#### LARGE FILING SEPARATOR SHEET

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#### FILE

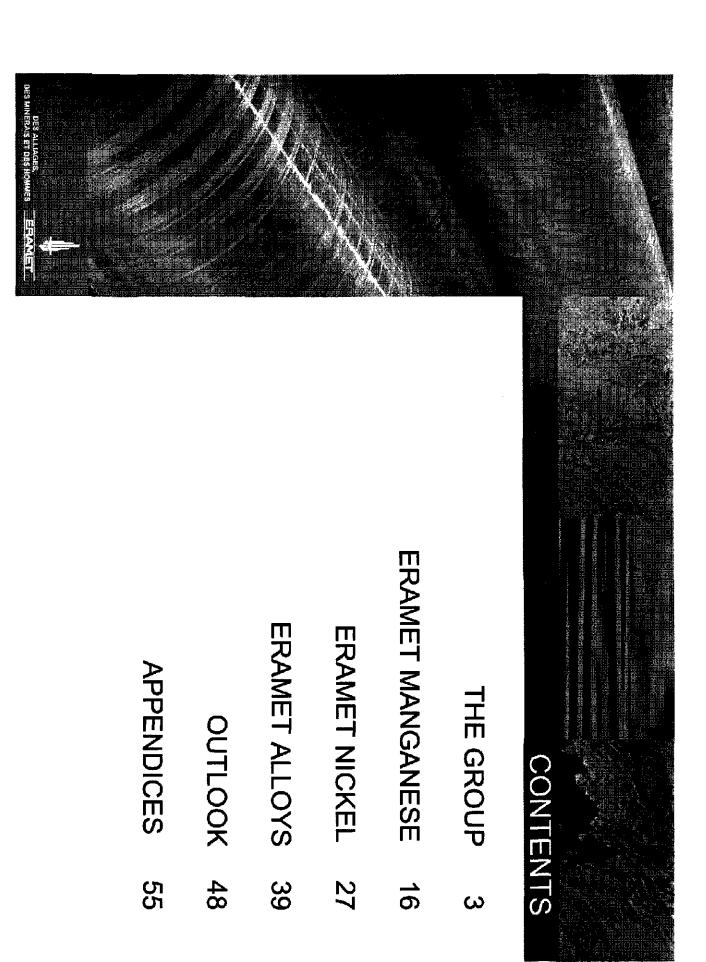
	402
1	BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO
2	<del>-</del>
3	In the Matter of the : Application for :
4	Establishment of a : Reasonable Arrangement : Case No. 09-516-EL-AEC
5	Between Eramet Marietta, : Inc. and Columbus :
6	Southern Power Company. :
7	<del>-</del>
8	PROCEEDINGS
9	before Mr. Gregory A. Price and Ms. Rebecca Hussey,
10	Hearing Examiners, at the Public Utilities Commission
11	of Ohio, 180 East Broad Street, Room 11-F, Columbus,
12	Ohio, called at 1:00 p.m. on Monday, August 10, 2009.
13	- <b></b>
14	VOLUME III
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21	ARMSTRONG & OKEY, INC.  222 East Town Street, 2 <sup>nd</sup> Floor Columbus, Ohio 43215 (614) 224-9481 - (800) 223-9481
22	ARMSTRONG & OKEY, INC.
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24	Fax - (614) 224-5724
25	- <del></del>

#### **PUCO EXHIBIT FILING**

Date of Hearing: $8/10/09$
Case No. 09-516-EL-AEC
PUCO Case Caption: In the Matter of the
Application for Establishment of
a Reasonable Arrangement Between
Erarnet Marietta, Inc. and Columbus
Southern Power Company.
List of exhibits being filed:
OCC Exs.   and 2
Reporter's Signature: Muria DiPhotofines  Date Submitted: 81(2/09)

#### EXHIBIT

OCC Ex.



#### INTRODUCTION

### **EXCELLENT RESULTS IN 2008 DESPITE A SHARP** DECLINE IN THE 4TH QUARTER

- Very strong and improved results in the year 2008 compared with 2007, despite a sharp decline in the 2nd half-year compared with the 2<sup>nd</sup> half 2007
- The economic crisis hit the group's markets very hard in the 4th quarter 2008 and these effects are continuing in early 2009
- □ The financial situation was stronger still at end-2008



### EXCELLENT RESULTS, DESPITE A VERY SHARP DECLINE IN THE 4TH QUARTER

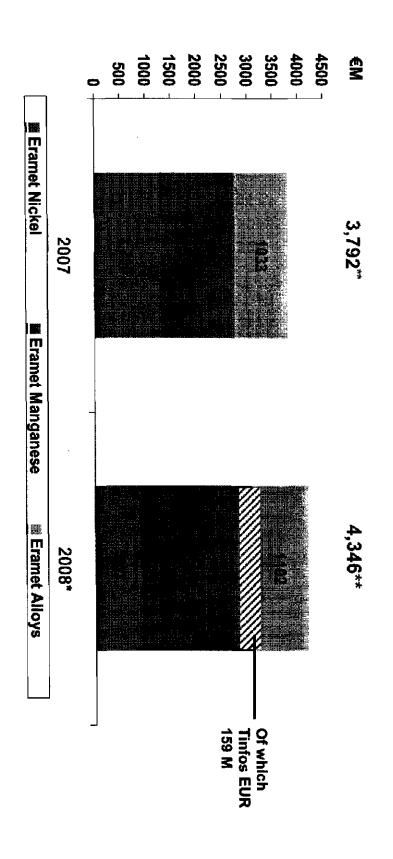
	2008*	2007	07 vs 08
Turnover (EUR M)	4,346	3,792	15%
Current operating income (EUR M)	1,321	1,196	10%
Operating margin (%)	30 %	32 %	1
ROCE before corporate income tax** (%)	58 %	60 %	•
ROCE after corporate income tax at standard rate of 35%** (%)	41 %	39 %	1
Net income group share (EUR M)	694	582	19%
Group net income per share (EUR M)	27.03	22.67	19%
Net cash and cash equivalents (EUR M)	1,133	954	19%
Dividend per share*** (EUR)	5.25	6.00	-13%

<sup>\*</sup> Figures include Tinfos except for Trading activities, recorded as assets to be divested
\*\* Excluding Weda Bay effect
\*\* A dividend of EUR 5.25 per share will be proposed to the General Meeting of Eramet shareholders on May 13th 2009



### CHANGE IN TURNOVER

### **GROWTH OF 15% WITH TINFOS AND 10% EXCLUDING TINFOS COMPARED WITH 2007**



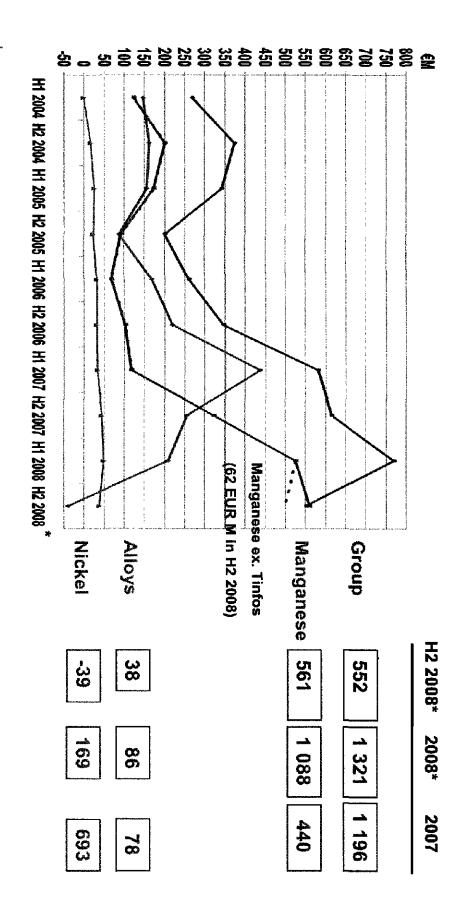


<sup>\*</sup> Figures include Tinfos except for Trading activities, recorded as assets to be divested

