 2011, they include the share of overheads reimbursed in France, sharply up following the dividend payouts during the financial year.

The "Standard 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 rates are shown below:

<i>(in %)</i>	FY 2011
Sweden	0
Norway	0
US	0
New Caledonia	0
Gabon	0
China	12.5%-25%

The withholding tax on payouts mainly relates to the dividends paid out during the financial year and planned over the coming financial year by ERAMET's foreign subsidiaries, pursuant to IAS 12. This primarily involves Comilog S.A. in Gabon.

In 2011, the €13 million in unrecognised tax loss carry-forwards mainly stemmed from the Manganese Division (Setrag SA, Comilog France and Chinese subsidiaries). In 2010, the €7 million in unrecognised tax loss carry-forwards largely stemmed from the Manganese Division (Setrag SA, Erachem Comilog S.A., Chinese subsidiaries, "Recycling" business and Comilog France). In the Manganese Division (Erachem Comilog S.A.) and the Alloys Division ("High-speed steel" business) deferred-tax assets relating to previously impaired temporary differences were recognised for €12 million. In 2009, out of €13 million in unrecognised tax loss carryforwards, the Manganese Division accounted for €9 million

(Setrag SA, Erachem Comilog S.A., Comilog S.A. and Comilog France) and the Alloys Division for €4 million ("High-speed steel" business).

Miscellaneous items are mostly prior year tax adjustments. In New Caledonia, the impact of the €40 million tax reassessment (€25 million after taking into account deferred tax arising on temporary differences) was recognised for the 2009 financial year, together with the disallowing of €9 million out of the €15 million tax credit obtained in 2007.

The income tax on the other components of comprehensive income breaks down as follows:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Translation adjustments for financial statements of subsidiaries denominated in foreign currency	-	-	-
Change in financial instrument revaluation reserve	18	7	(46)
Change in fair value of held-for-sale financial assets	3	(1)	(7)
TOTAL	21	6	(53)

Note 28. Earnings per share

	FY 2011			FY 2010			FY 2009		
	Net profit (loss)	Number of shares	Earnings per share	Net profit (loss)	Number of shares	Earnings per share	Net profit (loss)	Number of shares	Earnings per share
Basic earnings per share	195	26,307,370	7.42	328	26,419,691	12.43	(265)	26,090,386	(10.16)
• Subscription options	-	15,947	-	-	29,752	-	-	43,440	-
• Bonus share grants	-	97,389	-	-	33,137	-	-	-	-
Instruments deemed anti-dilutive ⁽¹⁾	-	-	-	-	-	-	-	(43,440)	-
DILUTED EARNINGS PER SHARE	195	26,420,706	7.39	328	26,482,580	12.40	(265)	26,090,386	(10.16)

(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.

On 31 December 2011, 24,102 subscription options were outstanding (29,752 at 31 December 2010). These potentially subscribable shares, representing some 15,947 shares, were included in the calculation of diluted earnings per share by virtue of their dilutive effect. The treasury shares, representing some

97,389 shares, allocated to bonus share plans (Note 14) are included in diluted earnings per share by virtue of their dilutive effect. ERAMET has not issued any other financial instruments that would be likely to dilute earnings per share.

The base number of shares corresponds to the weighted average number of shares in the period, less the weighted number of treasury shares:

	Ordinary shares		Treasury shares		Shares outstanding	
	At year-end	Weighted average	At year-end	Weighted average	At year-end	Weighted average
Number of shares at 31 December 2008	26,215,231	26,215,231	389,475	389,475	25,825,756	25,825,756
Purchases and sales—liquidity contract	-	-	(29,028)	(13,969)	29,028	13,969
Shares issued for Tinfos A/S acquisition	387,488	227,185	-	-	387,488	227,185
Treasury share cancellations	(252,885)	(106,004)	(252,885)	(106,004)	-	-
Subscription options exercised by employees	19,979	10,977	-	-	19,979	10,977
Bonus shares granted to employees	-	-	(25,830)	(12,499)	25,830	12,499
Number of shares at 31 December 2009						
• Weighted average	-	26,347,389	-	257,003	-	26,090,386
• At period end	26,369,813	26,369,813	81,732	81,732	26,288,081	26,288,081
Purchases and sales—liquidity contract	-	-	(1,491)	2,312	1,491	(2,312)
Purchases and sales—buyback instructions	-	-	23,610	1,031	(23,610)	(1,031)
Shares issued for dividend payments	129,965	129,965	-	-	129,965	129,965
Subscription options exercised by employees	13,688	4,988	-	-	13,688	4,988
Bonus shares granted to employees	-	-	-	-	-	-
Number of shares at 31 December 2010						
• Weighted average	-	26,504,766	-	85,075	-	26,419,691
• At period end	26,513,466	26,513,466	103,851	103,851	26,409,615	26,409,615
Purchases and sales—liquidity contract	-	-	35,461	11,138	(35,461)	(11,138)
Purchases and sales—buyback instructions	-	-	146,390	104,822	(146,390)	(104,822)
Subscription options exercised by employees	5,650	3,090	-	-	5,650	3,090
Bonus shares granted to employees	-	-	(26,156)	(10,625)	26,156	10,625
Number of shares at 31 December 2011						
• Weighted average	-	26,516,556	-	209,186	-	26,307,370
• At period end	26,519,116	26,519,116	259,546	259,546	26,259,570	26,259,570

Note 29. Off-balance-sheet commitments

<i>(in millions of euros)</i>	31/12/2011	31/12/2010	31/12/2009
Commitments given			
Endorsements, pledges and guarantees	116	97	103
Collateral security:	22	39	38
• Property, plant and equipment	2	2	1
• Inventories	10	19	19
• Receivables and other assets	10	18	18
Commitments received			
Endorsements, pledges and guarantees	134	128	14
Collateral security	Nil	Nil	Nil
Credit facilities	800	600	600

The above table does not include regular business orders (from customers or with suppliers and orders for non-current assets).

Since 2009, endorsements, pledges and guarantees given have included the bank guarantee given to the Southern Province of New Caledonia by Le Nickel-SLN in order to cover the environmental monitoring of the Doniambo site, any servicing work and the restoration of the site following its closure. A site restoration provision was recognised for a portion of these commitments (Note 17.4).

29.1. Moanda Metallurgy Complex (CMM) investment project—Comilog S.A.

Comilog S.A. entered into an EPC—Open Book contract with TEC (a Chinese engineering firm) for RMB 1.3 billion, equivalent to circa USD209 million, for the supply of the equipment for and construction of the CMM. The contract states that TEC shall issue its invoices in dollars on the basis of the USD/RMB exchange rate applicable on the dates the various invoices are issued. The payments under this contract began in November 2010 and amounted to USD48 million at 31 December 2011. Payments will continue as the project advances, with it currently being scheduled for completion at end-2013. In order to limit its exposure to fluctuations in the USD/RMB exchange rate, Comilog S.A. established a USD/RMB hedging programme involving forwards/futures and options. At 31 December 2011, in line with the options taken for the programme as a whole, the maximum hedging was for USD198.5 million at USD6.455/RMB with the minimum hedging being USD155 million at USD6.45/RMB. Outstanding hedges under this programme ranged between a minimum of USD64.8 million and a maximum of USD111.9 million.

A loan was contracted from BNP Paribas of USD157 million, relating to the setting-up of the project. At end December 2011, no amount was drawn down on that loan. The loan agreement

was signed on 10 September 2010. The guarantees given by the Gabonese State and ERAMET (for 25% and 75% of the amount respectively) date from end-2011. The first draw-down on the loan is expected to take place in 2012.

29.2. Senegal investment project via 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 (of this USD63.6 million had been paid in at 31 December 2011 by ERAMET). The partners were also party to a mutual USD25 million guarantee covering certain specific contingencies.

29.3. “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 S.A., is committed to ensuring that the necessary funding is made available for the capital expenditure required to achieve the operating capacity targets.

29.4. Operating leases

The amount recognised in income in respect of operating leases was €51 million (€46 million at 31 December 2010) concerning primarily real-estate and transport equipment leases, in particular in New Caledonia and Gabon.

Note 30. Other commitments

30.1. 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. 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 at the exercise date, 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 will be valued by independent experts.

30.2. Agreement to increase the Gabonese Republic's interest in Comilog S.A.

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 S.A.; 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 S.A.'s capital, which would increase the Gabonese Republic's shareholding in Comilog S.A. to 35.4%. In the first stage (2010-2011) an interest of 3.54% will be transferred in the capital of Comilog S.A.

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.

On 31 December 2010, the first-stage transfer covering the 2010-2011 period, of 50,583 shares representing 2.17% of the

share capital of Comilog S.A. was completed and recognised under shareholders' equity in the Group financial statements. In June 2011, ERAMET transferred 31,935 shares representing 1.37% (Note 2).

Note 31. Related party transactions

Related party transactions include the main regular transactions with non-consolidated controlled companies (Notes 1.11.1 and 9) and associates (Note 8).

To the best of the Group's knowledge, there were no transactions with shareholders holding over 5% of the share capital. Details of related party transactions in 2011 are provided below.

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Sales			
• Non-consolidated controlled subsidiaries	29	31	61
• Associates	-	-	-
• Other related parties	30	30	32
Cost of sales, administrative and selling expenses			
• Non-consolidated controlled subsidiaries	(5)	(5)	(11)
• Associates	-	-	-
Net borrowing cost			
• Non-consolidated controlled subsidiaries	-	-	-
• Associates	-	-	-

In 2011, the balance sheet assets and liabilities resulting from related party transactions were as follows:

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Trade and other receivables			
• Non-consolidated controlled subsidiaries	11	7	17
• Associates	-	-	-
Trade and other payables			
• Non-consolidated controlled subsidiaries	4	4	4
• Associates	-	-	-
Net financial assets (liabilities)			
• Non-consolidated controlled subsidiaries	(5)	7	7
• Associates	-	-	-

ERAMET does not in any way guarantee related party debts.

In 2011, 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:

<i>(in thousands of euros)</i>	FY 2011	FY 2010	FY 2009
Short-term benefits			
• Fixed remuneration	2,824	2,700	2,672
• Variable remuneration	1,267	1,779	1,279
• Directors' fees	587	595	502
• Other benefits			
• Post-employment benefits	222	73	824
Retirement indemnities	-	-	-
• Share-based payment	2,443	1,741	445
• Total	7,343	6,888	5,722
• Rémunérations payées en actions	2 443	1 741	445
TOTAL	7 343	6 888	5 722

Note 32. Workforce and personnel costs

32.1. Average workforce by Division

	FY 2011	FY 2010	FY 2009
Nickel	3,035	3,022	3,106
Manganese	6,418	6,433	6,604
Alloys	4,588	4,566	4,618
Holding Division and miscellaneous	161	135	137
TOTAL	14,202	14,156	14,465

32.2. Workforce by Division at end of period

	31/12/2011	31/12/2010	31/12/2009
Nickel	3,061	3,012	3,073
Manganese	6,318	6,419	6,402
Alloys	4,656	4,554	4,571
Holding Division and miscellaneous	173	138	137
TOTAL	14,208	14,123	14,183

32.3. Personnel costs by category

<i>(in millions of euros)</i>	FY 2011	FY 2010	FY 2009
Wages and salaries	(441)	(423)	(402)
Profit-sharing	(16)	(18)	(5)
Other personnel expenses	(184)	(167)	(164)
Employee benefits	(5)	5	(6)
Share-based payment	(13)	(6)	(3)
TOTAL	(659)	(609)	(580)
Personnel costs—temporary staff	(28)	(13)	(10)
Personnel costs—income statement	(687)	(622)	(590)
Payroll as % of sales (including temporary staff)	19%	17%	22%
Average personnel cost (excluding temporary staff) - €'000	(46)	(43)	(40)

Note 33. Statutory Auditors' fees

Full details of all 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:

<i>(in thousands of euros)</i>	FY 2011	FY 2010	FY 2009
Statutory audit, certification, examination of individual and consolidated financial statements	2,466	2,596	2,436
• Ernst & Young	1,198	1,284	1,186
• Deloitte & Associés	1,157	1,188	1,044
• Other	111	124	206
Other services directly relating to the statutory audit	170	159	151
• Ernst & Young	113	73	71
• Deloitte & Associés	57	61	62
• Other	-	25	18
Other services provided	951	618	355
• Ernst & Young	357	223	22
• Deloitte & Associés	475	233	164
• Other	119	162	169
TOTAL	3,587	3,373	2,942

Note 34. Other information

Carlo Tassara France (a company belonging to Mr Romain Zaleski's group) holds 3,394,146 shares in ERAMET (equivalent to 12.87% of its capital at 31 December 2009), on the basis of an estimate using the most recent declaration of the crossing of a shareholding threshold by the first-mentioned company (No. 207C0134 of 17 January 2007).

On December 17, 2009, Carlo Tassara France summoned S.I.M.A., SORAME and CEIR, as well as members of the Duval family, to appear before the Paris Commercial Court. The summons specifies that these proceedings are being brought in the presence of ERAMET. In its writ of summons, Carlo Tassara France claims first, that the S.I.M.A. group's presentation to the ERAMET shareholders in 1999 misled those shareholders by concealing from them the indebtedness of SMC, a 38.5%-held subsidiary of S.I.M.A., consolidated not fully, but by the equity method (as an associate company), whereas S.I.M.A. 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 S.I.M.A. from 1999 to 2002 (at which date, SMC filed for bankruptcy), by loans alleged to have been granted unlawfully for failure to receive prior authorisation from the ERAMET Board of Directors. The claimant also requests the Court 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 S.I.M.A.'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 S.I.M.A. shares and of the dividends received from S.I.M.A. 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 S.I.M.A. (and hence of Aubert & Duval) from the Group's scope of consolidation. ERAMET points out that the S.I.M.A. 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 threw out all claims made by Carlo Tassara France, by virtue of the fact that they were barred under the statute of limitations. Carlo Tassara France appealed the ruling.

Note 35. Events after the reporting date

To the best of the Company's knowledge, there are no events to report after the reporting date.

Note 36. Segment reporting

36.1. By business segment

<i>(in millions of euros)</i>	Nickel	Manganese	Alloys	Holding div. and interco eliminations	Total
FY 2011					
External sales	983	1,709	909	2	3,603
Inter-segment sales	6	4	1	(11)	-
Sales	989	1,713	910	(9)	3,603
Cash generated from operating activities	249	364	43	(22)	634
EBITDA	269	499	57	(36)	789
Current operating profit (loss)	189	388	16	(39)	554
Other operating income and expenses	-	-	-	-	(63)
Operating profit (loss)	-	-	-	-	491
Net borrowing cost	-	-	-	-	22
Other financial income and expenses	-	-	-	-	8
Share in profits of associates	-	-	-	-	1
Income tax	-	-	-	-	(219)
Attributable to non-controlling interests	-	-	-	-	(108)
Attributable to equity holders of the parent	-	-	-	-	195
Non-cash expenses	(128)	(154)	(29)	(20)	(331)
• Depreciation & amortisation	(81)	(105)	(39)	(3)	(228)
• Provisions	(12)	5	7	(1)	(1)
• Impairment losses	-	(19)	3	-	(16)
Industrial capital expenditure (intangible assets, property, plant & equipment)	141	245	100	6	492
TOTAL BALANCE SHEET assets (current and non-current)	2,830	2,604	1,217	(350)	6,301
TOTAL BALANCE SHEET liabilities (current & non-current, exc. shareholders' equity)	982	997	826	(583)	2,222
FY 2010					
External sales	958	1,853	763	2	3,576
Inter-segment sales	7	5	1	(13)	-
Sales	965	1,858	764	(11)	3,576
Cash generated from operating activities	229	518	56	(33)	770
EBITDA	269	656	76	(30)	971
Current operating profit (loss)	194	548	29	(32)	739
Other operating income and expenses	-	-	-	-	(19)
Operating profit (loss)	-	-	-	-	720
Net borrowing cost	-	-	-	-	3
Other financial income and expenses	-	-	-	-	(15)
Share in profits of associates	-	-	-	-	1
Income tax	-	-	-	-	(255)
Attributable to non-controlling interests	-	-	-	-	(126)
Attributable to equity holders of the parent	-	-	-	-	328
Non-cash expenses	(82)	(211)	(40)	17	(316)
• Depreciation & amortisation	(78)	(100)	(41)	(2)	(221)
• Provisions	(10)	(5)	(14)	12	(17)
• Impairment losses	-	(2)	13	-	11
Industrial capital expenditure (intangible assets, property, plant & equipment)	124	130	69	3	326
TOTAL BALANCE SHEET assets (current and non-current)	2,630	3,030	1,007	(564)	6,103
TOTAL BALANCE SHEET liabilities (current & non-current, exc. shareholders' equity)	842	1,043	630	(386)	2,129

<i>(in millions of euros)</i>	Nickel	Manganese	Alloys	Holding div. and interco eliminations	Total
FY 2009					
External sales	649	1,289	750	1	2,689
Inter-segment sales	6	-	-	(6)	-
Sales	655	1,289	750	(5)	2,689
Cash generated from operating activities	(15)	13	(21)	(19)	(42)
EBITDA	13	72	(5)	(21)	59
Current operating profit (loss)	(62)	(27)	(49)	(25)	(163)
Other operating income and expenses	-	-	-	-	(104)
Operating profit (loss)	-	-	-	-	(267)
Net borrowing cost	-	-	-	-	11
Other financial income and expenses	-	-	-	-	(12)
Share in profits of associates	-	-	-	-	-
Income tax	-	-	-	-	7
Attributable to non-controlling interests	-	-	-	-	(4)
Attributable to equity holders of the parent	-	-	-	-	(265)
Non-cash expenses	(57)	(86)	(90)	14	(219)
• Depreciation & amortisation	(75)	(92)	(47)	(17)	(231)
• Provisions	(57)	(3)	2	-	(58)
• Impairment losses	-	(3)	(48)	-	(51)
Industrial capital expenditure (intangible assets, property, plant & equipment)	107	110	67	2	286
TOTAL BALANCE SHEET assets (current and non-current)	2,406	2,765	895	(796)	5,270
TOTAL BALANCE SHEET liabilities (current & non-current, exc. shareholders' equity)	748	972	537	(492)	1,765

The ERAMET Group did not restructure its business segments in 2011 (just as it didn't in 2010).