<sup>\*\*</sup> Including eliminations

## **CURRENT OPERATING INCOME 2008**

# 2<sup>ND</sup> 2008 HALF DOWN COMPARED WITH 2<sup>ND</sup> HALF 2007

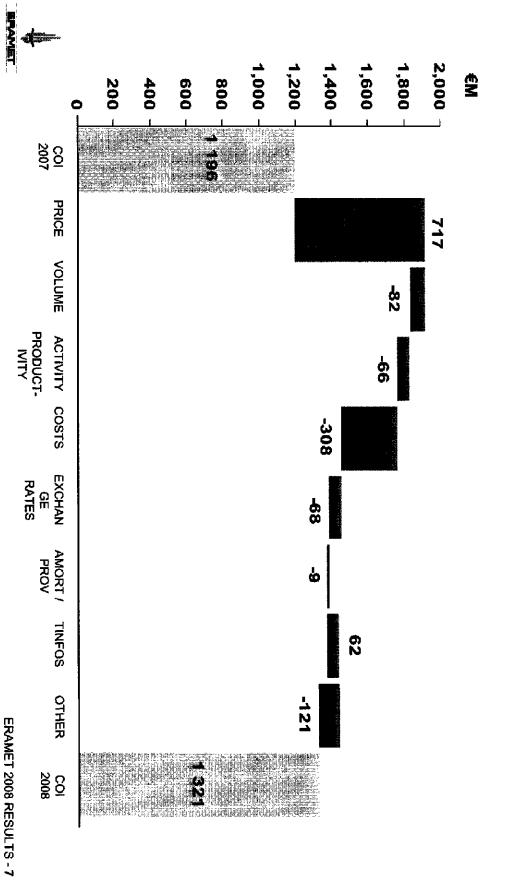




COI including eliminations
\* Figures include Tinfos except for Trading activities, recorded as assets to be divested

# CHANGE IN CURRENT OPERATING INCOME

### **INCREASE IN COLOF 10% WITH TINFOS AND 5% EXCLUDING TINFOS**



# CONSOLIDATED INCOME STATEMENT 2008

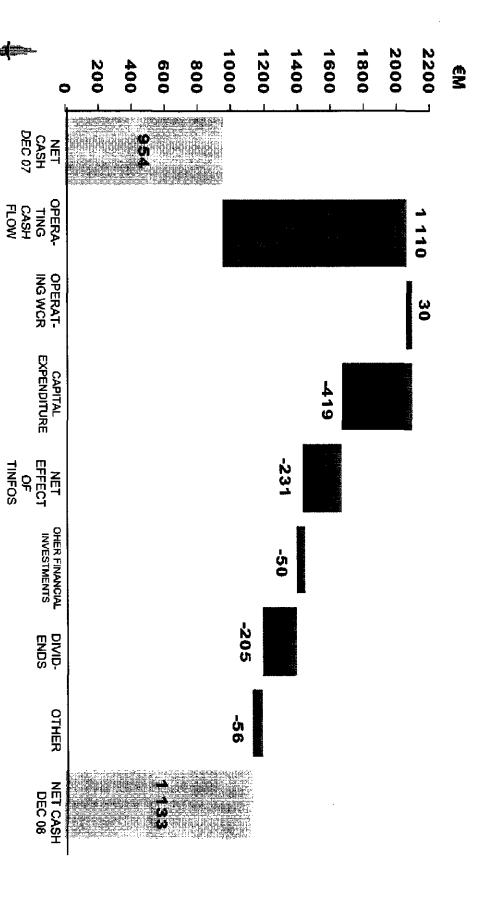
Minorities % minorities Net income - group share	Share of earnings of affiliates  Tax  Net income	Net cost of debt Other finance income and expenses Pre-tax income	Other operating income and expenses  Operating income	Current operating income % turnover	EBITDA % turnover	Turnover	€M
	2 <b>5</b> 50 0	÷ 5	(57)	1-1 × -	\$ 3 \$ 3		2007
(124) 23% <b>42</b> 1	0 (245) 31% 545	14 7 790	0 769	<b>769</b> 33%	868 37%	2,321	H1 2008
(37) 12% 273	0 (102) 25% 310	20 (82) <b>412</b>	(78) <b>474</b>	552 27%	637 31%	2,025	H2 2008*
(161) 19% 694	(347) 855	263. 4		<b>\$1</b>	1,505 35%		2008*
(16) 43% 21	(1.4) (7.7) 3.7		88	38		159	Of which Tinfos**

<sup>\*\*</sup> Contribution of Tinfos over 5 months, consolidated excluding Trading activities, recorded as assets to be divested ERAMET 2008 RESULTS - 8 \* Figures include Tinfos over 5 months except for Trading activities, recorded as assets to be divested



### CHANGE IN NET CASH

### **INCREASE IN NET CASH**



## BALANCE SHEET AS AT 31/12/2008

# A SOUND FINANCIAL SITUATION AT END-2008

in any con						
Financial instruments	Net cash	WCR	Fixed assets			
954 22		<b>2</b>		3 666	<u>2007</u>	ASSETS
0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Ŝ		4 464	2008	ETS
			en M€			
630 102				4 464	2008	LIABILITIES
0 23				3 666	2007	ITIES
Generated tax Financial instruments	Provisions and net	Minority	Sharehold- ers' equity			

<sup>\*</sup> Including Tinfos Goodwill EUR 229m and asset to be sold (trading activities) EUR 33m \*\* Including EUR 388m in financial investments as net cash

# CAPITAL EXPENDITURE INCREASED BUT WAS CUT SUBSTANTIALLY IN THE 2<sup>ND</sup> HALF IN RESPONSE TO THE CRISIS

Group total	Alloys	Manganese	Nickel	<b>⊕</b> M
419	83	145	189	2008
319	54	129	135	2007
309	58	122	125	2006
231	66	94	68	2005
240	60	39	139	2004



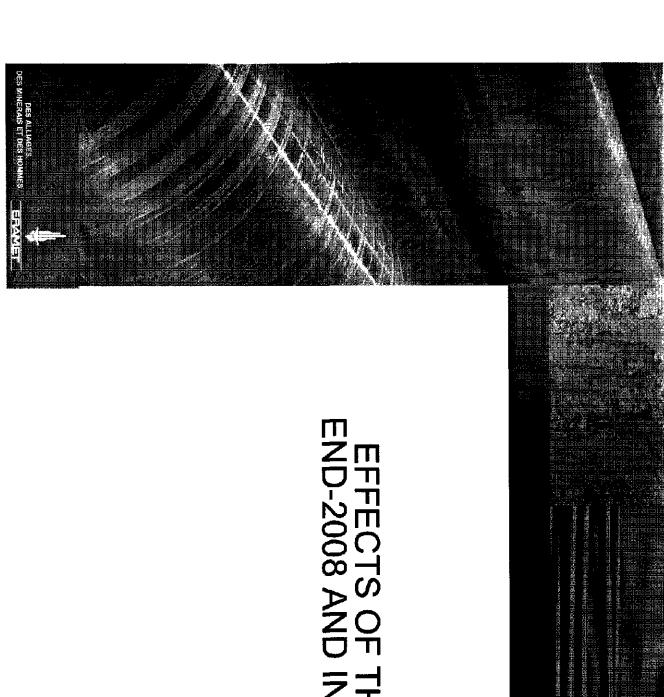
## SUSTAINABLE DEVELOPMENT

# ERAMET IS COMMITED TO SUSTAINABLE DEVELOPMENT

# Continued efforts to promote sustainable development

- Vigorous initiatives in the areas of security, health and safety at work and the environment
- Successful deadline completion of REACH\* pre-registration process within





# EFFECTS OF THE CRISIS AT END-2008 AND IN EARLY 2009

# EFFECTS OF THE CRISIS IN THE 4TH QUARTER

1,069 -10%
452 15%
ŧ
335 -47%
285 -7%
1,069 452 - 335 285

account Tinfos' contribution over 5 months A drop in turnover of 25% excluding Tinfos and 10% taking into



<sup>\*</sup> Figures include Tinfos except for Trading activities, recorded as assets to be divested