36.2. By geographic region

<i>(in millions of euros)</i>	Europe	North America	Asia	Oceania	Africa	South America	Total
Sales (sales destination)							
FY 2011	1,598	676	1,193	30	66	40	3,603
FY 2010	1,598	642	1,201	32	77	26	3,576
FY 2009	1,270	466	840	24	72	17	2,689
Industrial capital expenditure (intangible assets, property, plant & equipment)							
FY 2011	144	27	122	61	138	-	492
FY 2010	108	28	75	50	64	1	326
FY 2009	83	16	54	65	68	-	286
TOTAL BALANCE SHEET assets (current and non-current)							
FY 2011	3,622	368	783	903	624	1	6,301
FY 2010	3,792	400	700	846	365	-	6,103
FY 2009	3,157	352	533	903	325	-	5,270

6.1.3. Report of the Statutory Auditors on the Consolidated Financial Statements

YEAR ENDED 31 DECEMBER 2011

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 2011, 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 2011 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.

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(s):

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.

Further, as mentioned in Note 6.1 to the consolidated financial statements, the costs for geology, prospecting and studies for the Weda Bay project are recorded in assets. We analyzed the conditions for recording expenses in assets, their recoverable value, and the information provided in this note to the consolidated financial statements.

Provisions

As stated in Notes 1.19 and 17 to the consolidated financial statements, your Group is led 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 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, 22 February 2012

The Statutory Auditors

Ernst & Young et Autres
Aymeric de la Morandière

Deloitte & Associés
Alain Penanguer

6.2. 2011 SEPARATE FINANCIAL STATEMENTS

6.2.1. 2011 income statement, balance sheet

BALANCE SHEET

ASSETS

<i>(in thousands of euros)</i>	Notes	Gross amount	Depreciation, amortisation and provisions	31/12/2011 Net amount	31/12/2010 Net amount
Intangible assets					
Concessions, patents, licences, trademarks, processes, rights and similar assets		9,058	8,764	293	258
Other					
Non-current assets in progress		12,183		12,183	4,706
Subtotal		21,240	8,764	12,476	4,964
Property, plant & equipment					
Land		1,131		1,131	1,131
Buildings		23,710	16,687	7,023	7,442
Technical installations, machinery and equipment		60,133	48,091	12,042	12,771
Other		11,237	8,151	3,085	3,434
Non-current assets in progress		604		604	319
Down-payments		88		88	88
Subtotal		96,904	72,930	23,974	25,186
Non-current financial assets					
Investments in associates		1,541,490	314,484	1,227,006	1,539,505
Receivables on investments in associates	10	647,442		647,442	424,736
Other capitalised investments		54,204	46,280	7,924	6,860
Other		17,172	13,343	3,829	14,260
Subtotal		2,260,307	374,107	1,886,200	1,985,361
Non-current assets	9	2,378,451	455,801	1,922,650	2,015,511
Inventories and work in progress					
Raw materials and other supplies		41,185	4,221	36,964	44,293
Work in progress		9,306		9,306	11,024
Semi-finished and finished products		27,105		27,105	23,125
Goods for sale		32,341		32,341	43,007
Subtotal	15	109,937	4,221	105,716	121,449
Down-payments made on orders		3,418		3,418	2,688
Operating receivables					
Trade receivables		95,220	769	94,451	103,209
Other receivables		59,972	16,597	43,375	14,003
Subtotal	10&15	155,192	17,366	137,826	117,213
Cash & cash equivalents	11	4,121		4,121	5,310
Accruals					
Prepaid expenses		3,579		3,579	6,445
Deferred debt issue costs		3,973		3,973	25
Subtotal	12	7,552		7,552	6,470
Current assets		280,220	21,587	258,633	253,129
Translations adjustments		0		0	0
TOTAL ASSETS		2,658,671	477,388	2,181,283	2,268,640

LIABILITIES

<i>(in thousands of euros)</i>	Notes	31/12/2011	31/12/2010
Share capital		80,883	80,866
Issue, merger and contribution premiums		371,853	371,505
Legal reserve		8,087	7,996
Regulated reserves			0
Other reserves		253,839	253,839
Retained earnings		460,147	406,299
Profit (loss) for the period		340,942	146,112
Net assets	13	1,515,751	1,266,616
Regulated provisions	16	82,129	80,172
Shareholders' equity		1,597,879	1,346,788
Provisions for contingencies		15,983	10,106
Provisions for losses		6,930	5,972
Provisions for contingencies and losses	16	22,914	16,078
Long-term borrowings			
Bank loans		15,533	329
Miscellaneous borrowings		419	90
Inter-company current accounts		422,888	662,708
Subtotal		438,841	663,127
Down-payments received on orders		1,061	7,666
Operating payables			
Trade payables		99,089	209,220
Tax and payroll liabilities		17,516	14,597
Miscellaneous liabilities			
Liabilities on non-current assets and related payables		2,001	1,657
Other liabilities		1,963	9,485
Accruals			
Unearned income		20	20
Liabilities	18&19	560,490	905,773
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		2,181,283	2,268,640

INCOME STATEMENT

<i>(in thousands of euros)</i>	Notes	FY 2011	FY 2010
Operating income			
Sales of goods and merchandise		972,550	1,010,587
Income from ancillary activities		71,040	56,426
Sales	21	1,043,590	1,067,012
Change in inventories of finished products and work in-progress		2,262	8,011
Capitalised production		4,485	2,877
Operating subsidies		46	51
Reversal of provisions, extraordinary depreciation & amortisation & expense transfers		46,530	12,918
Other income		18	
Other income		53,341	23,857
TOTAL INCOME		1,096,931	1,090,869
Operating expenses			
Purchases of goods		689,067	755,574
Change in inventory		10,666	(10,898)
Raw materials and consumables used		207,585	246,619
Change in inventory		6,947	(21,410)
External purchases and expenses		82,030	76,268
Taxes other than on income		4,771	2,836
Wages and salaries		29,004	26,645
Payroll charges		50,215	22,171
Depreciation and amortisation		5,049	4,732
Provisions for current assets		4,221	3,839
Provisions for contingencies and losses		43,640	13,227
Other expenses		2,849	1,949
TOTAL EXPENSES		1,136,044	1,121,553
Operating profit (loss)		(39,113)	(30,683)
Net financial income	24	334,779	96,579
Profit (loss) before tax and extraordinary items		295,667	65,895
Extraordinary items	25	39,203	74,544
Employee profit-sharing & incentives		(3,569)	(4,228)
Income tax	22	9,641	9,900
PROFIT (LOSS) FOR THE PERIOD		340,942	146,112

CASH FLOW STATEMENT

<i>(in thousands of euros)</i>	FY 2011	FY 2010
Operating activities		
Profit (loss) for period	340,942	146,112
Elimination of non-cash and non-operating income and expenses	219,457	(90,436)
Cash generated from operating activities	560,399	55,676
Change in operating working capital requirement	(117,123)	33,750
Net cash generated by operating activities	443,276	89,426
Cash flows from investing activities		
Net payments for non-current financial assets	61,491	(8,091)
Payments for intangible assets, PP&E	(12,903)	(7,908)
Proceeds from non-current asset disposals	52,365	85,934
Changes in other receivables and payables	(6,992)	6,590
Subtotal	93,961	76,525
Other movements		
Net cash used in investing activities	93,961	76,525
Cash flows from financing activities		
Dividends paid to ERAMET SA shareholders	(92,173)	(47,324)
Proceeds from share capital increases	365	30,688
Change in working capital requirement arising from financing activities	373	(235)
Net cash used in financing activities	(91,435)	(16,870)
Other movements	0	0
DECREASE (INCREASE) IN NET BORROWINGS	445,803	149,081
Opening net cash (debt) position	(233,081)	(382,162)
CLOSING NET CASH (DEBT) POSITION	212,722	(233,081)

HIGHLIGHTS

SALES

Sales of metallurgical products rose 5.4% compared with 2010, due to the increase in the average LME price.

Over the same period, tonnages sold came to 53.3 thousand tonnes in 2011, down a modest 1% from 2010.

OPERATING PROFIT (LOSS)

The operating loss was up, rising from €30 million in 2010 to €39 million in 2011 as a result notably of the provision recognised for bonus shares plans: +€23.8 million.

NET FINANCIAL INCOME

Net finance income consisted primarily of dividends received from subsidiaries (Nickel: €27.9 million, Manganese: €531 million), a €195 million increase in the provision for Eralloys shares and €22 million in the provision for Tinfos shares.

A net foreign currency gain of €2.2 million was recorded for 2011 compared with a net expense of €12.8 million at end-2010, the 2010 loss being mainly due to the hedging of Weda Bay shares.

EXTRAORDINARY ITEMS

Extraordinary items were primarily comprised of a €49.2 million gain on the disposal of Comilog S.A. shares to the Gabonese State.

CHANGES TO INVESTMENTS IN ASSOCIATES

As part of the agreement signed on 20 October 2010 between ERAMET and the Gabonese Republic, at end-June 2011 ERAMET sold 31,935 shares, representing 1.37% of the share capital of Comilog S.A., cutting its interest from 65.08% to 63.71%. The gain on disposal was €49.2 million.

CHANGES IN THE CASH POSITION

Net cash is comprised of receivables on investments in associates and cash & cash equivalents, less borrowings and inter-company current accounts. The Company went from having a net debt position of €233.1 million to a net cash position of €212.7 million, mainly as a result of the extraordinary €531 million dividend payment by the Manganese Division and the sale of shares in Comilog for €52.4 million.

6.2.2. Notes to the separate financial statements

ACCOUNTING PRINCIPLES, RULES AND METHODS

At its meeting of 15 February 2011, the Board of Directors closed the financial statements of ERAMET SA to 31 December 2011.

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 CRC (French Accounting Regulations Committee—*Comité de la réglementation 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.

2. CHANGE IN METHODS

There has been no change in method compared with 31 December 2010.

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. These items have not been re-measured.

Unused assets or assets with fair market values lower than the carrying amount are, as a general rule, impaired by extraordinary depreciation or by charging to provisions.

Economically justified depreciation is calculated using the straight-line method. This depreciation is calculated over the asset's useful life.

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 period over which it is used and the useful life is recognised *via* extraordinary depreciation.

3.2. Non-current financial assets

Since 1 January 2006, the gross amount of non-current financial assets has included the purchase cost excluding 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. Development projects in progress

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. When project fulfilment is by acquisition, those costs are included in the value of the shares. Such costs are directly expensed or, where they have been capitalised but the projects aren't successful, impaired and booked under extraordinary items.

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 where they exceed 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 foreign currency gains or losses arising from re-measurement at the forward hedging rate or, where unhedged, at the closing rate, are recognised as foreign currency gains and losses 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 an 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 indemnities or 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 assets are measured independently. A provision is then recognised on the basis of the amount of financial assets and liabilities.

ERAMET's liabilities are appraised 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 for each country.

The following actuarial assumptions are used for measurement purposes:

	2011	2010	2009	2008
Discount rate	4.75%	4.90%	5.00%	5.40%
Inflation rate	2.00%	2.00%	2.10%	2.10%
Rate of increase in salaries	3.00%	3.10%	3.10%	2.10%
Return on plan financial assets	3.50%	4.00%	4.50%	5.00%

Employee bonus share plan

Five bonus share plans are in place within the Company:

- one plan approved by the Board of Directors on 29 July 2009 involving 70,880 shares;
- two plans approved by the General Shareholders' Meeting of 20 May 2010 involving 28,816 and 65,008 shares;
- two plans approved by the Board of Directors on 16 February 2011 involving 28,614 and 71,665 shares.

The corresponding provision was measured on the basis of the value of treasury shares (175,950 shares) and the stock price on 31 December 2011 (for 58,784 shares).

The provision was staggered over the vesting period (2 or 3 years depending on the plan) for staff at ERAMET SA. For the other

beneficiaries (outside ERAMET SA), the provision is funded once the plans are effectively granted.

On 29 July 2011, the shares of the plan dated 29 July 2009 were definitively granted to employees of French companies.

3.8. Sales

Sales consist of the following:

- ferronickel 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.

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Note 9. Non-current assets

Acquisition values

<i>(in thousands of euros)</i>	Acquisition values 31/12/2010	Acquisitions	Disposals, scrapping and adjustments	Acquisition values 31/12/2011
Intangible assets				
Concessions, patents, licences, trademarks, processes, rights and similar assets	8,482	576		9,058
Non-current assets in progress ⁽¹⁾	6,635	7,768	(2,220)	12,183
Subtotal	15,116	8,344	(2,220)	21,240
Property, plant & equipment				
Land	1,131			1,131
Buildings	22,963	747		23,710
Technical installations, machinery and equipment	57,074	3,059		60,133
Other	10,769	468		11,237
Non-current assets in progress	319	286		605
Down-payments	88			88
Subtotal	92,344	4,560	0	96,904
Non-current financial assets				
Investments in associates ⁽²⁾	1,636,989		(95,500)	1,541,490
Receivables on investments in associates	424,736	239,403	(16,697)	647,442
Other capitalised investments ⁽³⁾	14,077	41,120	(994)	54,204
Other ⁽⁴⁾	27,603	227	(10,657)	17,172
Subtotal	2,103,406	280,749	(123,848)	2,260,307
TOTAL	2,210,866	293,653	(126,068)	2,378,451

(1) Non-current assets connected with the IT infrastructure (€5.6 million) and the development of hydrometallurgical technology (€6.4 million).

€1.9 million of the reduction involved the reversal of expenditure on the Mabounié project: capitalised and fully impaired up to end-2009, it has since been expensed.

(2) Reclassification of the loan to Weda Bay Minerals, Inc (Canada).

In June 2011, 1.37% of the share capital of Comilog S.A. was sold to the Gabonese State (net carrying amount of the shares: €3.2 million).

(3) The "Other capitalised investments" item relates to treasury shares.

The increase is due to:

- the purchase of 146,390 shares in the first half of 2011 for €35.6 million as part of buyback instructions given to EXANE BNP Paribas in December 2010. These shares (some 170,000 in total) are intended to be distributed as part of a bonus share plan (see Section 3.7); and
- the purchase of €5.5 million worth of shares as part of the price support agreement signed with EXANE BNP Paribas.

The reduction mainly came from the awarding of bonus shares under the 2009 plan to employees of French companies.

Provisions have been funded for the full value of the treasury shares set aside to cover the requirements of the bonus share plans (+€34.6 million in 2011).

A €4.4 million provision was funded for the other treasury shares, held under the price support agreement, as the stock market price at 31 December 2011 was under the portfolio price.

(4) The reduction is due to the withdrawal of €5 million from the funds allocated to the price support agreement and the use of €5.5 million of these funds to buy shares under this agreement in 2011.

(5) A €195 million increase in the provision for Eralloys shares, and a €22 million increase in the one for Tinfos shares, in order to bring the net carrying amount at 31 December 2011 down to the value in use. In the case of Eralloys, this value fell as a result of the payout of an extraordinary dividend in 2011.

(6) A €13.4 million provision was funded for the option purchased on a project to exploit a manganese deposit in Namibia in 2009, in light of the abandonment of the project.

Depreciation, amortisation and provisions

<i>(in thousands of euros)</i>	Depreciation & amortisation and provisions at 31/12/2010	Depreciation, amortisation and provisions	Reversals of depreciation, amortisation and provisions	Disposals, retirements and adjustments	Depreciation, amortisation and provisions 31/12/2011	Net amount 31/12/2011
Intangible assets						
Concessions, patents, licences, trademarks, processes, rights and similar assets	8,224	541			8,764	293
Non-current assets in progress ⁽¹⁾	1,928			(1,928)	0	12,183
Subtotal	10,152	541	0	(1,928)	8,764	12,476
Property, plant & equipment						
Land	0				0	1,131
Buildings	15,521	1,167			16,687	7,023
Technical installations, machinery and equipment	44,303	3,879	(91)		48,091	12,042
Other	7,335	817			8,151	3,085
Non-current assets in progress	0				0	605
Down-payments						88
Subtotal	67,158	5,862	(91)	0	72,930	23,974
Non-current financial assets						
Investments in associates ⁽⁵⁾	97,484	217,000			314,484	1,227,006
Receivables on investments in associates	0				0	647,442
Other capitalised investments ⁽³⁾	7,218	4,420		34,642	46,280	7,924
Other ⁽⁶⁾	13,343				13,343	3,829
Subtotal	118,045	221,420	0	34,642	374,107	1,886,200
TOTAL	195,355	227,823	(91)	32,714	455,801	1,922,650

(1) Non-current assets connected with the IT infrastructure (€5.6 million) and the development of hydrometallurgical technology (€6.4 million).

€1.9 million of the reduction involved the reversal of expenditure on the Mabounié project: capitalised and fully impaired up to end-2009, it has since been expensed.

(2) Reclassification of the loan to Weda Bay Minerals, Inc (Canada).

In June 2011, 1.37% of the share capital of Comilog S.A. was sold to the Gabonese State (net carrying amount of the shares: €3.2 million).

(3) The "Other capitalised investments" item relates to treasury shares.

The increase is due to:

- the purchase of 146,390 shares in the first half of 2011 for €35.6 million as part of buyback instructions given to EXANE BNP Paribas in December 2010. These shares (some 170,000 in total) are intended to be distributed as part of a bonus share plan (see Section 3.7); and
- the purchase of €5.5 million worth of shares as part of the price support agreement signed with EXANE BNP Paribas.

The reduction mainly came from the awarding of bonus shares under the 2009 plan to employees of French companies.

Provisions have been funded for the full value of the treasury shares set aside to cover the requirements of the bonus share plans (+€34.6 million in 2011).

A €4.4 million provision was funded for the other treasury shares, held under the price support agreement, as the stock market price at 31 December 2011 was under the portfolio price.

(4) The reduction is due to the withdrawal of €5 million from the funds allocated to the price support agreement and the use of €5.5 million of these funds to buy shares under this agreement in 2011.

(5) A €195 million increase in the provision for Eralloys shares, and a €22 million increase in the one for Tinfos shares, in order to bring the net carrying amount at 31 December 2011 down to the value in use. In the case of Eralloys, this value fell as a result of the payout of an extraordinary dividend in 2011.

(6) A €13.4 million provision was funded for the option purchased on a project to exploit a manganese deposit in Namibia in 2009, in light of the abandonment of the project.

Note 10. Schedule of receivables

<i>(in thousands of euros)</i>	Gross amount 31/12/2011	1 year or less	Over 1 year	Reminder 31/12/2010
Receivables on investments in associates ⁽¹⁾	647,442	647,442		424,736
Pension plan assets ⁽²⁾	308	308		477
Other non-current financial assets	16,864	16,864		27,125
Trade receivables	95,220	94,409	811	103,979
Other receivables ⁽³⁾	59,972	59,972		24,876
Prepaid expenses	3,579	3,579		6,445
TOTAL	823,385	822,574	811	587,639

(1) Receivables on investments in associates: loans to Group companies:

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Strand Minerals Ltd	242,418	153,698
Weda Bay Minerals, Inc (Canada)	51,094	0
CFED	70,893	21,749
GCMC	447	37,639
ERAMET Holding Manganese	0	24,303
ERAMET Research	1,633	4,180
S.I.M.A.	197,269	121,235
Erasteel SAS	80,557	60,750
Eramine SAS	3,130	1,161
Miscellaneous		22
TOTAL	647,442	424,736

(2) Excess contribution to defined benefit supplementary pension plan.

(3) Other receivables include, amongst other things, a tax consolidation receivable net of income tax of €10.6 million and payments of €32 million on development projects, likely to be billed back to the Divisions should they succeed, for which €16.6 million in provisions has been funded.

Note 11. Cash & cash equivalents

Solely comprised of demand bank accounts.

Note 12. Prepaid expenses and accrued income

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Prepaid expenses ⁽¹⁾	3,579	6,445
Deferred debt issue costs	3,973	25
Translation adjustments: loss	0	0
TOTAL	7,552	6,470

(1) Prepaid insurance premiums totalled €1.6 million (compared with €1.4 million at 31 December 2010). Nickel hedging premiums totalled €1.6 million (compared with €4.5 million at 31 December 2010).

Note 13. Shareholders' equity

The share capital breaks down as follows:

	31/12/2011	31/12/2010
AREVA	25.68%	25.69%
SORAME/CEIR	37.00%	36.89%
STCPI	4.04%	4.04%
Miscellaneous	33.28%	33.38%
TOTAL	100%	100%

The 17 June 1999 shareholders' agreement, which expired on 30 June 2006, was tacitly extended for one-year periods. On 29 May 2008, the shareholders (SORAME and CEIR) and AREVA announced the signing of an amendment to the shareholders' agreement. The amended shareholders' agreement, initially entered into for a term expiring at 31 December 2009, is tacitly renewable for six-month periods, unless one of the parties gives fifteen calendar days' notice of termination. It was renewed for six months as from 1 January 2012.

With respect to this shareholders' agreement (including a sub-agreement between SORAME and CEIR), which constitutes an agreement to act in concert, prior approval notice 199CO577 was issued on 18 May 1999 by the French Financial Markets Board (CMF). For the amendment of 29 May 2008, the AMF issued approval and notice No. 208C1042.

Since 1 January 2002, registered shares meeting the required conditions have qualified for double voting rights.

ERAMET's distributable reserves totalled €1,086 million prior to the allocation of 2011 earnings (€1,032 million at 31 December 2010).

<i>(in thousands of euros)</i>	Number of shares	Share capital	Premiums, reserves and retained earnings	Profit (loss) for financial year	Total
Shareholders' equity as at 31 December 2009	26,369,813	80,428	1,086,653	(29,942)	1,137,140
Dividends paid			(47,324)		(47,324)
Carried forward to retained earnings and reserves			(29,942)	29,942	0
Withholding tax					0
Other transactions					0
Proceeds from share capital increases in cash	13,688	42	843		885
Proceeds from share capital increases by incorporation of reserves					0
Contributions in cash					0
Dividends paid in shares	129,965	396	29,407		29,804
Share capital increases in kind					0
Profit (loss) for the 2010 financial year				146,112	146,112
Shareholders' equity as at 31 December 2010	26,513,466	80,866	1,039,638	146,111,812	1,266,616
Dividends paid				(92,173)	(92,173)
Carried forward to retained earnings and reserves			53,939	(53,939)	0
Withholding tax					0
Other transactions					0
Proceeds from share capital increases in cash	5,650	17	348		365
Proceeds from 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 2011 financial year				340,942	340,942
SHAREHOLDERS' EQUITY AS AT 31 DECEMBER 2011	26,519,116	80,883	1,093,925	340,942	1,515,751

The share capital is comprised of 26,519,116 fully paid-up ordinary shares (26,513,466 ordinary shares at 31 December 2010) with a par value of €3.05.

Note 14. Treasury shares

The table below summarises treasury share transactions:

		Price support	Grants to employees	Other purposes	Total
Position at 31 December 2008		53,689	-	335,786	389,475
As a percentage of share capital	26,215,231	0.20%	-	1.28%	1.49%
Allocated to stock options/bonus shares:					
• grants/bonus shares—2007 Plans		-	-	(25,830)	(25,830)
• grants/future bonus shares		-	32,106	(32,106)	-
Purchases		241,360	-	-	241,360
Sales		(245,423)	-	-	(245,423)
Share cancellations/capital reduction		-	-	(252,885)	(252,885)
Share allocation/acquisition of Eralloys non-controlling interests				(24,965)	(24,965)
Position at 31 December 2009		49,626	32,106	-	81,732
As a percentage of share capital	26,369,813	0.19%	0.12%	-	0.31%
Purchases		269,075	23,610	-	292,685
Sales		(270,566)	-	-	(270,566)
Position at 31 December 2010		48,135	55,716	-	103,851
As a percentage of share capital	26,513,466	0.18%	0.21%	-	0.39%
Allocated to stock options/bonus shares:					
• grants/bonus shares—2009 Plans		-	(25,397)		(25,397)
• grants/bonus shares—2010 & 2011 Plans		-	(759)		(759)
Purchases		320,912	146,390	-	467,302
Sales		(285,451)	-	-	(285,451)
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%

The balance of 259,546 shares corresponds to:

- 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;
- shares intended to be allocated under the bonus share plans.

Note 15. Provisions for impairment of current assets

<i>(in thousands of euros)</i>	31/12/2010	Provisions	Reversals	31/12/2011
Raw materials				
Other supplies ⁽¹⁾	3,839	4,221	(3,839)	4,221
Trade receivables	769			769
Miscellaneous receivables ⁽²⁾	10,873	5,751	(27)	16,597
TOTAL	15,481	9,972	(3,866)	21,587

(1) Provisions have been fully funded for spare parts inventories where they exceed one year's supply.

(2) The increase in provisions is mainly due to the expenses booked under Other receivables on the Lithium exploration and development project.

Note 16. Provisions

<i>(in thousands of euros)</i>	31/12/2010	Provisions	Reversals		Reclassification	31/12/2011
			Used during financial year	Unused during financial year		
Provisions for price increases	69,668	0	0	0	0	69,668
Extraordinary amortisation and depreciation ⁽¹⁾	10,504	2,726	(769)	0	0	12,461
Provisions for restoring mining deposits	0	0	0	0	0	0
Total regulated provisions	80,172	2,726	(769)	0	0	82,129
Foreign currency losses						
Employees ⁽²⁾	5,101	1,062	(173)	0	(169)	5,820
Environment ⁽³⁾	772	39	0	0	0	810
Sector contingencies	0	0	0	0	0	0
Taxes	0	0	0	0	0	0
Other provisions for contingencies ⁽⁴⁾	7,488	8,479	0	0	0	15,967
Other provisions for losses ⁽⁵⁾	2,718	42,176	(9,936)	0	(34,642)	316
Total provisions for contingencies and losses	16,078	51,756	(10,109)	0	(34,812)	22,914
PROVISIONS FOR LIABILITIES	96,250	54,482	(10,878)	0	(34,812)	105,042

(1) €2 million net increase in the extraordinary depreciation charge, €1.7 million of which was mainly attributable to acquisition costs capitalised with the Tinfos shares.

(2) ERAMET funds provisions for pension and related liabilities on the basis of an actuarial appraisal by an outside firm. Detailed calculations were carried out at 31 December 2011. The excess payment of defined benefit supplementary pension plan contributions was reclassified under other investments.

(3) €0.8 million increase in provisions to clear the drainage channel at the Sandouville plant before its sale back to the Port Autonome du Havre (Le Havre Port authority).

(4) The provision for financial contingencies mainly relates to the potential loss on the Metal Securities bond portfolio secured by ERAMET.

(5) The provision for losses was recognised in connection with the bonus share plans approved by the Board of Directors on 29 July 2009, by the General Shareholders' Meeting on 20 May 2010, and by the Board of Directors on 16 February 2011 (see Chapter 3.7).

Note 17. Employee-related liabilities

<i>(in thousands of euros)</i>	Fair value of plan assets	Actuarial value of liabilities	Financial position
Pension plan	41,363	49,868	(8,505)
Retirement indemnities	2,136	4,421	(2,285)
Awards and bonuses		3,175	(3,175)
Healthcare plans		2,883	(2,883)
TOTAL	43,499	60,347	(16,848)

<i>(in thousands of euros)</i>	Unrecognised actuarial (gains)/losses	Unrecognised past service cost	Balance sheet provision (asset)/ liability
Pension plan	8,579		(74)
Retirement indemnities	952	1,370	(37)
Awards and bonuses			3,175
Healthcare plans	434		2,449
TOTAL	9,965	1,370	5,513

Actuarial assumptions:

Discount rate	4.75%
Inflation rate	0
Salary increase rate	0
Return on plan financial assets	3.5%

Breakdown of pension fund investments:

<i>(in thousands of euros)</i>	Equities	Bonds	Other investments	Total
Amount	3,723	35,786	3,990	43,499
Percentage	8.6%	82.3%	9.2%	100%

Change in pension liabilities:

<i>(in thousands of euros)</i>	FY 2011
At beginning of period	4,623
Expenses recognised	1,776
• Service cost	1,112
• Net interest expense	2,035
• Return on plan assets	(1,685)
• Amortisation of actuarial gains and losses and past service cost	314
• Other	
Contributions paid	(886)
Translation adjustments and other movements	-
AT PERIOD END	5,513

The €5.5 million balance breaks down into a provision for contingencies and losses of €5.8 million and pension plan assets of €0.3 million in the balance sheet of ERAMET SA at 31 December 2011.

Note 18. Breakdown of liabilities and maturity schedule

Net amount (in thousands of euros)	31/12/2011	Up to 1 year	From one to five years	From five years
Bank loans ⁽¹⁾	15,533	15,533		
Miscellaneous long-term borrowings ⁽²⁾	423,307	423,307		
Trade payables ⁽³⁾	99,089	99,087	2	
Tax and payroll liabilities	17,516	17,516		
Liabilities on non-current assets and related payables	2,001	2,001		
Other miscellaneous liabilities ⁽⁴⁾	1,963	1,963		
Unearned income	20	20		
TOTAL	559,429	559,427	2	0

(1) Bank borrowings include €15 million in commercial paper issued by ERAMET.

(2) ERAMET is financed by Metal Securities, its 87.92%-owned subsidiary. At 31 December 2011, it amounted to €423 million (as against €663 million at 31 December 2010), primarily due to the payment of a substantial dividend by the Manganese Division.

(3) The Company has supplier payables outstanding for more than 60 days from the date of invoice of €152,000.

(4) In 2011, the tax-consolidated French subsidiaries paid income tax instalments to ERAMET SA exceeding the income tax payable by €0.8 million.

Miscellaneous borrowings:

Net amount (in thousands of euros)	31/12/2011	31/12/2010
Current accounts with Metal Securities	422,888	662,708
Deposits received	419	90
Miscellaneous	0	0
TOTAL	423,307	662,797

Note 19. Breakdown of liabilities and accrued expenses

Gross amount (in thousands of euros)	31/12/2011	31/12/2010
Miscellaneous borrowings	423,307	662,797
Trade payables	99,089	209,220
Tax and payroll liabilities	17,516	14,597
Liabilities on non-current assets	2,001	1,657
Other miscellaneous liabilities	1,963	9,485
Unearned income	20	20
TOTAL	543,896	897,777

Note 20. Items relating to associates

Net amount <i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Balance sheet		
Investments in associates	1,540,805	1,636,283
Financial receivables	647,442	424,736
Trade receivables	14,841	3,053
Miscellaneous receivables	570	1,677
Miscellaneous financial borrowings	(423,307)	(662,797)
Trade payables	68,911	168,409
Other liabilities	(965)	(7,173)
Income statement		
Financial income	574,214	90,556
Financial expenses	(6,842)	(12,530)

Note 21. Sales

<i>(in thousands of euros)</i>	Total	France	International
Sales of goods and merchandise ⁽¹⁾	972,550	32,010	940,540
Income from ancillary activities	71,040	23,819	47,221
SALES	1,043,590	55,829	987,761

(1) Sales included a foreign currency gain of €14.7 million resulting primarily from USD hedging.

Note 22. Increases and reductions in future tax liabilities

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Increases in taxable base		
• Regulatory provisions	82,129	80,172
• Translation adjustment losses at close		
• Deferred expenses		
Reductions in taxable base		
• Provisions not deductible during the financial period	(324,311)	(108,952)
• Accrued expenses	(413)	(53)
• Translation adjustment gains at close		
• Unrealised financial income		
• Tax loss carry-forwards	(94,376)	(104,209)
Net reductions in taxable base	(336,971)	(133,042)
Increase in future taxation	(116,019)	(45,806)
	34%	34%

Breakdown of income tax

<i>(in thousands of euros)</i>	Gross amount	Tax owed	Profit (loss) for period
Current profit (loss)	295,667	0	295,667
Extraordinary items	39,203	0	39,203
Employee profit-sharing and incentives	(3,569)	0	(3,569)
Effects of tax consolidation and research tax credit	0	9,641	9,641
TOTAL	331,301	9,641	340,942

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 did not form part of a 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 +€6 million for the tax group (of which +€7 million stemmed from the 2011 Group research tax credit, +€0.4 million from 2011 tax credits and +€0.6 million from adjustments to the 2010 Group tax credits), +€10 million in tax consolidation gains (€9.6 million of which stemmed from the 2011 income tax of consolidated subsidiaries) and (€6.3) million in tax consolidation expenses [of which tax credits passed back to the subsidiaries: (€0.4) million in 2010 adjustments and (€5.7) million in 2011 research tax credits].

Note 23. Tax consolidation

All French subsidiaries that are at least 95% owned are consolidated for tax purposes, ERAMET being the Group parent.

Tax consolidation in France comprises the following companies:

Tax-consolidated companies	31/12/2011	31/12/2010	31/12/2009
Consolidated companies			
ERAMET	x	x	x
Metal Currencies	x	x	x
Metal Securities	x	x	x
ERAMET Holding Nickel (EHN)	x	x	x
Eurotungstène Poudres	x	x	x
ERAMET Holding Manganèse (EHM)	x	x	x
Société Industrielle de Métallurgie Avancée (S.I.M.A.)	x	x	x
ERAMET Alliages	x	x	x
Aubert & Duval (AD)	x	x	x
Airforge	x	x	x
Erasteel	x	x	x
Erasteel Commentry		x	x
Erasteel Champagnole	x	x	x
Valdi	x		
Non-consolidated companies			
ERAMET International	x	x	x
ERAMET Ingénierie (formerly TEC)	x	x	x
ERAMET Research (formerly CRT)	x	x	x
Eramine	x	x	x
Forges de Monplaisir	x	x	x
Supa	x	x	x
Transmet	x	x	x
Brown Europe	x	x	x
Metal Securities Investissement	x		
AD TAF	x		

Tax group losses utilisable at 31 December 2011 totalled €94.4 million.

Note 24. Net financial income

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Dividends from associates ⁽¹⁾	558,855	81,152
Interest from associates ⁽²⁾	15,403	9,404
Other dividends and interest	(883)	270
Reversal of provisions ⁽³⁾		34,039
Foreign currency gains ⁽⁴⁾	7,452	6,153
Financial income	580,828	131,017
Depreciation and amortisation expense and allocation to provisions ⁽³⁾	(229,699)	(1,384)
Interest and similar expenses ⁽⁵⁾	(11,071)	(14,095)
Foreign currency losses ⁽⁴⁾	(5,278)	(18,959)
Net losses on disposal of marketable securities		0
Financial expenses	(246,048)	(34,438)
NET FINANCIAL INCOME	334,779	96,579

(1) Dividends from the Manganese Division (€531 million) and from the Nickel Division (€27.9 million).

(2) Interest income on Group current account loans (€15.4 million).

(3) Net increase in the provision for financial contingencies covering the potential loss on the Metal Securities bond portfolio secured by ERAMET: (€8.3) million, increase in the provision for Erallloys shares of (€195) million and for Tinfos of (€22) million, and increase in the provision for treasury shares held under the price support agreement: (€4.4) million.

(4) Net foreign currency gain of €2.2 million, primarily stemming from the remeasurement of the Group's foreign currency loans and borrowings.

(5) Interest expenses on Metal Securities financing of (€7.5) million, and (€2.1) million in fees for the non-use of the syndicated credit facility.

Note 25. Extraordinary items

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Hedging gains	1	1
Income on share capital transactions ⁽¹⁾	52,671	85,934
Reversal of provisions and expense transfer ⁽²⁾	796	13,362
Extraordinary income	53,468	99,297
Hedging expenses	2	(4)
Expenses on share capital transactions ⁽¹⁾	(4,435)	(4,992)
Extraordinary depreciation and amortisation expense and allocation to provisions ⁽³⁾	(9,831)	(19,757)
Extraordinary expenses	(14,264)	(24,753)
EXTRAORDINARY ITEMS	39,203	74,544

(1) In June 2011, sale to the Gabonese State of 31,935 Comilog S.A. shares, generating a gain of €49.2 million, and net carrying amount of shares granted to employees of French companies under the 2009 bonus share plan: (€1) million.

(2) €0.8 million reversal of the regulated provisions for Sandouville assets.

(3) Increase in regulated provisions of (€2.7) million and increase in miscellaneous receivables of (5.8) million, mainly on the Lithium exploration and development project.

Note 26. Workforce

	FY 2011	FY 2010
Management	190	152
Supervisory staff	230	230
Workforce at end of period	420	382
Average no. of employees	402	381

Note 27. Off-balance-sheet commitments

<i>(in thousands of euros)</i>	31/12/2011	31/12/2010
Commitments given		
Endorsements, pledges and guarantees	941	76
Collateral security	Nil	Nil
Forward/future sales in USD	173,229	172,696
Commitments received		
Endorsements, pledges and guarantees	Nil	Nil
Collateral security	Nil	Nil
Multi-currency syndicated loan	800,000	600,000
Forward/future purchases in USD	0	0
Reciprocal commitments		
Currency hedge via <i>Metal</i> Currencies	68,216	82,182

The above table does not include current business orders or liabilities stemming from orders for non-current assets as part of capital expenditure programmes.