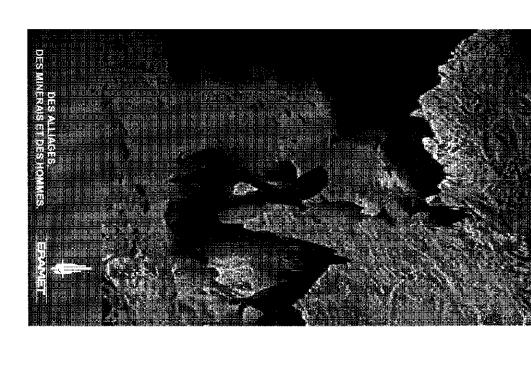
<sup>\*\* 4</sup>th quarter Tinfos: consolidation over five months except for Trading activities, recorded as assets to be divested

#### STEPS TAKEN

### CRISIS FROM THE 4<sup>TH</sup> QUARTER 2008 THE GROUP REACTED RAPIDLY TO THE

- Production adjusted to decline in demand
- Reduction in operating costs
- A major reduction in, and strict control of, investment spending





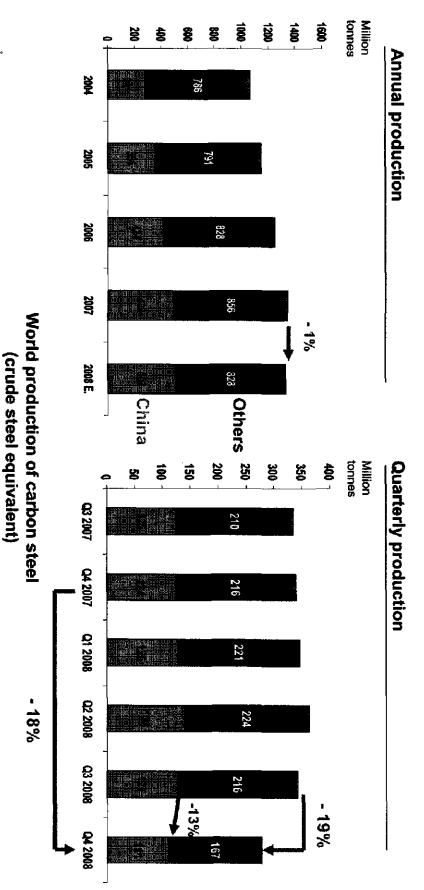
### RAMET MANGANESE

- World number two producer of high-grade manganese ore
   Markets: manganese alloys, chemicals
- World number one in manganese based chemical products
   Markets: electronics, other
- World number two in manganese alloys
- Market: steel industry
- World number one in refined manganese alloys
- Market: steel industry
- The world leader in spent oil catalyst recycling
   Markets: oil refining, steel industry

AN EXCELLENT YEAR DESPITE
A SHARP DROP IN VOLUMES
IN THE FINAL QUARTER

# STEEL INDUSTRY DEMAND FOR MANGANESE

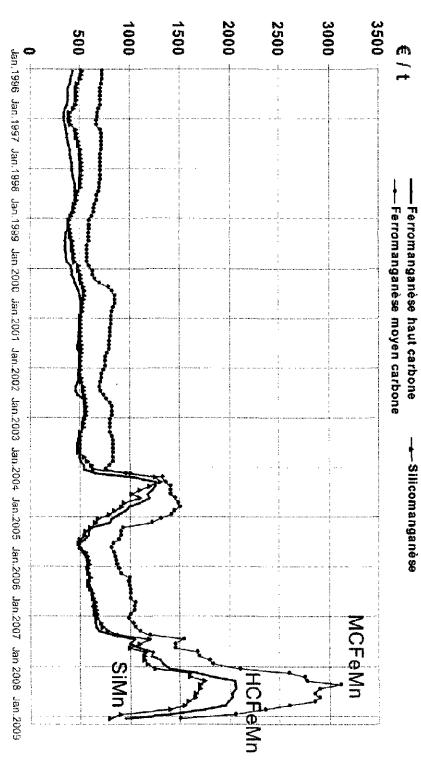
### SHARPLY IN THE 4TH QUARTER CARBON STEEL PRODUCTION DROPPED





### MANGANESE ALLOY PRICES

### A VERY SHARP RISE IN SPOT PRICES FOLLOWED BY A SHARP DROP



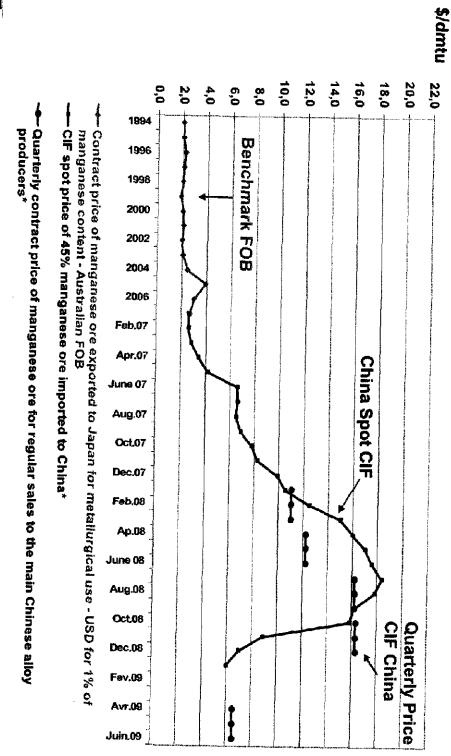


Source: CRU

**EUROPEAN SPOT PRICES** 

### MANGANESE ORE PRICES

## FOLLOWED BY A SHARP DROP A VERY SHARP RISE IN MANGANESE ORE SPOT PRICES,



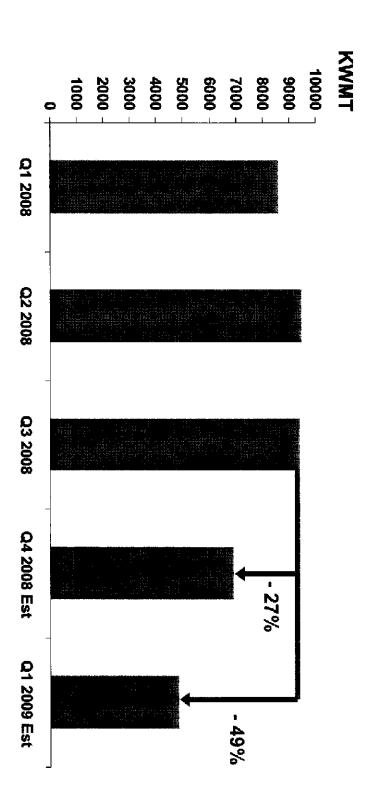


1 dmtu = 10 kg Mn content

ERAMET 2008 RESULTS- 19

## MANGANESE ORE PRODUCTION

### MAJOR CUTS TO ORE PRODUCTION WORLD-WIDE AT END-2008 AND IN EARLY 2009







#### OPERATIONS

### **ALLOYS IN 2008** PRODUCTION OF MANGANESE ORE AND

#### ☐ Manganese ore

- Production in 2008: 3.25 Mt, 3% vs 2007
- Production in Q4 2008: 690 Kt, -23% vs Q4 2007

## ☐ Manganese alloys (excluding Tinfos)

- Production in 2008: 708 Kt, 7% vs 2007
- Production in Q4 2008: 150 Kt, -23% vs Q4 2007

### ☐ Chemicals and recycling

- Chemicals: increase in volumes and prices
- vanadium prices in the 2nd half-year Recycling: slight decrease in turnover due to drop in molybdenum and



### TINFOS ACQUISITION

# SUCCESS OF TINFOS ACQUISITION - 56% CONTROL AT END-2008

- 30 July 2008: Eramet controlled 56% of Tinfos alongside the company H.H.H.\* (37%) and other minority shareholders
- 1er August 2008: Consolidation of Tinfos in Eramet's accounts
- Total value of the acquisition: EUR 398m, 70% in cash and 30% in shares, amounting to 241,491 new shares
- Phase 2 of the operation was to be the acquisition of minority stakes following the retrocession of part of the Notodden power plant, with Eramet retaining 40%
- After a halt in discussions with H.H.H.\*, negotiations were resumed. They could eventually lead to an increase of Eramet's shareholding in Tinfos
- ⇒ Eramet continues to implement synergies with Tinfos: EUR 10m-15m before tax in 2 years