Note 28. Risk management

28.1. 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 SLN subsidiary, all commercial hedging is performed on behalf of SLN, to which it is re-invoiced directly 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 loan maturity. At 31 December 2011, only the loan to Strand Minerals Indonesia was currency-hedged.

28.2. 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 2011, 1,298 tonnes were hedged for a fair value of +USD7.338 million [for record, in 2010: 7,674 tonnes for a fair value of (USD1.400 million)] plus an option on 1,008 tonnes maturing in 2013 exercisable by the counterparty in November 2012, with a nil fair value at 31 December 2011. ERAMET mainly uses forward transactions, combined call and put options (collars) and call options.

28.3. Credit or counterparty risk

ERAMET's counterparty risks mainly arise on its commercial transactions and hence on trade receivables. ERAMET may thus 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 comprised of leading international metallurgy groups for which insolvency risks are limited.

28.4. Interest rate risk

At 31 December 2011, ERAMET had no interest rate hedges covering its net debt. Its surpluses invested with Metal Securities are remunerated at (floating) market rates.

28.5. 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 2011 stood at €212.7 million (compared with net debt of €233.1 million at 31 December 2010). All its debt is to Metal Securities, the Group's special-purpose company, in charge of pooling and managing Group surpluses.

Furthermore, the Company may if necessary resort to any of the following three additional sources of financing:

28.5.1. Revolving credit facilities

In 2011, ERAMET renewed the multi-currency revolving credit facility agreement signed in 2005, raising it from €600 to €800 million, for a five-year period, with the option of extending it to six years. In accordance with the terms of the agreement, the Group asked the lenders for a one-year extension to the facility. This credit facility has thus since early 2012 been extended to 18 January 2017. This credit facility is intended to finance operations and investment in assets and was entered into on terms congruent with market conditions at the time of its signature. This facility is subject to a single covenant, relating to the ratio of the Group's net debt to shareholders' equity. It was wholly satisfied at 31 December 2011.

28.5.2. Commercial paper

In 2005, ERAMET set up a €400 million commercial paper programme, €15 million of which was raised in 2011.

28.5.3. Repos

On 20 December 2011, ERAMET renewed its commitment to set up a repo programme. The draw-down amount is €180 million with a revolving three-month maturity. This facility is confirmed. Nothing had been drawn down at 31 December 2011.

Note 29. Property finance leases

Not applicable.

Note 30. Consolidation of the corporate financial statements

The Company is consolidated within the ERAMET Group, of which it is the parent company.

Note 31. Compensation of management and supervisory bodies

<i>(in thousands of euros)</i>	FY 2011	FY 2010
Short-term benefits		
• Fixed remuneration	2,824	2,700
• Variable remuneration	1,267	1,779
• Directors' fees	379	398
Other benefits		
• Post-employment benefits	0	73
TOTAL	4,470	4,951

The ten highest paid individuals received a total of €4.7 million in 2011.

Note 32. Share subscription and purchase options, bonus shares

Subscription options

	Date of General Shareholders' Meeting	Date of Board meeting	Subscription price	No. of beneficiaries		Awarded at outset	Exercised or lapsed before		Lapsed in 2011	Still to be exercised as from 1 Jan. 2012	Number of beneficiaries at 1 Jan. 2012	Expiry date of liabilities
				at outset	at 1 Jan. 2011		1 Jan. 2011	in 2011				
1	23/05/2002	15 Dec. 2004	64.63 EUR	81	25	130,000	(100,248)	(5,650)	-	24,102	20	15/12/2012
TOTAL						130,000	(100,248)	(5,650)	-	24,102		

Exercisable only as from 12 December 2006. The shares could not be sold prior to 14 December 2008.

Bonus shares

(1)	Date of General Shareholders' Meeting	Date of Board meeting	Subscription price	No. of beneficiaries		Awarded at outset	Subscribed or lapsed			Expired in 2011	Still to be exercised as from 1 Jan. 2012	Number of beneficiaries at 1 Jan. 2012	Expiry date of liabilities
				at outset	at 1 Jan. 2011		before 1 Jan. 2011	Definitively awarded in 2011	Lapsed in 2011				
1	11/05/2005	25/04/2007	bonus	1	-	10,000	(10,000)	-	-	-	-	-	-
2	11/05/2005	23/07/2007	bonus	61	-	16,000	(16,000)	-	-	-	-	-	-
3	13/05/2009	29/07/2009	bonus	14,766	14,109	73,830	(3,285)	(25,010)	(2,380)	-	43,155	8,631	29/07/2013
4	20/05/2010	20/05/2010	bonus	14,405	14,405	28,810	(256)	(462)	(882)	-	27,210	13,605	20/05/2014
5	20/05/2010	20/05/2010	bonus	162	162	65,008	-	-	(680)	(5,415)	58,913	159	20/05/2015
6	20/05/2010	16/02/2011	bonus	14,298	-	28,596	-	(292)	(608)	-	27,696	13,848	16/02/2015
7	20/05/2010	16/02/2011	bonus	205	-	71,665	-	-	(425)	(5,957)	65,283	201	16/02/2016
TOTAL						293,909	(29,541)	(25,764)	(4,975)	(11,372)	222,257		

(1) *Definitive grant date: 3 = 29 July 2011 France and 29 July 2013 World; 4 = 20 May 2012 and 20 May 2014; 5 = 20 May 2013 and 20 May 2015; 6 = 16 February 2013 and 16 February 2015; and 7 = 16 February 2014 & 16 February 2016.*

(1) *The shares cannot be sold prior to: 3 = 29 July 2013; 4 = 20 May 2014; 5 = 20 May 2015; 6 = 16 February 2015; and 7 = 16 February 2016.*

Note 33. Individual training rights

Individual training rights vesting over a full year amount to 20 hours per full-time employee and pro rata for those working part-time or beginning during the year.

Taking into account the size of the workforce at 31 December 2011, individual training rights amounted to 32,015 hours (32,289 hours at 31 December 2010).

Note 34. Other information

Carlo Tassara France (a company belonging to Mr Romain Zaleski's group) holds 3,394,146 shares in ERAMET (equivalent to 12.87% of its capital at 31 December 2009), on the basis of an estimate using the most recent declaration of the crossing of a shareholding threshold by the first-mentioned company (No. 207C0134 of 17 January 2007).

On December 17, 2009, Carlo Tassara France summoned S.I.M.A., SORAME and CEIR, as well as members of the Duval family, to appear before the Paris Commercial Court. The summons specifies that these proceedings are being brought in the presence of ERAMET. In its writ of summons, Carlo Tassara France claims first, that the S.I.M.A. group's presentation to the ERAMET shareholders in 1999 misled those shareholders by concealing from them the indebtedness of SMC, a 38.5%-held subsidiary of S.I.M.A., consolidated not fully, but by the equity method (as an associate company), whereas S.I.M.A. 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 S.I.M.A. from 1999 to 2002 (at which date, SMC filed for bankruptcy), by loans alleged to have been granted unlawfully for failure to receive prior authorisation from the ERAMET Board of Directors; the claimant also requests the Court 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 S.I.M.A.'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 S.I.M.A. shares and of the dividends received from S.I.M.A. 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 S.I.M.A. (and hence of Aubert & Duval) from the Group's scope of consolidation. ERAMET points out that the S.I.M.A. 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 July 6, 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 threw out all claims made by Carlo Tassara France, by virtue of the fact that they were barred under the statute of limitations. Carlo Tassara France appealed the ruling.

Agreement to increase the Gabonese Republic's interest in Comilog S.A.:

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 S.A.; 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 S.A.'s capital, which would increase the Gabonese Republic's shareholding in Comilog S.A. to 35.4%. In the first stage (2010-2011) a 3.54% interest in Comilog S.A. will be transferred.

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.

On 31 December 2010, the first-stage transfer covering the period 2010-2011, of 50,583 shares representing 2.17% of the share capital of Comilog S.A. was completed and recognised under shareholders' equity in the Group financial statements. In June 2011, ERAMET transferred 31,935 shares representing 1.37%.

Note 35. Events after the reporting date

To the best of the Company's knowledge, no other events have arisen since the reporting date.

6.2.3. Table of subsidiaries and investments

As at 31 December 2011

				Share of capital held	Gross carrying amount of securities held	Net carrying amount of securities held	Loans and advances made and not yet repaid	Deposits, guarantees and endorsements provided	Dividends received during the financial year	Total sales in past financial year	Profit (loss) in most recent financial year
		Share capital	shareholders' equity other than share capital								
<i>(in thousands of euros or in thousands of foreign currency units, except in millions of XAF)</i>	Currency	Currency	%	EUR	EUR	EUR	EUR	EUR	Currency	Currency	
I. Detailed information on each stock (gross amount exceeding 1% of the Company's share capital)											
Subsidiaries (at least 50% of share capital owned)											
Eras	EUR	2,000	0	100.00	1,986	1,986				0	0
ERAMET Ingénierie	EUR	525	4,050	100.00	838	838				9,048	139
ERAMET Research	EUR	1,410	10,438	100.00	1,161	1,161	1,633			19,225	4,559
ERAMET International	EUR	160	2,090	100.00	892	892				9,910	186
ERAMET Holding Nickel	EUR	227,104	15,625	100.00	229,652	229,652			27,820	0	8,359
Weda Bay Mineral Inc	USD	35,505	19,447	100.00	3,616	3,616	51,094			0	(15,189)
ERAMET Holding Manganèse	EUR	310,156	220,514	100.00	310,156	310,156			120,029	0	142,288
Eralloys Holding	NOK	12,800	371,679	100.00	419,445	224,445			369,046	0	12,237
S.I.M.A.	EUR	148,000	10,029	100.00	329,584	325,100	197,269			4,599	(4,734)
Erasteel	EUR	15,245	75,451	100.00	143,169	50,169	80,557			189,972	20,509
					1,440,499	1,148,015					
Investments in associates (between 10% and 50% owned)											
Comilog	XAF	40,812	405,665	23.22	53,407	53,407			41,849	379,591	130,196
Tinfos	NOK	3,088	181,124	33.35	46,751	24,751			66	101,046	14,028
					100,158	78,158					
II. General information on other stocks (gross amount at most equal to 1% of the Company's share capital)											
• French subsidiaries	EUR				147	147	3,130				
• Foreign subsidiaries	EUR										
• Investments in associates	EUR				685	685			45		
TOTAL					1,541,490	1,227,006	333,684	0	558,855		

SIREN business identifier

Address of registered office

I. Detailed information on each stock (gross amount exceeding 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
ERAMET Research	301 608 634	1, avenue Albert-Einstein BP 120 78193 Trappes
ERAMET International	398 932 939	Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France
ERAMET Holding Nickel	335 120 515	Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France
Weda Bay Mineral Inc	N/A	14 th Floor, 220 Bay Street Toronto Ontario, M5J2W4 Canada
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
S.I.M.A.	562 013 995	Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France
Erasteel	352 849 137	Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France
Investments in associates (between 10% and 50% owned)		
Comilog	N/A	Compagnie Minière de l'Ogooué Z.I. 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 Separate Financial Statements – Year ended 31 December 2011

To the Shareholders,

In accordance with our appointment as statutory auditors at your Annual General Meeting, we hereby report to you for the year ended December 31, 2011 on:

- the audit of the accompanying financial statements of ERAMET;
- the justification of our assessments;
- the specific procedures and disclosures required by law.

The 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. These 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 includes examining, using sample testing techniques or other selection methods, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made, as well as evaluating the overall financial statement presentation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

In our opinion, the financial statements give a true and fair view of the financial position and the assets and liabilities of the Company as of December 31, 2011 and the results of its operations for the period then ended in accordance with accounting principles generally accepted in France.

II. JUSTIFICATION OF OUR ASSESSMENTS

Pursuant to Article L.823-9 of the French Commercial Code (Code de Commerce) related to the justification of our assessments, we hereby report on the following:

As indicated in Note 3.2 “Accounting policies and methods” to the financial statements, the valuation of the participating interests in the subsidiaries is carried out by taking into account the value of the net assets held and the profitability outlook. Our work consisted in assessing the financial information and the assumptions upon which these estimates were based and in reviewing the calculations performed by your Company. Based on this work, we assessed the reasonableness of these estimates.

These assessments were performed as part of our audit approach for the financial statements taken as a whole and therefore contributed to the expression of our opinion in the first part of this report.

II. SPECIFIC PROCEDURES AND DISCLOSURES

We have also performed the other procedures required by law, in accordance with professional standards applicable in France.

We have no comment to make regarding the fair presentation and consistency with the financial statements of the information given in the management report of the Board of Directors and the documents addressed to the shareholders with respect of 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 relating to remunerations and benefits received by the Directors and officers and any other commitments made in their favor, 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.

Pursuant to French law, we have verified that the management report contains the appropriate disclosures as to the identity of and voting rights held by shareholders.

Paris – La Défense and Neuilly sur Seine, February 22, 2012

The Statutory Auditors

Deloitte & Associates
Alain Penanguer

Ernst & Young et Autres
Aymeric de la Morandière

6.2.5. Special Report of the Statutory Auditors on related party transactions – Year ended 31 December 2011

To the Shareholders,

In our capacity as Statutory Auditors of your Company, we hereby report to you on regulated agreements and commitments with third parties.

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 for the purpose of approving them.

Our role is also to provide you with the information provided for in Article R. 225-31 of the French Commercial Code in respect of the performance of the agreements and commitments, previously approved by the Shareholders' Meeting and having continuing effect during the year, 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

Pursuant to Article L. 225-40 of the French Commercial Code, we have been advised of the following agreements and commitments previously authorized by your Board of Directors.

With Mr. Patrick Buffet

On May 11, 2011, the Board of Directors of Eramet decided to renew the term of office of the Chairman & CEO Mr. Patrick Buffet, and on July 27, 2011, at the recommendation of the Compensation Committee, unanimously decided, with Mr. Patrick Buffet abstaining, to maintain all of the provisions of his compensation package as well as the provisions set forth in his corporate officer agreement dated February 20, 2008, by including all the amendments decided since that date by the Board of Directors of Eramet, at the recommendation of the Compensation Committee.

Under the Chairman & CEO's corporate officer agreement of February 20, 2008, it is specified that termination benefits are to be owed should Mr. Patrick Buffet leave the Company as a result of removal or resignation with cause, non-renewal of his term of office or modification of the contractual reasons for which he joined the Eramet Group.

The amount of termination benefits to be owed in the event of departure will be equal to three times his most recent annual gross 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.

In accordance with the provisions of Article L. 225-42-1 of the French Commercial Code, 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.

AGREEMENTS AND COMMITMENTS ALREADY APPROVED BY THE SHAREHOLDERS' MEETING

AGREEMENTS AND COMMITMENTS APPROVED DURING PREVIOUS YEARS AND HAVING CONTINUING EFFECT IN 2011

In addition, pursuant to Article R.225-30 of the French Commercial Code, we have been advised that the following agreements and commitments, approved in previous years by the Shareholders' Meeting, have had continuing effect during the year.

With Le Nickel – SLN

Technical assistance contract

Type and purpose

Pursuant to the technical assistance contract signed in 1999, Eramet provides strategic, industrial, financial, tax and human resources management assistance to Le Nickel-SLN. This agreement was amended with retroactive effect to January 1, 2010.

Terms and conditions

These services are remunerated based on the costs actually incurred by Eramet to perform such services, plus an 8% margin. In 2011, the amount invoiced totaled €8,589,000, compared to €9,229,000 in 2010.

Marketing agreement

Type and purpose

The marketing agreement entered into between Eramet and Le Nickel-SLN in 1985 pursuant to which Eramet ensures the marketing of SLN-Le Nickel products (excluding ore) was also amended with retroactive effect to January 1, 2010.

Terms and conditions

According to this agreement, Eramet purchased nickel and ferro-nickel matte from Le Nickel-SLN at a selling price that allowed Eramet to make a 3% margin, plus a premium whose calculation methods and trigger price have been redefined. The total amount invoiced by Le Nickel-SLN to Eramet stood at €829,976,643 in 2011, compared to €858,254,658 in 2010.

As part of 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 by Le Nickel-SLN stood at €26,910,523 in respect of 2011, compared to €24,825,464 in 2010.

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

Type, purpose and terms and conditions

The Board of Directors of February 17, 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.

Defined benefits retirement plan

Type, purpose and terms and conditions

This plan, the so-called Article 39 plan, is applicable to all Eramet Group corporate officers and continued without modification during fiscal year 2011.

Paris – La Défense and Neuilly sur Seine, February 22, 2012

The Statutory Auditors

Deloitte & Associates

Alain Penanguer

Ernst & Young et Autres

Aymeric de la Morandière

6.2.6. Separate financial results over the past five financial years

	2007	2008	2009	2010	2011
Share capital at year-end					
a) Share capital (<i>in euros</i>)	79,012,144	79,956,455	80,427,930	80,866,071	80,883,304
b) Number of shares issued	25,905,621	26,215,231	26,369,813	26,513,466	26,519,116
Transactions and profit (loss) for the period (<i>in thousands of euros</i>)					
a) Sales ex. tax	1,369,986	1,033,393	751,791	1,067,012	1,043,590
b) Profit (loss) before tax, employee profit-sharing, depreciation, amortisation and provisions	221,083	152,814	106,182	127,381	608,704
c) Income tax	22,027	(20,076)	(6,433)	(9,900)	(9,641)
d) Employee profit-sharing	0	0	0	0	0
e) Profit (loss) after tax, employee profit-sharing, depreciation, amortisation and provisions	206,516	148,159	(29,942)	146,112	340,942
f) Proposed dividend	155,434	137,630	47,466	92,797	0
Earnings per share (<i>in euros</i>)					
a) Profit (loss) after tax, employee profit-sharing, but before depreciation, amortisation and provisions	7,68	6,59	4,27	5,18	23,32
b) Profit (loss) after tax, employee profit-sharing, depreciation, amortisation and provisions	7,97	5,65	(1,14)	5,51	12,86
c) Proposed dividend per share	6,00	5,25	1,80	3,50	
Personnel					
a) Average number of employees	347	369	383	381	402
b) Total payroll (<i>in thousands of euros</i>)	27,914	26,331	27,350	30,873	32,573
c) Amounts paid out in employee benefits (<i>in thousands of euros</i>)	10,165	11,250	15,478	22,105	50,189

6.3. CONSOLIDATED FINANCIAL STATEMENTS FOR 2010 AND 2009

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) the 2010 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 2010 Reference Document filed with the AMF on 5 April 2011;
- b) the 2009 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 2009 Reference Document filed with the AMF on 16 April 2010.

The sections of the 2010 and 2009 Reference Documents not included are therefore either of no relevance to investors or covered elsewhere in this Registration Document.

The two above-mentioned Reference and Registration Documents can be found on the Company's website (www.eramet.com) and on that of the AMF (www.amf-france.org).

6.4. DIVIDEND POLICY

6.4.1. Dividend payout arrangements

Dividends are paid annually at the timing 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 Article L. 232-12-2 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 Article L. 232-18-1 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 that lapse, 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 2011 EARNINGS ALLOCATION

The proposed allocation of 2011 earnings can be found in resolution two 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 previous financial year (in 2012: as from 23 May 2012).

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. The proposed dividend is €2.25 per share.

Dividends paid out over the past few years

	2011	2010	2009	2008	2007
Number of shares receiving dividends	26,519,116	26,513,466	26,369,813	26,215,231	25,905,621
Profit (loss) for the period attributable to equity holders of the parent	€195 million	€328 million	(€265) million	€694 million	€582 million
Dividends per share	€2.25	€3.50	€1.80	€5.25	€6.00
TOTAL PAYOUT	€59.7 million	€92.8 million	€47 million	€137.6 million	€155 million

6.4.3.2. OUTLOOK

The Company intends to continue to follow the policy applied over recent years.

6.5. FEES PAID TO THE STATUTORY AUDITORS

6.5.1. Organisation of internal control

In recent years, the Group has asked the Company's Statutory Auditors in preference to audit its main global subsidiaries. However, for historical or practical reasons, other firms carry out audits as can be seen from the following table:

<i>(in thousands of euros)</i>	2011	2010	2009
Ernst & Young	1,668	1,580	1,279
Deloitte & Associés	1,689	1,482	1,270
Other	230	311	393
TOTAL	3,587	3,373	2,942

6.5.2. Fees paid to the various auditors

Full details of the fees paid to the various audit firms over the past three financial years, broken down by type of service, can be found in Note 33 to the consolidated financial statements.

7

CORPORATE AND SHARE-CAPITAL INFORMATION

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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 €47.26) on 29 September 1994, following the decision of the Combined Ordinary and Extraordinary General Shareholders' Meeting of 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 compartment).

The Company's shares are traded on the NYSE Euronext Paris market (ISIN code: FR0000131757) where ERAMET is included in compartment A.

The stock is part of the SBF 80, 120 and 250 Euronext Paris indices. ERAMET was included in the DJ STOXX 600 index in late 2007. ERAMET joined the Euronext Paris N 100 index on 2 January 2008. No shares in any other Group company are traded on any other stock exchange.

7.1.2. Share price performance

Over the five years from 30 December 2006 to 31 December 2011, the performance of the ERAMET stock closely tracked that of the Dow Jones Stoxx 600 Basic Resources Europe index (-22% for ERAMET compared with -19% for the Dow Jones) whereas the CAC lost 43% over the same period.

The ERAMET stock price dropped 63% in 2011 closing the year at €94.50, giving the Company a stock market capitalisation of €2.5 billion, in contrast with a fall of 19% in 2011 for the CAC 40 index and a 30% drop in the DJ Basic Resources over the same period.

The stock fluctuated between a high of €276.65 on 16 February 2011 and a low of €80.05 on 23 November 2011.

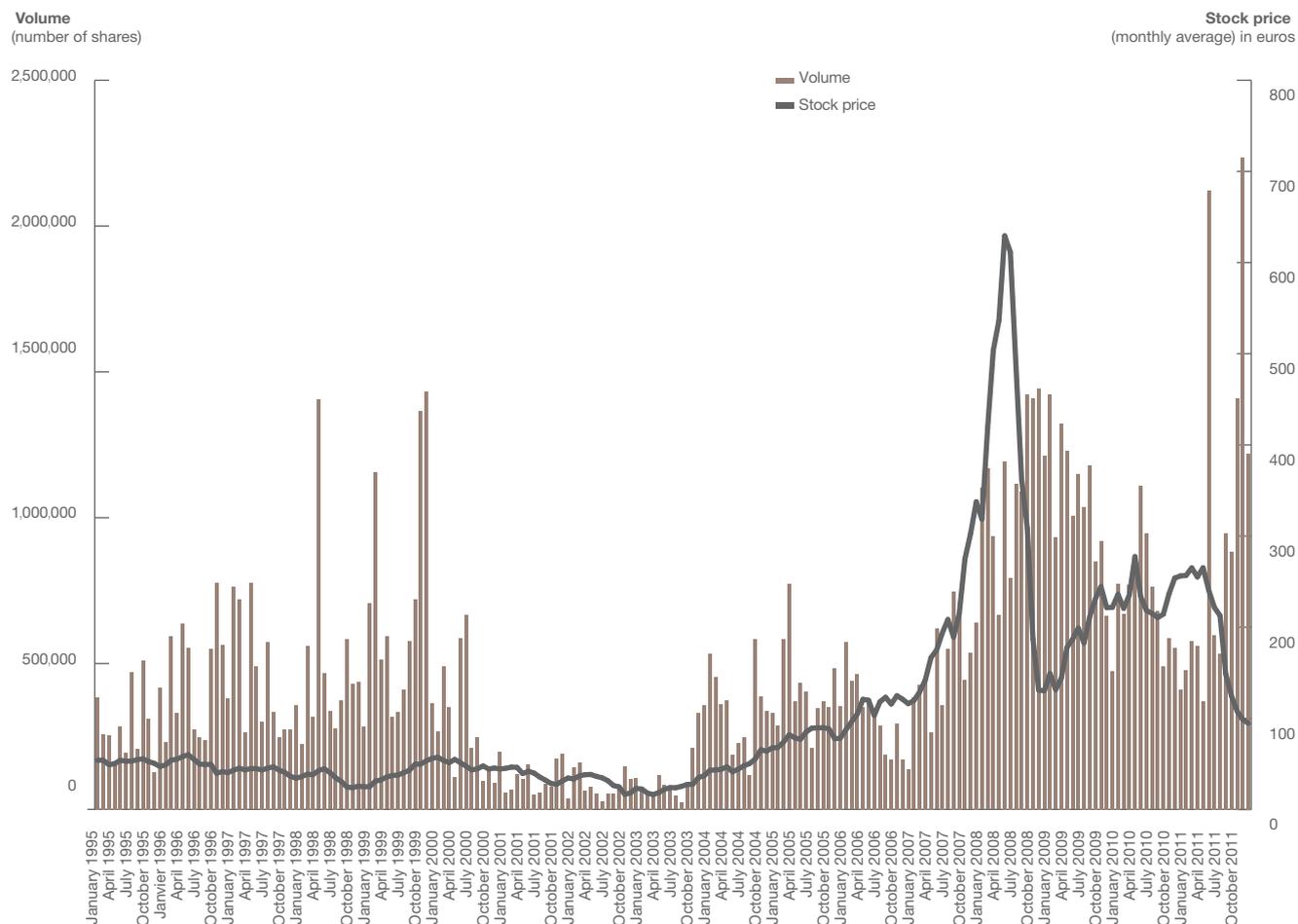
ERASHARE PROGRAMME CONTINUED FOR ERAMET GROUP EMPLOYEES

The EraShare programme was continued in 2011, with each Group employee receiving two ERAMET shares, following 5 shares per employee in 2009 and 2 shares per employee in 2010.

FINANCIAL COMMUNICATIONS

The Group's financial communications continued to be enhanced across a range of media: the Registration Document, the business report, and the Group website www.eramet.com. The presentations of the half-yearly and annual results are webcast in English and French. Financial analysts were given the opportunity to visit the Trappes research centre and the Norwegian plant in Tyssedal (titanium dioxide) and met ERAMET Alloys at the Bourget show.

Changes in trading volumes and ERAMET share price performance



Stock market data

	Price (in euros)		Year ended 31/12	Stock market capitalisation at 31/12 (in millions of euros)	Number of shares traded (daily average)
	Highs & lows over the period	Low			
1994*	57.93	47.26	52.59	771	37,385
1995*	58.39	41.31	48.78	743	15,673
1996*	61.89	34.91	41.47	643	23,981
1997*	53.20	33.08	34.76	542	22,172
1998*	47.72	22.11	25.60	399	24,176
1999*	58.75	23.15	57.00	1,393	33,810
2000*	61.75	41.90	43.55	1,076	14,100
2001	47.80	22.00	34.60	855	4,664
2002	39.80	13.90	21.05	527	4,928
2003	38.60	14.50	38.50	985	5,834
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

* Recalculated in euros.

	Price (in euros)			Number of
	Low	High	Average (year-end)	shares traded (monthly average)
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
2010				
December	265.00	238.50	256.27	411,443
November	277.00	234.30	253.93	552,238
October	255.35	218.15	236.75	585,637
September	222.15	199.00	214.35	490,807
August	228.10	193.70	210.61	678,536
July	230.50	198.25	215.08	761,711
June	236.80	201.00	218.52	945,600
May	274.00	203.75	233.71	1,110,292
April	298.40	250.20	277.46	874,592
March	258.95	221.15	235.37	769,847
February	231.30	203.15	220.07	668,710
January	260.95	215.20	236.05	772,721
2009				
December	216.60	234.15	221.816	474,492
November	207.00	230.50	221.510	664,166
October	210.00	272.30	244.570	919,131
September	213.55	248.80	231.111	850,553
August	190.00	244.00	211.362	1,179,815
July	153.51	204.00	182.722	1,035,733
June	175.00	238.50	199.005	1,148,573
May	161.30	204.74	186.854	1,004,671
April	153.75	195.00	177.945	1,229,638
March	109.02	185.00	144.122	1,321,855
February	108.00	149.50	131.51	932,017
January	122.00	193.00	149.32	1,422,169

	Price (in euros)			Number of shares traded
	Low	High	Average (year-end)	(monthly average)
2008				
December	115.00	149.50	130.150	1,211,461
November	96.06	175.00	131.021	1,443,299
October	131.12	278.79	186.849	1,410,394
September	240.72	375.98	308.481	1,423,270
August	318.03	450.99	361.961	1,090,663
July	400.00	634.99	485.971	1,116,959
June	563.72	655.80	611.596	794,622
May	561.20	669.98	629.300	1,191,992
April	473.30	595.00	536.614	665,791
March	402.00	560.00	503.747	934,809
February	328.00	509.96	418.39	1,168,588
January	249.00	367.90	318.37	1,101,950

Source: NYSE Euronext.

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

Tel. +33 (0)826 109 119.

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 2011, the share capital totalled €80,883,303.80, split into 26,519,116 fully paid-up shares all in the same class with a par value of €3.05 each.

7.2.1.2. RIGHTS ATTACHING 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.

Subscribed unpaid capital

Nil.

7.2.2. Securities not representing share capital

FOUNDERS' SHARES, VOTING RIGHTS CERTIFICATES

Nil.

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 changes can be found in Note 26 to the consolidated financial statements in Chapter 6 of this document.

7.2.4. Changes in shareholdings over the past three years

Shareholdings have not changed materially over the past three years, or since the substitution in 2001 of AREVA for Cogema, which had itself acquired ERAP's rights in 1999.

The Company has not been notified of any material change in shareholdings since the end of the year.

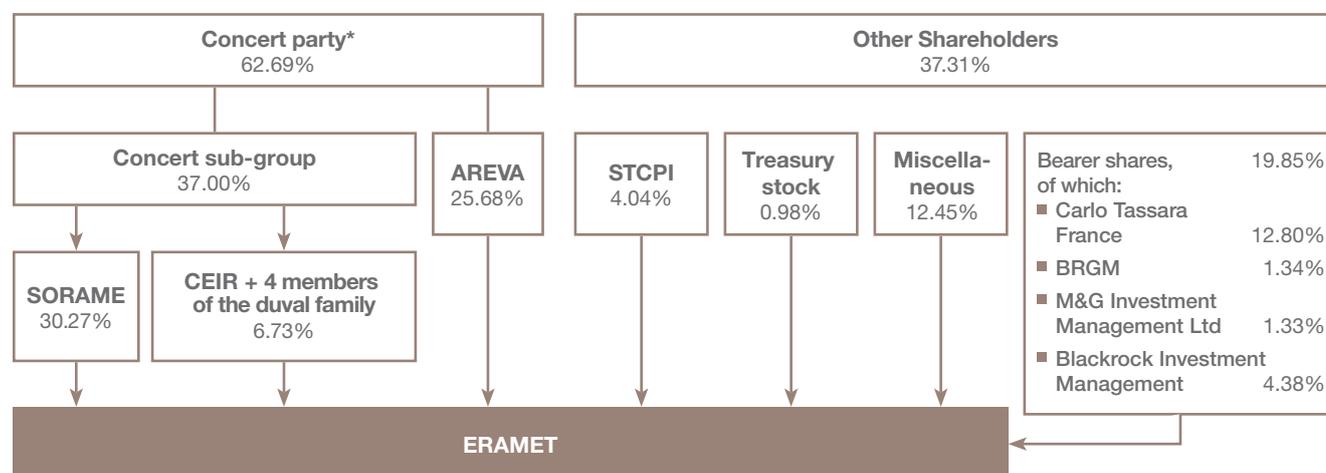
Changes may arise from the exercise of options granted under stock option plans or the vesting of shares granted under bonus share plans or the automatic vesting of double voting rights for shares that have been registered for more than two years.

7.2.5. Share ownership

The share ownership of which the Company is aware 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 shareholding threshold crossings as well as the exercise of still-valid options and bonus shares.

7.2.5.1. OWNERSHIP STRUCTURE

Company shareholders as at 31 December 2011 (in % of shares)



* Pursuant to a shareholders' agreement for which CMF (Financial Markets Regulator) opinion No. 199CO577 was notified on 18 May 1999.

7.2.5.2. 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)

Main shareholders	Number of shares	Percentage of share capital	Number of votes	Percentage of actual voting rights
SORAME ⁽¹⁾ (Société de Recherche et d'Applications Métallurgiques)	8,027,095	30.27%	15,849,106	35.87%
CEIR ⁽¹⁾ (Compagnie d'Études Industrielles de Rouvray)	1,783,996	6.73%	3,567,992	8.07%
Other individuals in the concert party (Cyrille, Georges, Édouard and Patrick Duval)	2,289	NS	4,512	NS
Total for the SORAME/CEIR ⁽¹⁾ concert sub-group	9,813,380	37.00%	19,421,610	43.95%
AREVA ⁽¹⁾	6,810,317	25.68%	13,567,594	30.70%
Total concert party (concert sub-group/AREVA) ⁽¹⁾	16,623,697	62.69%	32,989,204	74.65%
STCPI (Société Territoriale Calédonienne de Participations Industrielles)	1,070,586	4.04%	2,141,172	4.85%
Employees (ERAMET share fund)	33,854	0.13%	56,464	0.13%
ERAMET treasury shares	259,546	0.98%	0	0.00%
Corporate officers (excluding concert party)	15,087	NS	18,010	NS
Carlo Tassara France (Romain Zaleski group company) ⁽²⁾	3,394,146	12.80%	3,394,146	7.68%
BRGM ⁽³⁾	356,044	1.34%	356,044	0.81%
M&G Investment Management Ltd. ⁽⁴⁾	353,627	1.33%	353,627	0.80%
BlackRock Investment Management (UK) Ltd. ⁽⁵⁾	1,161,174	4.38%	1,161,174	2.63%
Other	3,251,355	12.26%	3,403,538	7.7%
TOTAL SHARES	26,519,116	100.00%	44,190,796	100.00%
TOTAL REGISTERED SHARES	18,350,116	69.20%	36,021,796	81.51%
TOTAL BEARER SHARES	8,169,000	30.80%	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. 199CO577 from France's Financial Markets Board on 18 May 1999.

(2) Since the most recent declaration by Carlo Tassara France of its crossing a shareholding threshold, No. 207CO134 of 17/01/07

(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, as of November 2011, Prudential plc controlled 524,779 shares.

(5) Estimate on the basis of the most recent Thomson Reuters survey. Blackrock Investment Management (UK) Ltd stated that, as of 29 November 2011, BlackRock Global controlled 816,868 shares, and that BlackRock Inc. controlled 1,357,908 shares (5.12% of the share capital) as of 16 February 2012 and 1,303,888 shares (4.92% of the share capital) as of 13 March 2012.

7.2.5.3. AT 31 DECEMBER 2010 (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	Number of shares	Percentage of share capital	Number of votes	Percentage of actual voting rights
SORAME ⁽¹⁾ (Société de Recherche et d'Applications Métallurgiques)	7,997,095	30.16%	15,816,014	35.68%
CEIR ⁽¹⁾ (Compagnie d'Études Industrielles de Rouvray)	1,783,996	6.73%	3,567,992	8.05%
Other individuals in the concert party (Cyrille, Georges, Édouard and Patrick Duval)	2,283	NS	3,504	NS
Total for the SORAME/CEIR ⁽¹⁾ concert sub-group	9,783,374	36.90%	19,387,510	43.74%
AREVA ⁽¹⁾	6,810,317	25.69%	13,567,594	30.61%
Total concert party (concert sub-group/AREVA) ⁽¹⁾	16,593,691	62.59%	32,955,104	74.34%
STCPI (Société Territoriale Calédonienne de Participations Industrielles)	1,070,586	4.04%	2,141,172	4.83%
Employees (ERAMET share fund)	31,138	0.12%	50,748	0.11%
ERAMET treasury shares	103,851	0.39%	0	0.00%
Corporate officers (excluding concert party)	14,045	NS	16,836	NS
Carlo Tassara France (Romain Zaleski group company) ⁽²⁾	3,394,146	12.80%	3,394,146	7.66%
BRGM ⁽³⁾	356,044	1.34%	356,044	0.80%
M&G Investment Management Ltd. ⁽⁴⁾	1,507,277	5.68%	1,507,277	3.40%
BlackRock Investment Management (UK) Ltd. ⁽³⁾	1,044,297	3.94%	1,044,297	2.36%
Other	2,398,391	9.1%	2,861,923	6.45%
TOTAL SHARES	26,513,466	100.00%	44,327,547	100.00%
TOTAL REGISTERED SHARES	18,153,898	68.47%	35,967,979	81.14%
TOTAL BEARER SHARES	8,359,568	31.53%	8,359,568	18.86%

(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 most recent declaration by Carlo Tassara France of its crossing a 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 identifiable bearer share (TPI) survey. In March 2009, M&G Investment Management Ltd, a subsidiary of Prudential plc, stated that, as from 24 March 2009, Prudential plc controlled 792,995 shares.