\* HHH: Halvor Holta Holding

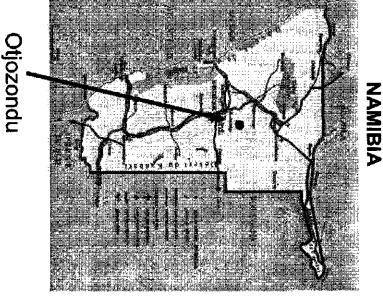
### **DEVELOPMENT PROJECT**

### PARTNERSHIP TO STUDY THE OTJOZONDU PROJECT IN NAMIBIA

☐Partnership agreement signed on July 29 with Otjozondu Holding (Pty) Ltd and Oreport, the shareholders of Otjozondu Mining (Pty) Ltd

- Feasibility study for development of Otjozondu deposit in Namibia over 18 months
- Since 15<sup>th</sup> October 2008, Eramet has held a call option for the majority of the capital of Otjozondu Mining (Pty) Ltd

□This ore would complement that of Comilog very well



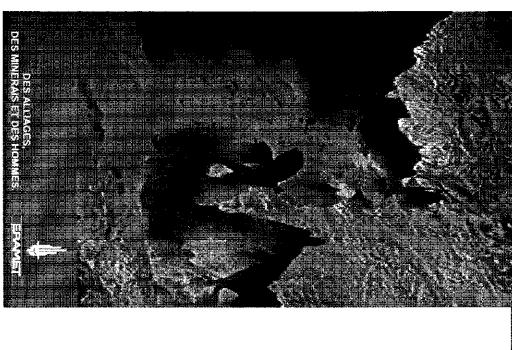


# **EXCELLENT RESULTS FOR ERAMET MANGANESE**

129	12%	2	145	83	62	Capital expenditure (EUR M)
49	•	•	94	89	100	ROCE after corporate income tax at standard rate of 35 % (%)
76	1	1	145	136	153	ROCE before corporate income tax (%)
30	1	39	46	48	45	Current operating margin (%)
440	147%	62	1,088	561	527	Current operating income (EUR M)
1,473	59%	159	2,348	1,175	1,173	Turnover (EUR M)
2007	07 vs 08	Of which Tinfos**	2008*	H2 2008*	H1 2008	EUR m



<sup>\*</sup> Figures include Tinfos except for Trading activities, recorded as assets to be divested
\*\* Tinfos pro forma, 5 months, except for Trading activities, recorded as assets to be divested



### ERAMET MANGANESE

EFFECTS OF THE CRISIS AT END-2008 AND IN EARLY 2009

### OPERATIONAL MEASURES

# MAIN MEASURES TAKEN IN RESPONSE TO THE CRISIS

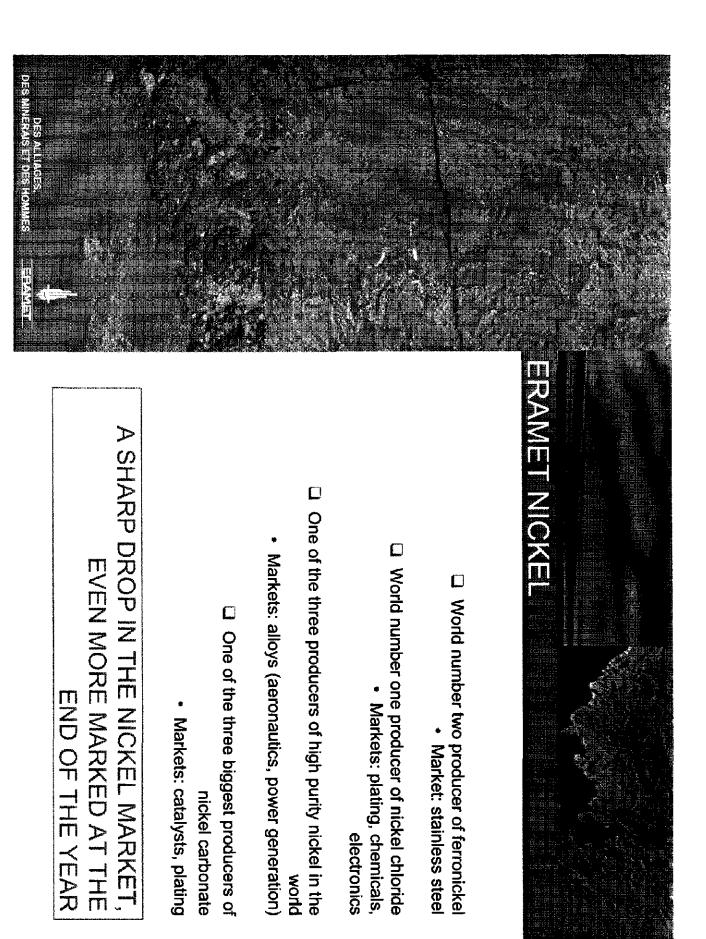
### □ Reduced production

- Manganese ore: Q1 2009: 60% (- 560 Kt) compared with capacity
- Manganese alloys: Q1 2009: 65% (- 155 Kt) compared with capacity
- Eramet will continue to make rapid output adjustments to take into market recovery account demand variations and remains able to respond to an eventual

#### Cost reduction

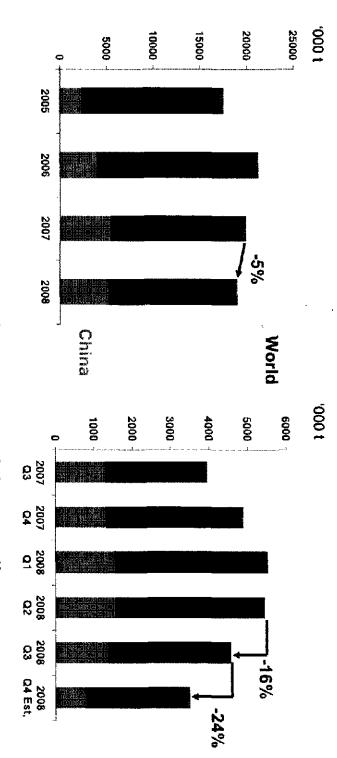
- General initiatives to reduce temporary employment and overtime
- Part-time unemployment at manganese alloy production sites in Norway and China
- Suspension of operations at the North Plant at Marietta => 110 job cuts
- Limits on capital expenditure: 65 % compared with pre-crisis target





## STAINLESS STEEL PRODUCTION

## PRODUCTION SINCE THE 3RD QUARTER SUBSTANTIAL DECLINE IN AUSTENITIC STAINLESS STEEL



Global production of austenitic stainless steel\*



\* Stainless steel containing nickel (about 8 to 10%); 65% of nickel demand

## SUPPLY-DEMAND BALANCE IN 2008

### COMPARISON WITH DEMAND, DESPITE CUTS IN PRODUCTION AND STOPPAGES A VERY SUBSTANTIAL SURPLUS IN SUPPLY BY

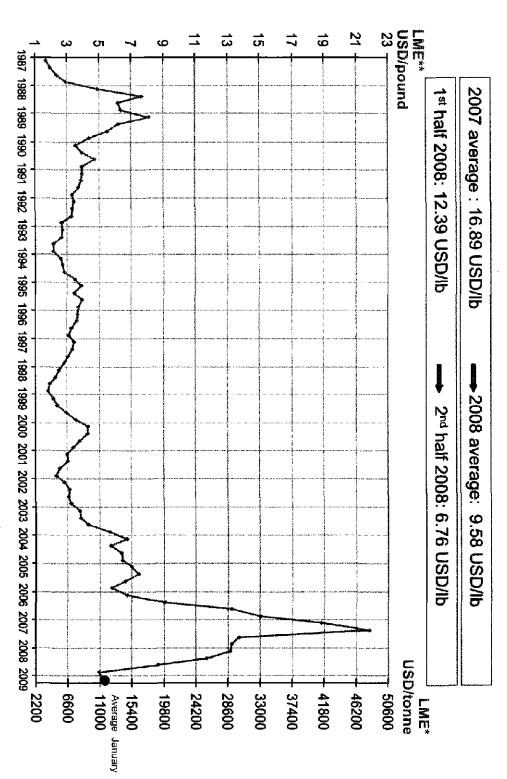
WORLD ('000 t.)	2006	2007	2008	07 vs 08
Stainless steel production	27,951	28,095	26,377	-6%
Apparent nickel consumption	1,381	1,370	1,271	-7%
Nickel production	1,354	1,433	1,380	4%
Supply/demand balance	- 27	+ 63	+ 109	

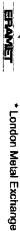
	Nickel stocks in weeks of consumption	
	6.7	
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#### NICKEL PRICES

# PLUNGE IN NICKEL PRICES ON THE LME





\*\* Quarterly average price at settlement

ERAMET 2008 RESULTS - 30

#### OPERATIONS

# **ERAMET NICKEL'S OPERATIONS IN 2008**

### □ Nickel production

2008 production: 51,000 tonnes, - 14% vs 2007

#### □ Nickel deliveries

2008 deliveries: 51,700 tonnes, -6% vs 2007

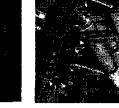


### CAPITAL EXPENDITURE



### BETWEEN 2003 AND 2008, SLN INVESTED EUR 708M MAJOR CAPITAL EXPENDITURE IN RECENT YEARS:

- SLN has been extensively modernised in recent years
- Rebuilding of 2 electric furnaces and 2 rotary furnaces
- Renewal of more than half of the mining equipment fleet
- Ore beneficiation plant at Tiébaghi
- Plant inaugurated in November 2008
- At Sandouville, capital expenditure for the development of new products with high added value (nickel carbonate, etc.)









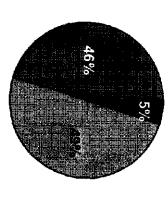
### WEDA BAY - INDONESIA

#### A WORLD-CLASS DEPOSIT: RESOURCES REVISED UPWARDS

March 06 Dry Acquisition (Mt)	Dry tonnes (Mt)	content (%)	(Kt)
Measured	16	1.27	203
Indicated	139	1.47	2,043
Inferred	123	1.53	1,882

January 09 Dry tonnes Current (Mt)		Nickel content (%)	(Kt)
Measured	89	1.45	1,281
Indicated	147	1.44	2,107
Inferred	109	1.55	1,699

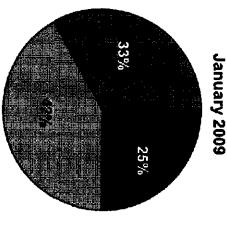
March 2006



Measured







Breakdown of Weda Bay resources by category



### WEDA BAY - PARTNERSHIP

### AN IMPORTANT STEP FORWARD FOR THE WEDA BAY PROJECT: PARTNERSHIP WITH MITSUBISHI CORP

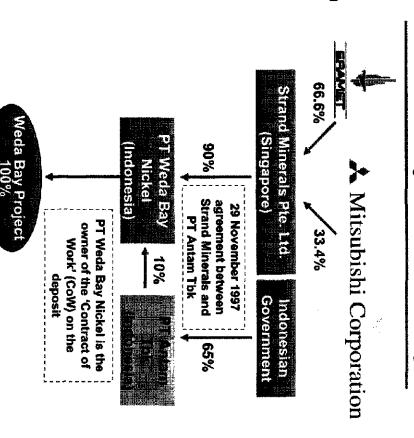
#### A new partnership

- Minerals which controls 90% of the Weda Bay Nickel project Sale to MITSUBISHI CORP. of 33.4% of Strand
- The remainder is controlled by our partner Antam
- Payment by Mitsubishi to Eramet of USD 145m, made by Eramet including the contribution to expenditure already

#### Mitsubishi Corp.:

- A very complementary partnership that adds value to the project
- One of Indonesia's biggest economic partners through industrial and commercial activities
- A major player in mining and metallurgy through participation in large-scale projects and existing

## New shareholding structure of Weda Bay





### DEVELOPMENT PROJECTS

# PRONY AND CREEK PERNOD IN NEW CALEDONIA

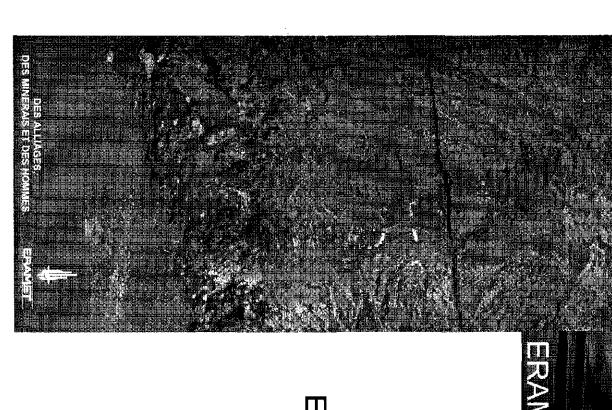
- Signing of a convention between SLN\* and the South Province on January 20th, with a the biggest nickel oxide resources in the world view to developing the Prony and Creek Pernod deposits. These deposits represent one of
- Plant project using the hydrometallurgical technology developed by Eramet's research centre in Trappes
- garnierites from the Thio and Kouaoua mines, which will extend the exploitation period As well as ore from Prony and Creek Pernod, the project will use low-grade
- The project is aiming for production capacity of about 60,000 tonnes of nickel a year
- Creation of a joint venture, 50% controlled by SLN and 50% controlled by the South Province, to conduct exploration of the deposit and research into the project
- Licence commitment: 3 times 3 years and spending of EUR 12m in the first 3 years as well as EUR 70m in subsequent years (including the prefeasibility study)
- Valuation of the deposits brought by the South Province according to exploration results (quantities of nickel content, long-term nickel prices) and financial feasibility of the operation



### **MAJOR DECLINE IN 2008**

135	40%	189	96	93	Capital expenditure (EUR M)
78	1	15	(9)	38	ROCE* after corporate income tax at standard rate of 35 % (%)
120		23	(13)	59	ROCE* before corporate income tax (%)
54	ı	19	(11)	37	Current operating margin (%)
693	-76%	169	(39)	208	Current operating income (EUR M)
1,290	-30%	897	342	555	Turnover (EUR M)
2007	07 vs 08	2008	H2 2008	H1 2008	EUR m





#### EFFECTS OF THE CRISIS AT END-2008 AND IN EARLY 2009

### OPERATIONAL MEASURES

# MAIN STEPS TAKEN IN RESPONSE TO THE CRISIS

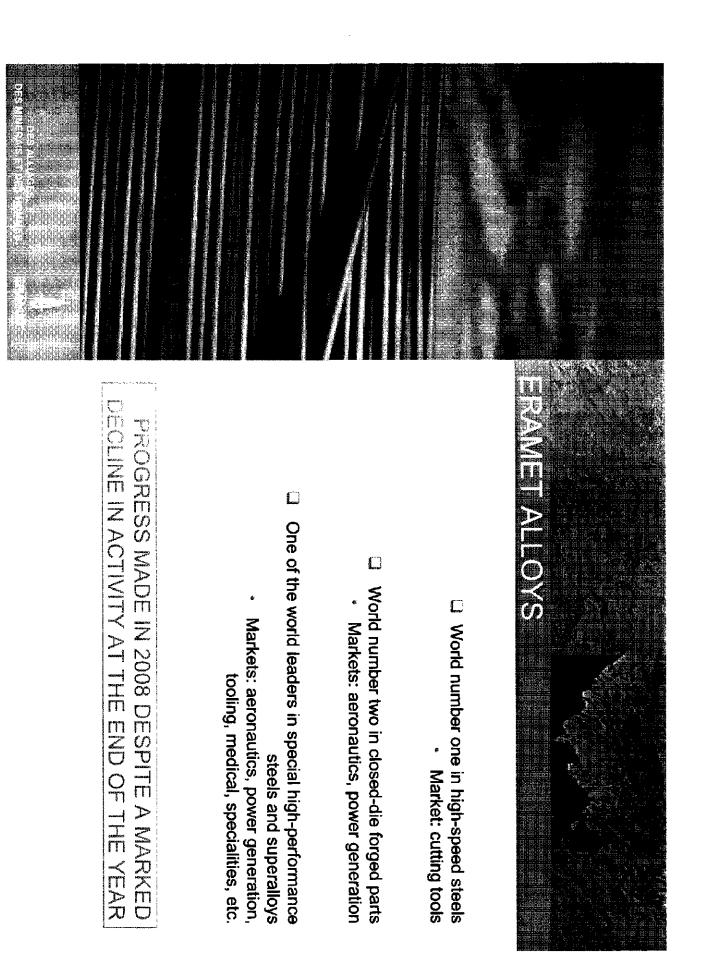
#### ☐ Reduced production

- Q1 2009: production at a rate compatible with output of 50,000 tonnes or 80% of the capacity
- Eramet will continue to make rapid output adjustments to take an eventual market recovery into account demand variations and remains able to respond to