7.2.5.4. AT 31 DECEMBER 2009 (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	Number of shares	Percentage of share capital	Number of votes	Percentage of actual voting rights
SORAME ⁽¹⁾ (Société de Recherche et d'Applications Métallurgiques)	7,822,011	29.66%	15,640,930	35.42%
CEIR ⁽¹⁾ (Compagnie d'Études Industrielles de Rouvray)	1,783,996	6.77%	3,567,992	8.08%
Other individuals in the concert party (Cyrille, Georges, Édouard and Patrick Duval)	2,223	NS	3,444	NS
Total for the SORAME/CEIR ⁽¹⁾ concert sub-group	9,608,230	36.44%	19,212,366	43.50%
AREVA ⁽¹⁾	6,757,277	25.63%	13,514,554	30.60%
Total concert party (concert sub-group/AREVA) ⁽¹⁾	16,365,507	62.06%	32,726,920	74.11%
STCPI (Société Territoriale Calédonienne de Participations Industrielles)	1,070,586	4.06%	2,141,172	4.85%
Employees (ERAMET share fund)	22,610	0.09%	42,220	0.10%
ERAMET treasury shares	81,732	0.31%	0	0.00%
Corporate officers (excluding concert party)	14,142	NS	15,033	NS
Carlo Tassara France (Romain Zaleski group company) ⁽²⁾	3,394,146	12.87%	3,394,146	7.69%
BRGM ⁽³⁾	356,044	1.35%	356,044	0.81%
M&G Investment Management Ltd. ⁽⁴⁾	1,553,229	5.89%	1,553,229	3.51%
BlackRock Investment Management (UK) Ltd. ⁽³⁾	1,157,153	4.39%	1,157,153	2.62%
Six Sis AG ⁽³⁾	406,082	1.54%	406,082	0.92%
Holta Invest AS	126,978	0.48%	126,978	0.29%
Other	1,821,604	6.95%	1,821,680	4.12%
TOTAL SHARES	26,369,813	100.00%	44,161,300	100.00%
TOTAL REGISTERED SHARES	18,049,498	68.45%	35,840,985	81.16%
TOTAL BEARER SHARES	8,320,315	31.55%	8,320,315	18.84%

(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 most recent declaration by Carlo Tassara France of its crossing a 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 identifiable bearer share (TPI) survey. In March 2009, M&G Investment Management Ltd, a subsidiary of Prudential plc, stated that, as from 24 March 2009, Prudential plc controlled 792,995 shares.

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 can be found in the Corporate Governance Chapter.

7.2.5.5. FORESEEABLE CHANGES IN VOTING RIGHTS

At 31 December 2011, a total of some 277,000 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, total double voting rights would increase to circa 18,350,000 plus the single voting rights of bearer shares, representing 8,169,000 additional rights at 31 December 2011.

7.2.6. Stock option plans and bonus shares

Details of the stock subscription option plans and bonus shares granted and still open at 31 December 2011 can be found in Note 25 to the ERAMET separate financial statements, set out in Chapter 6 of this document. The bonus shares allocated (under the plans dated 25 April 2007, 23 July 2007, 29 July 2009, 20 May 2010 and 16 February/2011) constitute shares already in existence.

On the basis of one share per option, the exercise of all valid subscription options not yet exercised under the plan dated 15 December 2004 would create 24,102 shares, thereby increasing the number of shares (on the basis of the figures at 31 December 2011) to 26,543,218, the share capital to €80,956,814.90 and the voting rights to 44,214,898.

7.2.7. Summary table of financial authorisations

Summary table of existing financial authorisations

Share capital increases authorised	
A. By issuing shares, various marketable securities and/or subscription warrants, with retention of shareholders' preferential subscription rights. Art. L. 225-129 of the French Commercial Code	
By the EGM for up to €24,000,000	11 May 2011 (Resolution 23)
Length of authorisation	26 months to 10 July 2013
Use of the authorisation	None
B. By issuing shares, various transferable securities and/or subscription warrants, with waiver of shareholders' preferential subscription rights	
By the EGM for up to €24,000,000	11 May 2011 (Resolution 25)
Length of authorisation	26 months to 10 July 2013
Use of the authorisation	None
C. By capitalising reserves, earnings, premiums or other capitalisable items	
By the EGM for up to €24,000,000	11 May 2011 (Resolution 24)
Length of authorisation	26 months to 10 July 2013
Use of the authorisation	None
D. By issuing shares or various marketable securities in consideration for non-cash transfers of assets to the Company, with waiver of shareholders' preferential subscription rights. Art. L. 225-147-6 of the French Commercial Code	
By the EGM for up to 10% of the share capital, or €8,086,607.	11 May 2011 (Resolution 26)
Length of authorisation	26 months to 10 July 2013
Use of the authorisation	None
Total issues limit (total A+B+C+D)	
By the EGM	11 May 2011 (Resolution 27)
Maximum amount	€24,000,000
Utilisation of authorisations	None
Share capital increase reserved for employees	
E. By the EGM	
Length of authorisation	11 May 2011 (Resolution 29)
Maximum amount	26 months to 10 July 2013
Use of the authorisation	€500,000
	None
Share capital reduction	
F. By the EGM	
Length of authorisation	11 May 2011 (Resolution 22)
Maximum amount	26 months to 10 July 2013
Use of the authorisation	10% of share capital
	None
Bonus share awards	
(Articles L. 225-197-1 and L. 225-197-2 of the French Commercial Code)	
By the EGM	20 May 2010
Maximum total number	300,000 shares
Length of authorisation	38 months to 19 July 2013
Used in 2010 and 2011	194,079
Number of shares lapsing in 2011	13,967
Balance available	119,888

A draft resolution will be submitted to the General Shareholders' Meeting called for 15 May 2012 to authorise the renewal of the authorisation to award bonus shares (see text of the draft resolutions in Chapter 8 of this document).

7.2.8. Description of the share buyback programme

7.2.8.1. REPORT ON THE 2011 BUYBACK PROGRAMME

The Combined Ordinary and Extraordinary General Shareholders' Meeting of 11 May 2011 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 maximum total expenditure by the Company of €1,325,705,500. This authorisation expires at the Ordinary General Shareholders' Meeting approving the financial statements for the 2011 financial year and was granted with a view to:

- supporting the share price *via* a liquidity contract with an investment services provider, in accordance with the AMAFI code of conduct recognised by the AMF;

- retaining or using them (by way of exchange, in payment or otherwise) for the purposes of acquisitions;
- delivering shares upon the exercise of rights attaching to marketable securities convertible to equity by means of redemption, conversion, exchange or otherwise;
- implementing any purchase option plan involving the Company's shares pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- allocating bonus shares pursuant to the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- allotting or transferring shares to employees under profit sharing schemes or in implementation of employee savings plans in accordance with the law, with particular reference to Articles L. 3332-1 *et seq.* of the French Labour Code;
- cancelling them, pursuant to resolution 22 of the Combined Ordinary and Extraordinary General Shareholders' Meeting of 11 May 2011, which authorised the reduction of the Company's share 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 2011.

	Shares in the share capital	Price support	Awards to employees	Total
Position at 31 December 2010		48,135	55,716	103,851
As a percentage of share capital	26,513,466	0.18%	0.21%	0.39%
Bonus share awards				
• 2009 plan			(25,397)	(25,397)
• 2010 and 2011 plans			(759)	(759)
Purchases		320,912	146,390	467,302
Sales		(285,451)		(285,451)
POSITION AT 31 DECEMBER 2011	26,519,116	83,596	175,950	259,546
As a percentage of share capital		0.32%	0.66%	0.98%

Over the course of the year, 467,302 shares were purchased at an average price of €208.88 and 285,451 shares were sold at an average price of €197.91.

The carrying amount of the portfolio of 259,546 shares, with a par value of €3.05 each, held at 31 December 2011 was €54,183,564.40, with a market value on that date of €94.5 per share, representing a total of €24,527,097.

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 has had a liquidity contract with Exane BNP Paribas since 18 July 2003. This liquidity contract complies with the AMAFI charter (formerly the AFEI 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 2011, the

following resources were available in the liquidity account: 84,546 ERAMET shares and €2,598,658.

7.2.8.4. DESCRIPTION OF THE 2012 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 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 15 May 2012, deliberating on the basis of the quorum and majority requirements for Ordinary General Shareholders' Meeting.

NUMBER OF SHARES AND PROPORTION OF CAPITAL HELD BY THE COMPANY

At 31 December 2011, the Company's share capital was comprised of 26,519,116 shares.

On that date, the Company held 259,546 treasury shares, equivalent to 0.98% of the share capital.

BREAKDOWN BY PURPOSE OF THE EQUITY SECURITIES HELD BY THE COMPANY

As at 31 December 2011, the 259,546 treasury shares held by the Company were allocated as follows by goal:

- share price support (liquidity contract): 83,596 shares;
- grants to employees: 175,950 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 the AMF;
- retain or use them (by way of exchange, in payment or otherwise) for the purposes of acquisitions;
- deliver shares upon the exercise of rights attaching to marketable securities convertible to equity by means of redemption, conversion, exchange or otherwise;
- implement any purchase option plan involving the Company's shares pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- allocate bonus shares pursuant to the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- allot or transfer shares to employees under profit sharing schemes or in implementation of employee savings plans in accordance with the law, with particular reference to Articles L. 3332-1 *et seq.* of the French Labour Code;
- cancel them, pursuant to resolution 22 of the Combined Ordinary and Extraordinary General Shareholders' Meeting of 11 May 2011, which authorised the reduction of the Company's share 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 2011, namely 2,651,911 shares, before deduction of the treasury shares held by the Company

ERAMET shares are listed in compartment A of Euronext Paris (ISIN code: FR0000131757).

The maximum purchase price would be €500 per share.

The maximum total sum to be used in these purchases would be €1,325,955,500, on 2,651,911 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 General Shareholders' Meeting approving the financial statements for the 2012 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.

- NAF code: 515 C.
- Business sector: exploring for and operating mining deposits of any kind, metallurgy of all metals and alloys and trading thereof.

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.fr

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. General Shareholders' Meeting

7.3.9.1. CALLING OF MEETINGS AND TERMS OF ADMISSION (ARTICLES 20 TO 22 OF THE ARTICLES OF ASSOCIATION)

Composition: General Shareholders' Meetings comprise all shareholders in the Company, regardless of the number of shares they hold.

Meeting notice: General Shareholders' 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 General Shareholders' 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 entered into 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 (00:00), 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 sequestered:

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 sequestered share, 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 attaching 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 spin-off of the shareholder company.

In accordance with the law, double voting rights may only be cancelled by a decision of the Extraordinary General Shareholders' Meeting and following approval by the Special Meeting of Beneficiary Shareholders.

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 shareholders' 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 advice 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 point.

Shares that are jointly-owned, split, pledged or sequestered:

Except where specifically provided by 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 Ordinary General Shareholders' Meetings, by the bare owner at Extraordinary General Shareholders' Meetings, by one of the joint owners or by a sole proxy in the case of jointly-owned shares and by the owner of pledged or sequestered shares.

7.3.10. Transfer of shares

Since the deletion of the approval clause by the General Shareholders' Meeting of 15 June 1994, shares may be traded freely, subject to compliance with the rules applicable to companies whose shares are listed on regulated markets.

7.3.11. Identification of shareholders

7.3.11.1. CROSSING 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 specified timeframe, by registered letter with advice 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, within the specified timeframe, to declare 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 Shareholders' 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 advice 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 Shareholders' 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.

7.3.11.3. PUBLISHED DECLARATIONS OF SHAREHOLDING THRESHOLD CROSSINGS

Date	AMF Decision No.	Object
03/08/1999	199C1045	Declaration of the crossing of a shareholding threshold (ERAP — CEIR — SORAME). Declaration of intent. Appointment of five qualified persons as directors. Reminder: dispensation from the obligation to file a proposed tender offer.
29/12/1999	199C2064	Declaration of the crossing of a shareholding threshold. COGEMA substituted for ERAP.
30/12/1999	199C2068	Declaration of the crossing of a shareholding threshold. AFD substituted for ERAP.
25/07/2001	199C0921	Proposed amendment to the shareholders' agreement: assigning ERAMET shares held by COGEMA to CEA Industrie.
12/09/2001	201C1140	Declaration of the crossing of a shareholding threshold. Amendment to the shareholders' agreement following the substitution of AREVA for COGEMA.
20/12/2004	204C1559	Declaration of the crossing of a 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 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 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 under a shareholding threshold (0%) by Carlo Tassara France.
24/07/2007	207C1569	Declaration of crossing under a 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 17/06/99
03/06/2008	208C1083	Declaration of crossing under a 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 19/07/99
20/03/2012	212C0416	Declaration of crossing over (and then under) a shareholding threshold by BlackRock Inc. to 4.92% of the share capital and 2.94% of the voting rights.

7.3.12. Factors likely to influence a tender offer

In addition to the information on the crossing of shareholding thresholds, 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 TENDER OFFER PERIOD

In resolution 28, the General Shareholders' Meeting of 11 May 2011 gave the Board discretion, for the period laid down by law, to make use, within the confines of the law, 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 23 to 26 of the same General Shareholders' Meeting to issue shares, miscellaneous marketable securities and/or subscription warrants waving or maintaining the shareholders' preferential subscription rights, "in the event of one or more tender offers including public exchange offers involving the securities issued by the Company". The General Shareholders' Meeting of 15 May 2012 shall be asked to renew this authorisation.

7.4. SHAREHOLDERS' AGREEMENTS

Pursuant to a shareholders' agreement dated 17 June 1999, which came into force on 21 July 1999, for which prior opinion 199C0577 was notified by the *Conseil des marchés financiers* (French Financial Markets Regulator), which agreement was amended on 28 May 2008, the Company is under the majority control of a declared concert party of shareholders, comprised of:

- a concert sub-group comprised of SORAME and CEIR, pursuant to a simultaneous shareholders' agreement dated 19 July 1999, that came into effect on 21 July 1999, and was amended on 13 July 2009, it being specified that Georges, Édouard, Cyrille and Patrick Duval together held and continue to hold over half the share capital of SORAME, without any one of them controlling it alone, and that virtually all the share capital of CEIR is held by members of the Duval family (without any of them controlling it alone);
- AREVA, formerly called CEA Industries, which took over the rights and obligations of ERAP, the initial signatory, following a substitution made by an amendment dated 27 July 2001 to the concert agreement of 17 June 1999.

On 27 December 2011, AREVA announced that it had entered into exclusive negotiations with Fonds Stratégique d'Investissement with respect to the disposal of AREVA's interest in ERAMET. On 16 March 2012, Fonds Stratégique d'Investissement announced that it had finalised an agreement with respect to the acquisition of this interest, the closing of the transaction being subject to certain conditions precedent.

The provisions of the aforementioned shareholders' agreement and those of the concert sub-group are contained in the main extracts from the texts of the AMF decision and notification No. 208C1042 (amendment of 28 May 2008) and No. 209C1013 (amendment of 13 July 2009) reproduced below (the full version of these texts is available on the AMF website).

7.4.1. Decision and notification No. 208C1042 of 30 May 2008

Under cover of a letter dated 29 May 2008, the AMF (French Financial Markets Authority) was sent a shareholders' agreement entitled "Amendment No. 2 to the shareholders' agreement of 17 June 1999", entered into on 29 May 2008 between SORAME, CEIR and certain members of the Duval family who are shareholders of SORAME on the one hand and AREVA on the other.

A/ SORAME and CEIR (companies controlled by the Duval family), certain members of the Duval family and AREVA are party to a shareholders' agreement instituting a concert party between them with respect to ERAMET, pursuant to a private deed dated 17 June 1999 as amended on 27 July 2001 substituting AREVA for Cogema, itself previously substituted for ERAP on 1 December 1999 under the terms of the aforesaid shareholders' agreement.

This shareholders' agreement relating to the management of ERAMET and share ownership in that company was entered into for a period of approximately 7 years beginning on 21 July 1999 and terminating on 30 June 2006. This agreement was, however, to be tacitly extended thereafter for successive one-year periods unless terminated with one month's notice before the expiry of its term by registered letter with advice of receipt from any one of the parties.

Before signing this shareholders' agreement, its signatories applied to the *Conseil des marchés financiers* (French Financial Markets Regulator) for dispensation from the obligation to file a proposed tender offer, firstly for the concert sub-group between SORAME and CEIR and secondly for the concert party between SORAME, CEIR and ERAP, which dispensation was granted them.

In the absence of termination by any party prior to 31 May 2006, and then prior to 31 May 2007, the ERAMET shareholders' agreement instituting a concert party between SORAME, CEIR and AREVA was tacitly extended first, as from 1 July 2006, for a one-year term ending on 30 June 2007 and subsequently, as from 1 July 2007 for a one-year term ending on 30 June 2008.

On 29 May 2008, SORAME, CEIR, certain members of the Duval family and AREVA signed an amendment to the 1999 shareholders' agreement extending their concert agreement until 31 December 2008 with various amendments, accordingly substituting as from 29 May 2008 a redrafted version for the earlier version of their shareholders' agreement of 17 June 1999. (...)

B/ The main terms of the amendment are as follows:

- Concert party: The parties agreed to extend the term of the concert agreement with respect to ERAMET.
- Membership of the ERAMET Board of Directors:
The Board of Directors shall consist of seven directors proposed by SORAME and CEIR, of whom two individuals proposed in consideration of their competence and independence, five directors proposed by AREVA, of whom two individuals proposed in consideration of their competence and independence, two directors proposed by STCPI and one director to chair the ERAMET Board of Directors. This membership 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 amendment either by SORAME and CEIR, or by AREVA, or (ii) a material change in the capital interest held by STCPI in ERAMET, resulting in a reduction to below 635,372 ERAMET shares.
- Chairmanship, selection committee: The parties intend to consult each other before appointment of any Chairman and chief executive officer and the appointment of the senior managers of each of the ERAMET Group's three business divisions.
- Covenant to consult: The parties covenant to consult, before any ERAMET General Shareholders' Meeting, to ensure concordant exercise of their voting rights and to implement a joint policy with respect to the Company.