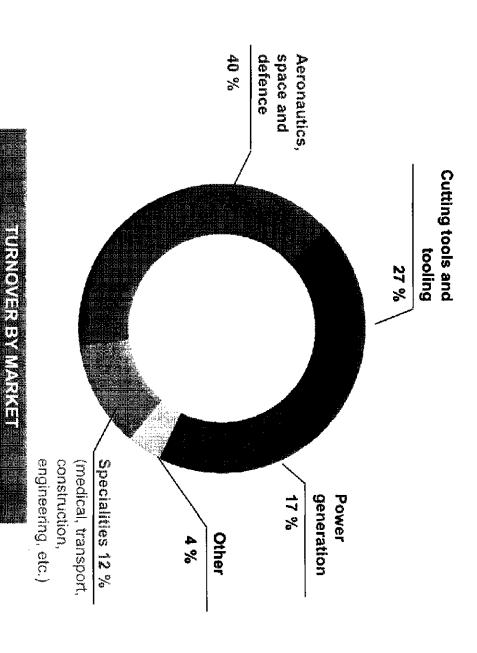
#### Cost reduction

- Reduction of general expenses
- Reduction of outsourcing costs
- Purchasing action plan
- departures, limitation of overtime council: technical unemployment, headcount freezes and non-replacement of Employment measures planned, will be discussed soon with SLN works
- Launch of a study aiming for a long-term reduction in production costs at SLN
- □ Limitation of capital expenditure: 47 % compared with pre-crisis





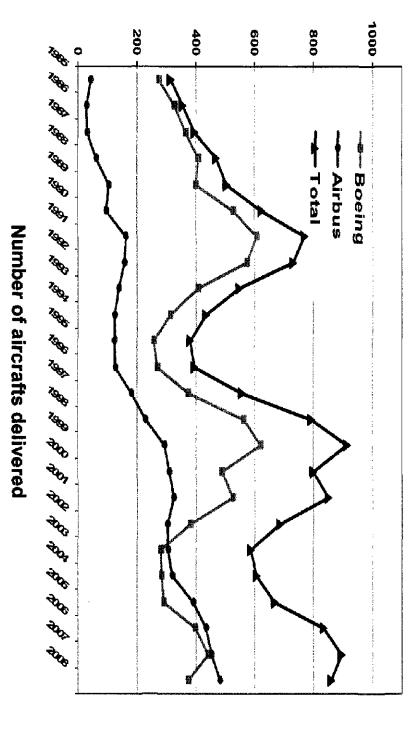
# TURNOVER BREAKDOWN 2008





### AERONAUTIOS MARKET

### SLIGHT DECREASE IN 2008 (STRIKE AT BOEING) AND UNCERTAINTY OVER THE COMING YEARS





Source: Airbus - Boeing

## ALLOYS DIVISION MARKETS

### **SLOWING MARKETS**

#### ☐ Aeronautics market

- Decline in production rates of A320, B777 aircraft
- Postponements of B787, A400 M

#### Energy market

- Downwards revision in gas turbines in 2009
- But progress in nuclear

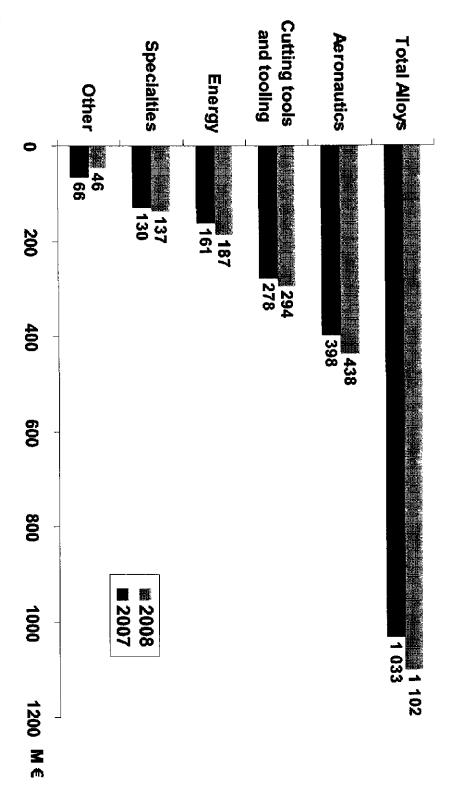
### ☐ High-speed steels market

quarter Slight decline in volumes over the year but very sharp drop in the final



#### OPERATIONS

# 2008 TURNOVER UP 7% ON 2007 (EUR M)





### 

# **UKAD - TITANIUM PARTNERSHIP**

Creation of a joint venture, 50% owned by Aubert & Duval and 50% owned by Ardor Holding, a partner of UKTMP (Kazakhstan)

#### Objectives:

- Strengthening the position held by Aubert & Duval in the titanium market
- Aubert & Duval parts), unique in the western world and able to compete against VSMPO Creating an integrated business line (UKTMP sponges and ingots, UKAD bars and billets,

#### A rapidly developing market

- characteristics (corrosion resistance), density and its workability In aeronautics, where titanium is replacing aluminium and steel, because of its
- In other growth markets, such as defence, energy and medical
- Investment of EUR 40m (including 50% for AD)
- □ Launch of certification tests planned for end of 2011

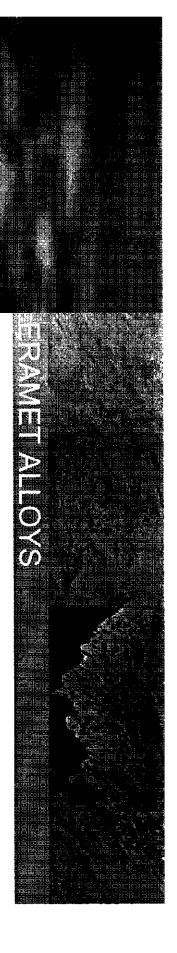


#### KEY FIGURES 2008

# INCREASE IN COI OF 10% IN 2008, DESPITE A 21% DROP IN THE 2<sup>ND</sup> HALF 2008 COMPARED WITH THE 1<sup>ST</sup> HALF

54	54%	83	56	27	Capital expenditure (EUR M)
7	•	8	8	8	ROCE* after corporate income tax at standard rate of 35 % (%)
11	1	13	13	12	ROCE* before corporate income tax (%)
8	8	8	7	00	Current operating margin (%)
78	10%	86	38	48	Current operating income (EUR M)
1 033	7%	1 102	510	592	Turnover (EUR M)
2007	07 vs 08	2008	H2 2008	H1 2008	EUR m





#### EFFECTS OF THE CRISIS AT END-2008 AND IN EARLY 2009

### OPERATIONAL MEASURES



# MAIN STEPS TAKEN IN RESPONSE TO THE CRISIS

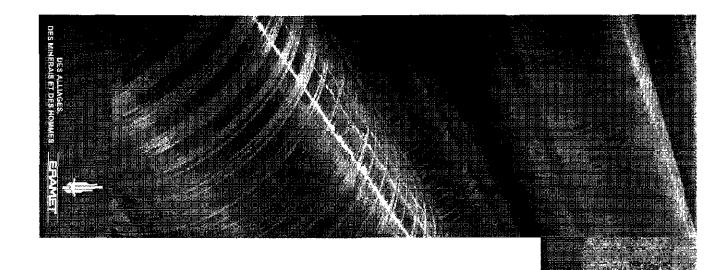
#### □ Reduced production

- end of 2008 Stoppages of steel plants at Commentry and Söderfors for 3 weeks at the
- Eramet will continue to make rapid output adjustments to take an eventual market recovery into account demand variations and remains able to respond to