- Concert stability: so long as AREVA does not increase its interest in ERAMET by more than 2%, whether directly or indirectly, the concert sub-group formed between SORAME and CEIR undertakes to maintain the number of shares and voting rights in ERAMET required to remain predominant in the overall concert party between SORAME, CEIR and AREVA, except where shares are disposed of that represent, together with those that may have been sold since the signing of the amendment, not less than 80% of its interest in ERAMET at the signing of the amendment of 29 May to the shareholders' agreement of 17 June 1999.
- Reciprocal pre-emptive right: The parties agree a reciprocal right of first refusal:
 - in the event of a firm intention to sell on the market to unidentified third parties, piecemeal, by Accelerated Book Building (ABB) or by Fully Marketed Offering (FMO), a specified number of ERAMET shares;
 - in the event of a proposed sale to one or more identified third parties of one or more blocks of ERAMET shares 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.
- Call option granted to AREVA:
 - The Duval family have granted AREVA a call option over all SORAME shares directly or indirectly held by the individuals party to the concert agreement, Cyrille, Georges, Édouard and Patrick Duval, in the event that a disposal of SORAME shares or a planned share capital transaction would result in their overall interest in this company falling below 50% of the share capital or voting rights.
 - In the event that AREVA exercises the call option, the sale price shall be determined by an expert.

The right of first refusal and the call option shall not apply to intra-group transfers or to unrequited transfers to individuals.

The shareholders' agreement superseded on 29 May 2008 the shareholders' agreement of 17 June 1999 and was entered into for a fixed term expiring on 31 December 2008. It shall thereafter be tacitly extended for successive six-month periods unless terminated by any party by means of notice served not less than 15 calendar days before the expiry of the then current half-yearly period.

The agreement shall cease, as shall the concert party between the parties, in the event that any of them disposes of more than 80% of its interest in ERAMET, or in the event of a change of predominance within the overall concert party between SORAME, CEIR and AREVA.

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 ERAMET shareholders' agreement of 19 July 1999 between SORAME and CEIR", entered into on 13 July 2009 between SORAME and CEIR.

A/ It is hereby recalled that on 19 July 1999, SORAME and CEIR (being companies controlled by the Duval family) entered into a shareholders' agreement instituting a concert party between them for a period of 10 years as from 21 July 1999.

The main terms of this shareholders' agreement were:

- the non-transferability of their ERAMET shares for 5 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 amongst 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 amongst them in the event that their interests increase;
 - reciprocal rights of pre-emption over their ERAMET shares;
 - an undertaking to consult before any ERAMET General Shareholders' Meeting, to ensure concordant exercise of their voting rights for the implementation of a common policy as regards the Company.
- (...)

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.

The following are the main terms of the amendment entered into by 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 so 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 amongst 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 in SORAME and CEIR shareholdings in ERAMET: the parties may freely increase their interests in ERAMET, provided they do not increase their interest by more than 2% of the capital or voting rights within twelve months.
- An undertaking to consult before any ERAMET General Shareholders' 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 of 19 July 1999. It is entered into 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 prior to the expiry of the then current period.

It shall cease, as shall be concert party between the parties, in the event that either party disposes of more than 80% of its interest in ERAMET.

The distribution of seats on the Board of Directors and on the committees is further detailed in Chapter 4 of this document, entitled Corporate Governance.

To the best of ERAMET's knowledge, there are no other shareholders' agreements.

8

GENERAL SHAREHOLDERS' MEETING

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8.1. NOTE EXPLAINING THE RESOLUTIONS

We have set out below, for your attention, an explanatory note regarding the resolutions proposed for voting at your General Meeting.

The first two resolutions concern the approval of the individual Company 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 third resolution, you are asked to approve the special report prepared by your Company's Statutory Auditors concerning the agreements referred to in articles L. 225-38 *et seq.* of the French Commercial Code. This report gives an account of related-party agreements, previously authorised by a General Shareholders' Meeting, which continued during the 2011 financial year. Having already received approval from a General Shareholders Meeting, those agreements will not be submitted to a vote at this Meeting, with the exception of the commitment in respect of Patrick Buffet, which is the subject of the fourth resolution.

In the fourth resolution, you are asked, in accordance with Article L. 225-42-1 of the French Commercial Code, to approve the preservation, in their entirety, of the arrangements concerning severance payment that is or may be due to Patrick Buffet in the event of the conclusion of his term of office as Chairman and CEO, as authorised by the Board of Directors at its Meeting of 27 July 2011.

This commitment is the subject of a special report prepared by the Statutory Auditors.

The fifth resolution proposes to the General Meeting the appropriation of profit and the setting of a dividend of €2.25 per share.

The sixth resolution concerns ratification of the co-option of Claire Cheremetinski, which took place during the year. Mrs Cheremetinski is deputy director for energy and other shareholdings at the French Government Shareholding Agency (APE).

The purpose of the seventh resolution, pursuant to Article L. 225-209 of the French Commercial Code, is to request the General Shareholders' Meeting to authorise the Board to renew the Company's share buyback programme. 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.

The purpose of the eighth resolution is to allow the Company to pursue the execution of its share buyback programme when the purchase offer is fully paid in cash, on condition that buyback transactions are carried out in the normal course of the Company's business and, specifically, provided that such transactions are not likely to frustrate the public offer (article 232-15 of AMF General Regulations).

In the ninth resolution, it is proposed that the capital increase authorisations of the twenty-third to twenty-sixth resolutions of the General Shareholders' Meeting of 11 May 2011, namely, the authorisations to carry out capital increases with preferential subscription rights (23rd), by incorporation of reserves (24th), without preferential subscription rights (25th) or in consideration for contributions in kind (26th), up to a par value limit of €24 million (that is, slightly less than one third of the share capital), may be used during periods of public offers for purchase or exchange, in the event of applicability of the reciprocity clause provided by law (specifically, 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 meeting of defence measures during an offer period and the suspension of delegations of authority 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 Meeting called to vote on the financial statements for 2012.

The purpose of the tenth resolution is to allow ERAMET's Board of Directors to allocate a number of shares, not exceeding 550,000 existing bonus shares, over a three-year period (2013, 2014 and 2015), as follows:

- to all Group employees (subject to the constraints of the applicable legal, accounting and tax provisions at local level), allocation of bonus shares that are not performance-related;
- to senior managers of the Group (approximately 200 individuals) (subject to the constraints of the applicable legal, accounting and tax provisions at local level), allocation of bonus shares that are performance-related for grant of 100%;
- to the Executive Committee ("Comex") members (specifically, those who are also corporate officers), allocation of bonus shares that are performance-related for grant of 100%.

The performance conditions required for the first year of application (in 2013) of this authorisation for the selective performance-related share allocation plan shall be as follows:

- relative performance of ERAMET shares for one third of the allocation. This involves comparing the change in total shareholder return over three years with that of a panel composed of 30 comparable companies on the Stoxx 600 Basic Resources Index);
- for two-thirds of the allocation, intrinsic performance as demonstrated by the following financial indicators:
 - up to one third: current operating profit on turnover, as calculated based on the budget,

- up to one third: cash flow from operating activities, as calculated based on the budget.

Combined vesting and retention period: 4 years minimum, 5 years maximum.

The 550,000 bonus shares represent 2.1% of the share capital at 31 December 2011.

The eleventh resolution gives powers to fulfil the formalities involved in implementing the other resolutions adopted by the combined Ordinary and Extraordinary General Shareholders' Meeting.

The Board of Directors

8.2. WORDING OF THE DRAFT RESOLUTIONS WITHIN THE REMIT OF THE ORDINARY GENERAL SHAREHOLDERS' MEETING

First resolution (2011 annual financial statements)

Having heard the Report from the Board of Directors and the report from the Statutory Auditors, for the financial year ended 31 December 2011, 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 (2011 consolidated financial statements)

Having heard the Report from the Board of Directors and the report from the Statutory Auditors relating to the consolidated financial statements for the financial year ended 31 December 2011, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves said 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 from the Statutory Auditors on the agreements 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 (Commitments pursuant to article L. 225-42-1 of the French Commercial Code)

Having heard the special report from the Statutory Auditors on the agreements referred to in Articles L 225-38 *et seq.* of the French

Commercial Code, and in accordance with the provisions of article L. 225-42-1 of said Code, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves that report and all provisions referred to therein, in relation to the severance payment of the Chairman and CEO that may be payable to Patrick Buffet.

Fifth resolution (Appropriation of earnings— Setting the dividend)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, approves the appropriation of earnings as suggested by the Board of Directors:

- Income for the financial year was €340,941,957.27
- plus retained earnings at 31 December 2011 (*) €460,146,878.56

The General Shareholders' Meeting resolves to allocate:

- To the legal reserve: €1,723.25
- leaving: €801,087,112.58

The General Shareholders' Meeting resolves to distribute:

- an amount of €2.25 per share, namely, for the 26,519,116 shares comprising the share capital on 31 December 2011,
- a sum of €59,668,011
- leaving retained earnings of: €741,419,101.58

The dividend will be detached on 18 May 2012 and paid out as from 23 May 2012.

If, when the dividend is paid out, any new shares have been created as a result of the exercise of subscription options or the creation of bonus shares for beneficiary employees, the amount of the dividend corresponding to those shares shall be automatically deducted from retained earnings.

The General Shareholders' Meeting, acting as an Ordinary General Shareholders' Meeting, notes that the dividends per share paid out in respect of the past financial year and the previous three financial years, were as follows:

	2008	2009	2010	2011
Number of shares subject to dividends	26,215,231	26,369,813	26,513,466	26,519,116
Dividend	€5.25	€1.80	€3.50	€2.25

(*) The retained earnings include €624,291.70 corresponding to the amount of the dividend voted but not paid, in respect of ERAMET's treasury shares on the date of payment of the dividend in 2011.

Sixth resolution (Ratification of the co-option of a director)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings, ratifies the co-option of Claire CHEREMETINSKI as director, which took place at the Board of Directors' Meeting of 14 December 2011, replacing Astrid MILSAN, who resigned, for the remaining term of the latter's term of office, that is, until the end of the General Shareholders' Meeting called to approve the financial statements for the 2014 financial year, which is scheduled to be held in 2015.

Seventh 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 right 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 exchange, in payment or otherwise) in connection with acquisition transactions;
- provide shares upon the exercise of rights attached to marketable securities giving access to the capital by redemption, conversion, exchange or in any other manner;
- implement any Company share purchase option plan pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code;
- allocate bonus shares pursuant to the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code;
- allocate or transfer shares to employees in respect of their profit-sharing or the implementation of any employee savings scheme, under the conditions provided for by legislation and, in particular, by Articles L. 3332-1 *et seq.* of the French Labour Code (*Code du travail*);
- cancel those shares, in accordance with the twenty-second resolution of the General Shareholders' Meeting of 11 May 2011 authorising the reduction of the Company's capital for 26 months.

Such shares may be purchased, sold, transferred or exchanged by any means, in the market or over the counter, including, where appropriate, by means of derivatives and the whole of the authorised share buyback programme may be acquired or transferred in the form of share blocks.

Payment may be made by any means.

The maximum purchase price may not exceed €500 per share.

This authorisation is granted for a period expiring at the General Shareholders' Meeting called to approve the 2012 financial statements.

On the basis of the number of shares in the share capital at 31 January 2012, assuming a price of €500 per share, the maximum theoretical investment would amount to €1,325,955,500.

For the purposes of implementing this resolution, the Board of Directors is granted full powers, which it may delegate, 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 the various goals in line with the applicable legal or regulatory provisions;
- complete all formalities and, in general, do whatever may be necessary.

Eighth resolution (Authorisation to trade in the Company's shares during a public offer period)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings and subject to adoption of the previous resolution, authorises the Board of Directors to also use the authorisation granted in said resolution during a public offer period, if, on the one hand, the purchase offer for the Company's shares is fully paid in cash and if, on the other hand, the buyback transactions are carried out in the normal course of its business.

This authorisation is granted for a period expiring at the General Shareholders' Meeting called to approve the 2012 financial statements.

8.3. WORDING OF THE DRAFT RESOLUTIONS WITHIN THE REMIT OF THE EXTRAORDINARY GENERAL SHAREHOLDERS' MEETING

Ninth resolution (Entitlement to use the authorisations during a public offer period)

The General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Extraordinary Shareholders' Meetings, expressly authorises the Board of Directors to make full or partial use, pursuant to legal provisions, of the various delegations arising from the twenty-third to twenty-sixth resolutions of the General Shareholders' Meeting of 11 May 2011, in the event that a public purchase or exchange offer, or several such offers, should take place in relation to securities issued by the Company.

This authorisation is granted for a period expiring at the General Shareholders' Meeting called to approve the 2012 financial statements.

Tenth resolution (Allocation of bonus shares)

Having familiarised itself with the report from the Board of Directors and the special report from the Statutory Auditors, the General Shareholders' Meeting, adopting resolutions under the conditions of quorum and majority required for Extraordinary Shareholders' Meetings, authorises the Board of Directors to proceed to allocate existing bonus shares, in one instance or in several instances, to corporate officers and employees of the Company and of its associated companies, within the meaning of Article L. 225-197-2 of the French Commercial Code, in accordance with Articles L. 225-197-1 *et seq.* of said Code.

The total number of bonus shares that may be granted under this authorisation may not exceed 550,000 shares.

The share grant to the beneficiaries shall be definitive at the end of a vesting period of at least two years.

In addition, beneficiaries may not sell the shares allocated to them under this authorisation for a minimum period of two years from the date of the final granting of shares.

However, given that the vesting period for all or part of one or several allocations would be at least four years, the General Shareholders' Meeting authorises the Board of Directors to refrain from imposing any holding period for the shares concerned, such that said shares shall be freely transferable from the final date of their granting.

As an exception to the foregoing, in the event of the disablement of a beneficiary, classified within the second or third categories defined by Article L. 341-4 of the French Social Security Code, the granting of said shares to the beneficiary concerned shall become final prior to expiry of the aforementioned vesting periods and, in such event, said shares shall be freely transferable.

The bonus shares allocated shall consist of existing shares.

As the decision to allocate bonus shares falls to the Board of Directors, the latter shall determine the identity of beneficiaries of the share grants and shall set the conditions and, where appropriate, the criteria for allocating them.

In accordance with legal provisions, at the end of the mandatory holding period, the shares may not be sold:

- a) within the ten stock market sessions preceding and following the date on which the consolidated or, as applicable, separate financial statements are made public;
- b) during a period running from the date on which the Company's corporate bodies became aware of a piece of information that, if made public, could have a significant impact on the price of the Company's securities, to the date subsequent to ten stock market sessions following the session in which that piece of information is made public.

The Board of Directors may make use of this authorisation, on one or more occasions, for a period of thirty-eight months from this Meeting.

Eleventh resolution (Powers)

The Combined Ordinary and Extraordinary General Shareholders' Meeting grants all powers to the bearer of an original, an extract or a copy of the minutes of this Meeting to carry out any filing or formalities that may be necessary.

8.4. REPORTS FROM THE STATUTORY AUDITORS ON THE RESOLUTIONS PRESENTED TO THE GENERAL SHAREHOLDERS' MEETING

Statutory Auditors' special report on the granting of existing shares for no consideration to employees and corporate officers of the Company

To the Shareholders,

As statutory auditors of your Company and pursuant to the engagement set forth in Article L.225-197-1 of the French Commercial Code (*Code de commerce*), we hereby report on the proposed granting of existing shares for no consideration to corporate officers and employees of your Company and of its affiliated companies in accordance with the meaning set forth in Article L.225-197-2 of the French Commercial Code, a transaction on which you are being asked to vote.

Based on its report, the Board of Directors recommends that you confer on it the authority for a period of 38 months as from the date of this Shareholders' Meeting, to grant existing shares for no consideration.

It is the role of the Board to draw up a report on this transaction that it wishes to carry out. Our responsibility, when necessary, is to make comments on the information which is provided to you on the planned transaction.

We performed the procedures that we deemed necessary in accordance with the professional guidelines of the French Institute of Statutory Auditors (*Compagnie Nationale des Commissaires aux Comptes*) relating to this type of engagement. These procedures consisted in verifying that the planned methods as described in the Board of Director's report comply with legal provisions.

We have no comments to make on the information provided in the Board of Director's report on the planned transaction to grant shares for no consideration.

Paris – La Défense and Neuilly sur Seine, February 22, 2012

The Statutory Auditors

Ernst & Young and Others
Aymeric de la Morandière

Deloitte & Associés
Alain Penanguer

9

ADDITIONAL INFORMATION

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9.1. PERSONS RESPONSIBLE FOR THE REGISTRATION DOCUMENT

9.1.1. Name and position of persons responsible

Patrick Buffet

Chairman and Chief Executive Officer of ERAMET.

Jean-Didier Dujardin

Chief Financial Officer of ERAMET.

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 results 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, results 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.

Executed in Paris on 29 March 2012

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 AND OTHERS

Address: Tour First—1, place des Saisons, 92400 Courbevoie, France Entry 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 of office expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

Ernst & Young Audit, Tour Ernst & Young, 11, allée de l'Arche, Paris La Défense Cedex, France, represented by Mr François Carrega as partner responsible for the audit, had exercised this function for the six previous financial years.

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 of office expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

Mr Nicholas L.-É. Rolt was the partner responsible for the audit for Deloitte & Associés until the renewal in office on 13 May 2009.

9.2.2. Alternate Statutory Auditors

9.2.2.1. AUDITEX

Address: Tour First—1, place des Saisons 92400 Courbevoie, France Entry 377 652 938 in the Nanterre trade and corporate register (RCS).

Date of appointment: Shareholders' General Meeting of 13 May 2009.

Term of office expiry date: Shareholders' General Meeting called in 2015 to approve the financial statements for 2014.

Mr Jean-Marc Montserrat has exercised this function for the six previous financial years.

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.

Date of appointment: Shareholders' General Meeting of 11 May 2005, for renewal at the Shareholders' General Meeting of 13 May 2009.

Term of office 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: Mr Philippe Joly.
Capacity: Strategy and Financial Communications Manager.
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 accordance with the regulations, ERAMET publishes its annual and interim results and releases its quarterly sales.

Information release: in addition to legal publication in financial publications, press releases and all regulated financial information are made available to the public on the Company's website (<http://www.eramet.com> – in the Investors section), and released in accordance with 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 can be found on ERAMET's Website (<http://www.eramet.com>) or by requesting them from the Company's Director of Legal Affairs at its registered office: Tour Maine-Montparnasse – 33, avenue du Maine 75015 Paris, France.