#### Cost reduction

- Continuing restructuring initiatives: relocation of laboratories and production
- Repatriation of machining subcontracting
- Redundancy plan at Söderfors in Sweden
- Non-replacement of departures and cancelling of interim contracts
- Part-time unemployment plan under study (Champagnole 7 weeks,...)
- ☐ Limitation of capital expenditure: 44 % compared with pre-crisis target





#### OUTLOOK

### **OUTLOOK - SHORT TERM**

☐ Market conditions will remain difficult in the short term

... but positive effects will follow due to the end of destocking and

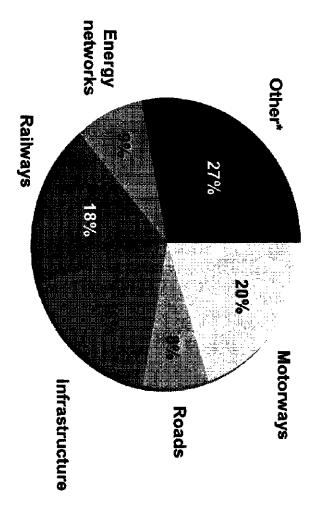
stimulus plans



### CHINESE STIMULUS PLAN

## WILL BENEFIT THE STEEL INDUSTRY CHINA HAS LAUNCHED A MAJOR STIMULUS PLAN THAT

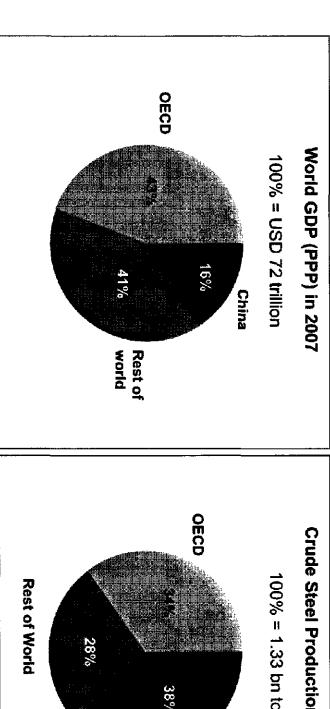
100% = \$ 586bn

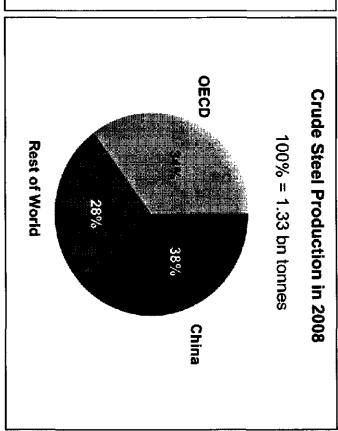




# THE INCREASING WEIGHT OF CHINA

## COMPARED WITH ONLY16% OF GDP (PPP) CHINA REPRESENTS 38% OF GLOBAL CRUDE STEEL PRODUCTION







As at December 2008, China represents 46% of crude steel production, and Asia 66%

# OUTLOOK - MEDIUM AND LONG TERM

### ERAMET'S VARIOUS BUSINESS LINES ARE STILL LONG-TERM GROWTH BUSINESSES

- ☐ In the medium term:
- Supply limited by closures and output reductions
- Reduced investments
- Decrease in supply favouring a rebalancing of the market

#### ☐ In the long term:

- Industrialisation and urbanisation in emerging markets, particularly China and
- Economic recovery in developed countries
- Possible supply deficit



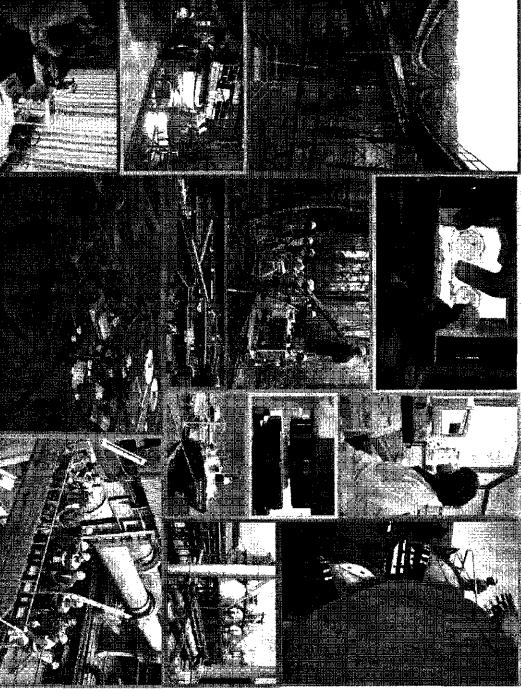
#### CONCLUSION

#### **GROUP STRATEGY**

- Eramet will continue to take steps to adapt to changes in its markets by:
- Adjusting output
- Limiting investment spending
- Cutting costs
- ... In order to preserve its room for financial manoeuvre and so that it can benefit fully from market recovery when this comes
- ☐ Medium- and long-term targets will be maintained, with major development projects beyond the current crisis

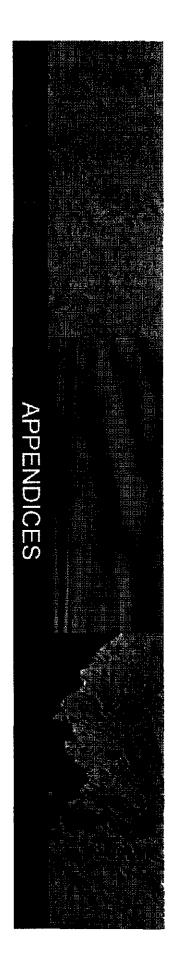




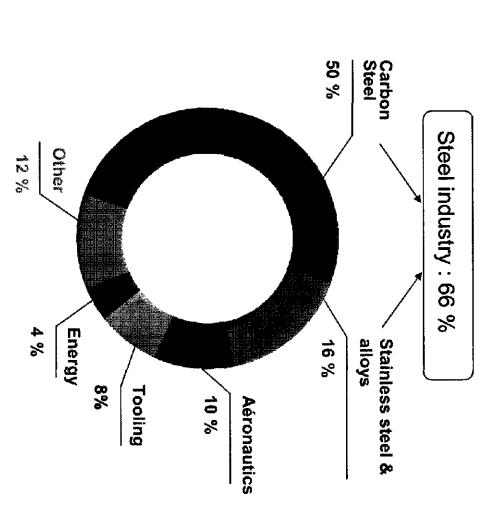








# BREAKDOWN OF TURNOVER IN 2008







## RETURN ON CAPITAL EMPLOYED

# **ROCE REMAINED HIGH IN 2008**

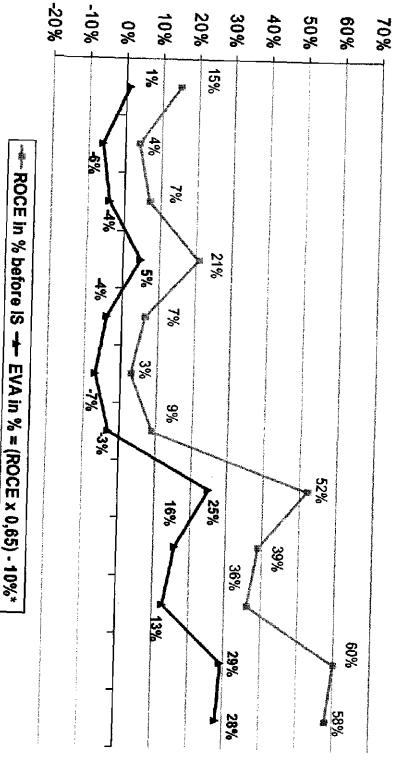
Total Group	Alloys	Manganese	Nieke	M€
58 %	13 %	145 %	23 %	2008
60 %	11 %	76 %	120 %	2007