2012 DIARY

Publication of the 2011 annual sales and results	Thursday, 16 February 2012	(before stock-market opening)
Publication of first-quarter sales	Thursday, 28 April 2012	(before stock-market opening)
Shareholders' General Meeting	Tuesday, 15 May 2012	
Publication of first quarter sales and results	Monday, 30 July 2012	(before stock-market opening)
Publication of third-quarter sales	Thursday, 27 October 2012	(before stock-market opening)

9.3.3. List of financial-information releases and press releases

16 February 2012: 2011 annual results.

10 January 2012: Renewal of the SLN shareholders' agreement.

22 December 2011: Web documentary presenting ERAMET.

15 December 2011: Weda Bay Nickel project and master agreement with BRGM.

2 December 2011: Judgement by the Paris Commercial Court in the dispute between Carlo Tassara France and S.I.M.A., SORAME and CEIR, in the presence of ERAMET.

27 October 2011: Third-quarter sales.

25 October 2011: ERAMET and Mineral Deposits Limited announce the creation of their joint venture in mineral sands.

6 October 2011: Erasteel opens a new powder metallurgy plant in Sweden.

28 July 2011: Results for first half-year 2011.

28 July 2011: Signature with Mineral Deposits Limited of the final agreements concerning the creation of a joint venture in mineral sands.

1 July 2011: Erasteel and HeYe Special Steel laid the foundations for a strategic agreement on worldwide commercial cooperation and industrial cooperation in China in the field of high-speed steels.

20 June 2011: Signature by ERAMET and Mineral Deposits Limited of a memorandum of understanding for the creation of a joint venture in mineral sands.

11 May 2011: Press release relating to the Shareholders' General Meeting of 11 May 2011.

28 April 2011: First-quarter sales.

17 February 2011: 2010 annual results.

Publication in the BALO compulsory legal notices bulletin

Notice calling the Shareholders' General Meeting	4 April 2011
Notice calling the Shareholders' General Meeting	22 April 2011
Notice of approval of financial statements without amendment	18 May 2011

9.4. LIST OF REPORTS

FINANCIAL YEAR ENDED ON 31 DECEMBER 2011

Internal reports

	Section
Report by the Chairman of the ERAMET Board of Directors—Financial Year 2011	4.1

External reports

	Section
Report from the Statutory Auditors on the 2011 consolidated financial statements	6.1.3.
Report by the Statutory Auditors on the 2011 annual financial statements	6.2.4.
Special report by the Statutory Auditors on related-party agreements and commitments in 2011	6.2.5.
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 Board of Directors of ERAMET—2011 Financial Year	4.1
Report by the Statutory Auditors on the resolutions submitted to the Shareholders' General Meeting	8

9.5. TABLE OF RECONCILIATION WITH THE ANNUAL FINANCIAL REPORT

This Registration Document contains all the information that must be included in annual financial reports pursuant to the provisions of 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 makes it possible to identify 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 2011	Section 6.1.3
4	Separate parent-company financial statements—Financial Year ended 31 December 2011	Section 6.2
5	Report of the statutory auditors on the annual financial statements—Financial year ended 31 December 2011	Sections 6.2.4 and 6.2.5
6	Management report: <ul style="list-style-type: none"> • Business activities • Financial commentary • Research and Development • Organisation chart • Information on workforce and management remuneration • Environmental information • Table of delegations of powers to increase share capital • Factors likely to influence a public offer • Share buybacks 	Sections 1, 2 and 4 Section 1 Section 2 Section 2 Sections 4 and 5 Section 5 Section 7 Section 7 Section 7
7	Fees paid to the Statutory Auditors	Section 6.5
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 so-called “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 about 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	Any exceptional events that may affect activities and markets	2
6.4	Any dependence	2
6.5	Competitive position	2
7	Organisational structure	
7.1	Group	4.1
7.2	Major subsidiaries	2.1
8	Real property, production sites, plant and equipment	
8.1	Significant elements of property, plant and equipment	2.7
8.2	Environmental aspects of such plant and equipment	5.4
9	Examination of financial position and results	
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 finance	1.2
11	Research and development—Patents and licences	2.8
12	Information on trends	
12.1	Trends	1
12.2	Any likely influence	1

Section	Information	Registration Document
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	4
14.2	Conflicts of interest	4
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	4
16.2	Service contracts	4
16.3	Committees	4
16.4	Corporate-governance declaration	4
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	Transactions with affiliates	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	6
20.4	Checking of historic financial information	6
20.5	Date of latest financial information	6
20.6	Interim and other financial information	not applicable
20.7	Dividend distribution policy	6.4
20.8	Judicial and arbitration proceedings	3 and 6
20.9	Significant changes in the Issuer's financial or commercial situation	not applicable
21	Additional Information	
21.1	Share capital	7
21.2	Certificate of incorporation and articles of association	7
22	Significant agreements	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	Documents available for inspection by the public	9
25	Information on non-consolidated investments	2 and 6

9.7. GLOSSARY

9.7.1. Processes

Acid lixiviation

Exploitation of nickel oxide ores (laterites) by dissolution in acid.

Alloy metallurgy

- Air metallurgy: melting is performed in an arc furnace, followed by metallurgical processing to add other alloying metals, remove impurities and obtain the required chemical composition.
- Vacuum metallurgy: this smelting process is used for high-stress alloys (nitrogen content, alloy elements reactive to oxygen, etc.). It is performed in VIM vacuum induction furnaces (vacuum induction melting).
- Remelting: this is essential for certain critical parts used in aerospace and energy. This process better controls segregations and inclusion morphology, as well as lowering the gas content, thus significantly increasing the mechanical-reliability properties.
- Powder metallurgy: Manufacturing alloys with highly advanced characteristics by spraying a liquid-metal jet then compacting the powder so obtained at very high pressure and at high temperature.

Closed die-forging

Complex shaping of a pre-forged metal blank between two hollowed dies in a single, slow stroke.

Forging

Plastic deformation of metal between two flat tools. Forging produces parts with simple geometry.

Hydrometallurgy

Reduction of the metal oxides and chemical separation of the metal from the oxide radical (attack for dissolution, extraction by solvent, electrolysis).

Ore beneficiation

Used by Le Nickel-SLN, this innovative technology uses sorting by grain size and density to increase the ore content so that a larger part of the deposit can be mined, thus increasing the lifespan of reserves.

Press

Industrial tool use for closed die-forging (defined earlier). Its power is measured in thousands of tonnes.

Pyrometallurgy

Reduction of metal oxides and metal-oxide separation by melting (blast furnace or electric furnace).

Rolling

Reducing the thickness of an ingot, bar, metal sheet, etc., by rolling between the rotating cylinders of a rolling mill.

9.7.2. Products

Alloys

Metallic materials composed of different metals with special properties making them suitable for specific uses, such as wear or corrosion resistance, mechanical strength at high temperatures, etc.

Cobalt and tungsten powders

These products are used, in particular, to make hardened carbides for machining metal and for diamond tools used to cut stones and building materials.

Electrolytic Manganese Dioxide (EMD)

Active agent in alkaline disposable batteries.

Ferroalloys

Alloys containing iron and at least one other metal added to the liquid metal during the steel manufacturing process, so adjusting the composition to procure the required properties.

Grades

Different kinds of steel obtained by varying the metal alloys used in their composition in order to obtain specific characteristics. Each grade is suited to particular needs.

High-speed steels

Very strong, wear-resistant steels, with a high degree of hardness both cold and under heat, mainly used to manufacture cutting tools (bits, taps, cutters and saws, etc.) for metal machining.

Long products

Semi-finished products made of alloys with advanced characteristics, and used in further processing.

Manganese

Consumed in alloy form (ferromanganese, silicomanganese), this metal is used in steel making in the proportion of 6 to 7% O in order to improve its hardness, abrasion resistance, elasticity and surface condition when rolled. It is also used for deoxidation/desulphurisation in the manufacturing process. Other applications: chemistry, disposable and rechargeable batteries, electronic circuits, fertilisers, aluminium hardener, etc.

Nickel

An essential element in alloys, this metal confers numerous properties on steel according to grade: resistance to atmospheric corrosion when combined with chromium (stainless steel), resistance to high temperatures, ductility, mechanical strength, electrical resistance, magnetic properties, etc. Nickel can be recycled indefinitely.

Superalloys

Alloys of several metals with nickel generally predominant (nickel-based superalloys), with advanced characteristics of mechanical strength at high temperatures and corrosion resistance. Superalloys are used to manufacture parts for aeronautics and space applications, energy production, the chemical industry and environmental preservation.

9.8. ADDRESSES OF THE CONSOLIDATED SUBSIDIARIES

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
ARGENTINA						
Bolera Minera Avenida Cordoba 1233, Piso 2, Ciudad de Buenos Aires Argentina				✓	Proportional consolidation	50.00%
Eramine Sud America Avenida Cordoba 1233, Piso 2, Ciudad de Buenos Aires Argentina				✓	Full consolidation	100.00%
AUSTRALIA						
Weda Bay Minerals Pty Ltd (Nickel) Unit 5, 46 Hillside Crescent Hamilton QLD 4007 PO Box 508 Fortitude Valley QLD 4006 Australia	✓				Full consolidation	100.00%
BELGIUM						
Erachem Comilog S.A. Rue du Bois 7334 Saint-Ghislain Belgium		✓			Full consolidation	63.71%
CANADA						
Gulf Chemical and Metallurgical Canada Corporation P. O. Box 3510 55418 Range Road 214 Fort Saskatchewan, Alberta Canada		✓			Full consolidation	63.71%
Weda Bay Minerals Inc. (Nickel) 14 th Floor, 220 Bay Street Toronto Ontario, M5J 2W4 Canada	✓				Full consolidation	100.00%
CHINA						
Comilog Far East Development Ltd Comilog Asia Ltd Comilog Asia Ferro Alloys Ltd ERAMET Comilog Shanghai Consultancy Services Co. Ltd 2929 Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong				✓		92.74%
ERAMET Comilog Shanghai Trading Co. Ltd. Units 01-02 26/F Aurora Plaza, 99 Fucheng Road, Pudong, Shanghai, China		✓			Full consolidation	92.74%
Erasteel Innovative Material Co Ltd Room 2607-2612 Bank of China Tower No. 200 Yin Cheng Zhong Road Pudong 200-120, Shanghai China				✓	Full consolidation	100%
Guangxi ERAMET Comilog Chemicals Room 2612-26F China Bank Tower 200 Yincheng Road Central Pudong Shanghai 200120 China		✓			Full consolidation	92.74%

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
Guangxi Comilog Ferro Alloys Ltd Fenghuang Town, Laibin County, Guangxi Province, 546102 China		✓			Full consolidation	64.92%
Guilin Comilog Ferro Alloys Ltd Sanjie Industrial Zone, Sanjie, Lingchuan, Guilin, Guangxi, China		✓			Full consolidation	92.74%
FRANCE						
Airforge 75, boulevard de la Libération BP 173 09102 Pamiers Cedex France 33 (0) 4 77 40 36 47 33 (0) 5 61 68 44 24/22			✓		Full consolidation	100.00%
Aubert & Duval Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42			✓		Full consolidation	100.00%
Comilog Dunkerque Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 53 91 24 05		✓			Full consolidation	63.71%
Comilog France Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 53 91 24 05		✓			Full consolidation	63.71%
Comilog Holding Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42		✓			Full consolidation	63.71%
Comilog International Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42		✓			Full consolidation	63.71%
ERAMET Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42					Consolidating entity	
ERAMET Alliages Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42			✓		Full consolidation	100.00%
ERAMET Comilog Manganèse Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42		✓			Full consolidation	81.86%

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
ERAMET Holding Nickel Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42	✓				Full consolidation	100.00%
ERAMET Holding Manganèse Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42		✓			Full consolidation	100.00%
Eramine Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42				✓	Full consolidation	100.00%
Erasteel Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42			✓		Full consolidation	100.00%
Erasteel Champagnole 23, rue Georges-Clemenceau BP 104 39300 Champagnole France 33 (0) 3 84 52 64 44			✓		Full consolidation	100.00%
Eurotungstène 9, rue André-Sibellas BP 152X 38042 Grenoble Cedex 9 France 33 (0) 4 76 70 54 54	✓				Full consolidation	100.00%
Interforge Z.I. de la Maze BP 75 63501 Issoire France 33 (0) 4 73 89 07 83			✓		Full consolidation	94.00%
Metal Currencies Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42				✓	Full consolidation	100.00%
Metal Securities Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42				✓	Full consolidation	100.00%
S.I.M.A. Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 40 88 20 55			✓		Full consolidation	100.00%

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
UKAD Tour Maine-Montparnasse 33, avenue du Maine 75755 Paris Cedex 15 France 33 (0) 1 45 38 42 42			✓		Proportional consolidation	50.00%
Valdi 1, boulevard de la Boissonnette 42110 Feurs France 33 (0)4 77 27 40 92		✓			Full consolidation	100.00%
GABON						
Comilog S.A. Compagnie Minière de l'Ogooué Z.I. de Moanda BP 27-28 Gabon 241-66 10 00		✓			Full consolidation	63.71%
PMO (Port Minéralier d'Owendo) Compagnie Minière de l'Ogooué Z.I. de Moanda BP 27-28 Gabon 241-66 10 00		✓			Full consolidation	63.30%
Setrag BP 578 Libreville Gabon 00241708049		✓			Full consolidation	54.09%
INDONESIA						
Pt Weda Bay Nickel Wisma Raharja 8 th Floor Jl. TB. Simatupang, Kav. 1 Cilandak Timur – Jakarta Selatan 12560 Indonesia +62 (21) 788 49 866	✓				Full consolidation	59.94%
LUXEMBOURG						
Eras S.A. 6 B Route de Trève L-2633 Luxembourg Luxembourg				✓	Full consolidation	100.00%
MAURITIUS						
Mineral Deposits Mauritius Ltd			✓		Proportional consolidation	50.00%
MEXICO						
Erachem Mexico Carretera Tampico – Valles km. 28 Tamos, Panuco, Vert. CP 92018 Mexico Mexico 52-1 210 27 62		✓			Full consolidation	63.71%
NEW CALEDONIA						
Cominc BP E5 98848 Nouméa Cedex New Caledonia 687-24 55 55	✓				Full consolidation	56.00%
Société Le Nickel – SLN BP E5 98848 Nouméa Cedex New Caledonia 687-24 55 55	✓				Full consolidation	56.00%
Poum SAS 98848 Nouméa Cedex New Caledonia 687-24 55 55	✓				Full consolidation	56.00%

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
NORWAY						
ERAMET Norway A/S P.O. Box 82 - N – 3901 Porsgrunn Norway 47 35 56 18 00		✓			Full consolidation	100.00%
Eralloys Holding A/S Vollsveien 13H P.O. Box 103 N – 1325 Lysaker Norway 47 67 10 3425		✓			Full consolidation	100.00%
Tinfos A/S O. H. Holtas gate 21 - N – 3678 Notodden Norway 47 53 65 25 00		✓			MEE	33.35%
Tinfos Energi A/S Oyesletta 61 P.O. Box 246 N – 4491 Kvinesdal Norway 47 38 35 72 00		✓			Full consolidation	100%
DNN Industrier A/S Gl Oddavei 6 N-5770 Tyssedal Postal C/O Tinfos A/S O. H. Holtas gate 21 - N – 3678 Notodden Norway 47 53 65 25 00		✓			Full consolidation	100%
ERAMET Titan A/S Gl Oddavei 6 N – 5770 Tyssedal Norway 47 53 65 25 00		✓			Full consolidation	100%
ERAMET Titanium & Iron A/S Gl Oddavei 6 N – 5770 Tyssedal Norway 47 53 65 25 00		✓			Full consolidation	100%
ERAMET Norway Kvinesdal A/S Oyesletta 61 P.O. Box 246 N – 4491 Kvinesdal Norway 47 38 35 72 00		✓			Full consolidation	100%
SENEGAL						
Grande Côte Operations SA Rue 26 N'Gor Dakar			✓		Proportional consolidation	45.00%
SINGAPORE						
Strand Minerals (Indonesia) Pte Ltd. (Nickel) 8 Marina Boulevard, #05-02 Marina Bay Financial Centre Tower 1, Singapore 018981. Singapore	✓				Full consolidation	66.66%

	Nickel	Manganese	Alloys	Holding company	Consolidation method	Percentage interest
SWEDEN						
Erasteel Kloster AB Box 100 815 82 Söderfors Sweden 46 (0) 293 17 000			✓		Full consolidation	100.00%
SWITZERLAND						
Comilog Lausanne Avenue C.F. Ramuz 43 1009 Pully Switzerland 41 21—729 45 03		✓			Full consolidation	63.71%
Unimin Holding GmbH Industriestrasse 47 6304 Zug Switzerland	✓				Full consolidation	100.00%
THE NETHERLANDS						
Miner Holding BV Rokin 55 Amsterdam Netherlands		✓			Full consolidation	63.71%
UNITED KINGDOM						
Erasteel Stubs Ltd. Causeway Avenue Warrington WA4 6QB United Kingdom 44 (0) 1925 41 3870			✓		Full consolidation	100.00%
TiZir Ltd 3 More London Riverside, London SE1 2AQ			✓		Proportional consolidation	50.00%
UNITED STATES						
Bear Metallurgical Corp. 302 Midway Road—P.O. Box 2290 Freeport Texas 77541 United States 1-979 233 7882		✓			Full consolidation	63.71%
Comilog US 610 Pittman Road MD 21226 Baltimore, Maryland, United States 1-410 636 71 26		✓			Full consolidation	63.71%
ERAMET Marietta Inc. PO Box 299 State Route 7—South Marietta, Ohio 45750-0299 United States 1-740 374 1000		✓			Full consolidation	100.00%
Erachem Comilog Inc. 610 Pittman Road, Baltimore, Maryland MD 21226-1788 United States 1-410 789 8800		✓			Full consolidation	63.71%
Erasteel Inc. 95 Fulton street Boonton NJ 07005—1909 United States 1-973 335 8400			✓		Full consolidation	100.00%
Gulf Chemical and Metallurgical Corp. 302 Midway Road—P.O. Box 2290 Freeport Texas 77541 United States 1-979 233 7882		✓			Full consolidation	63.71%

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ERAMET

ALLOYS, ORES AND PEOPLE.

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