# ROCE BEFORE INCOME TAX AND EVA FROM 1997 TO 2008

# ROCE SLIGHTLY DECREASING COMPARED TO 2007

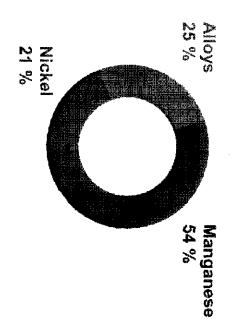






Excluding impact of Tinfos, Weda Bay and securitization \* EVA in % = (ROCE x 0,65) - 9% before 2008

# DISTRIBUTION OF TURNOVER IN 2008



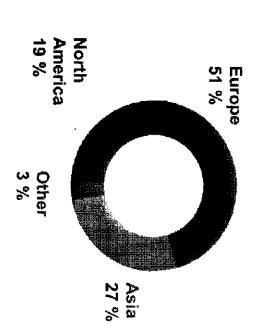
Compared to 2007

\*\* Alloys + 7 %

\*\* Manganese + 59 %

\*\* Nickel - 30 %

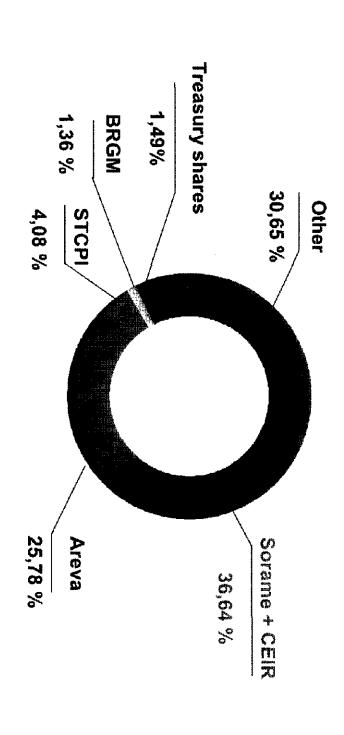
TURNOVER BY DIVISION



TURNOVER BY GEOGRAPHICAL AREA



# SHAREHOLDERS AT 31 DECEMBER 2008

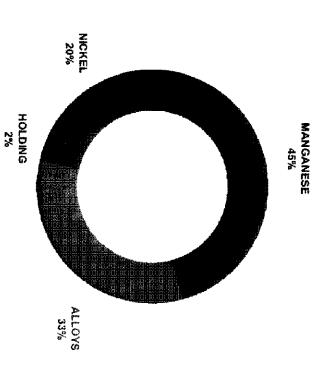


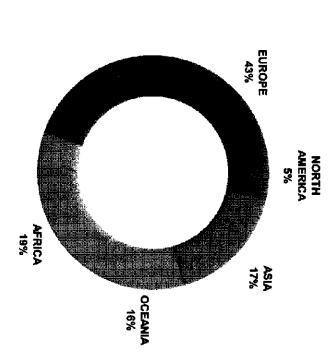
Number of shares: 26 215 231



#### **WORKFORCE 2008**

# WORKFORCE AT THE END OF THE YEAR





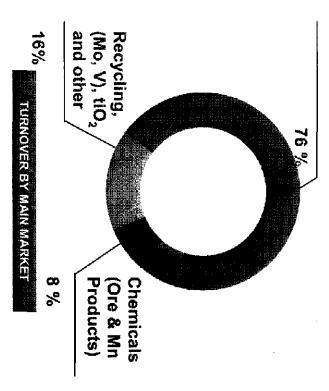
Total workforce: around 16 000

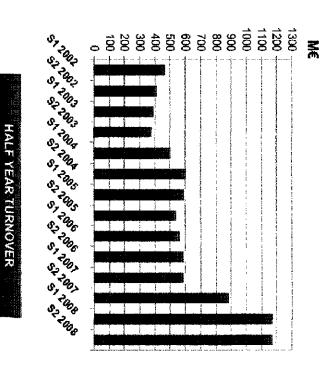


#### 2008 TURNOVER

# INCREASE OF 59% IN 2008, TO EUR 2,348M, DUE TO MANGANESE ORE AND ALLOY PRICES



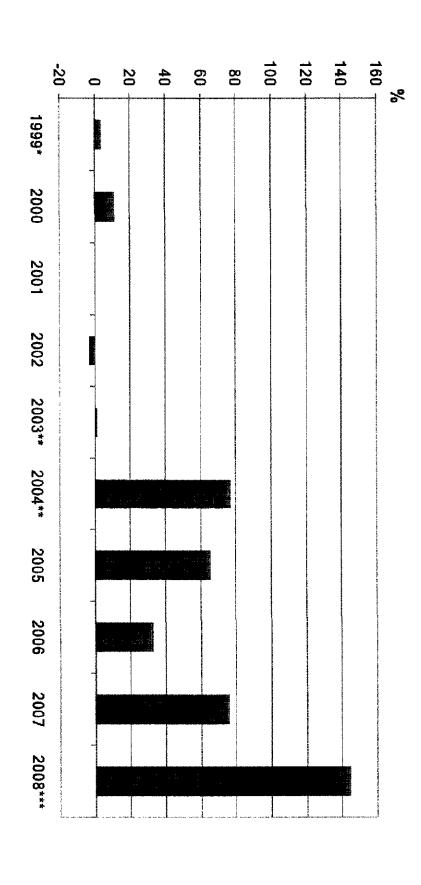


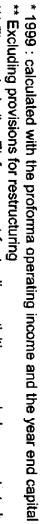




\* +49% excluding Tinfos

# MANGANESE ROCE BEFORE INCOME TAX



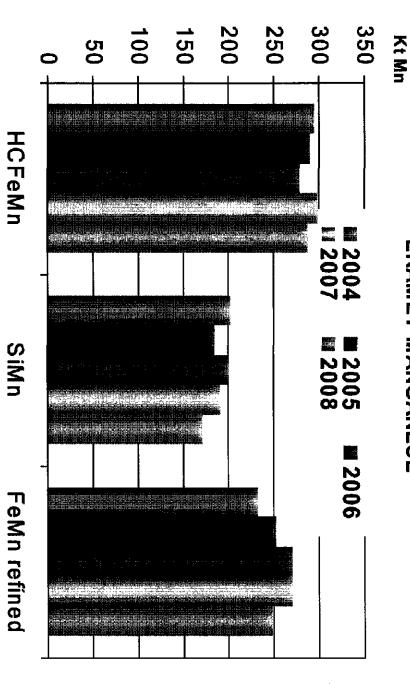


\*\*\* Figures including Tinfos, except for trading activities recorded as assets to be divested



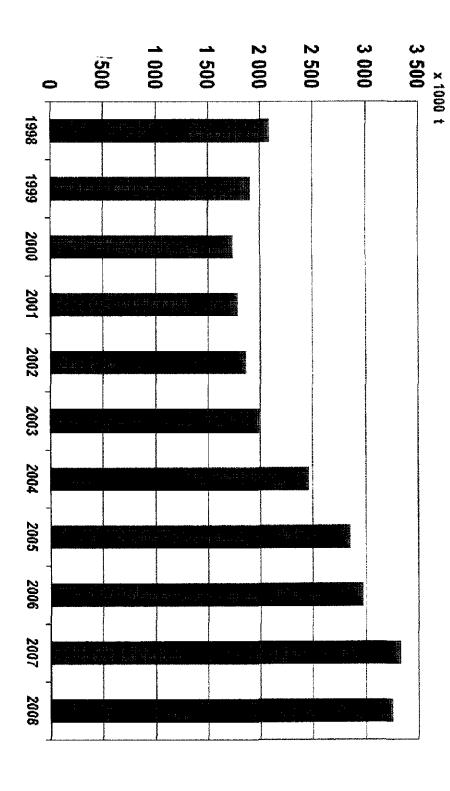
### MANGANESE ALLOYS

## MANGANESE ALLOY PRODUCTION OF ERAMET MANGANESE





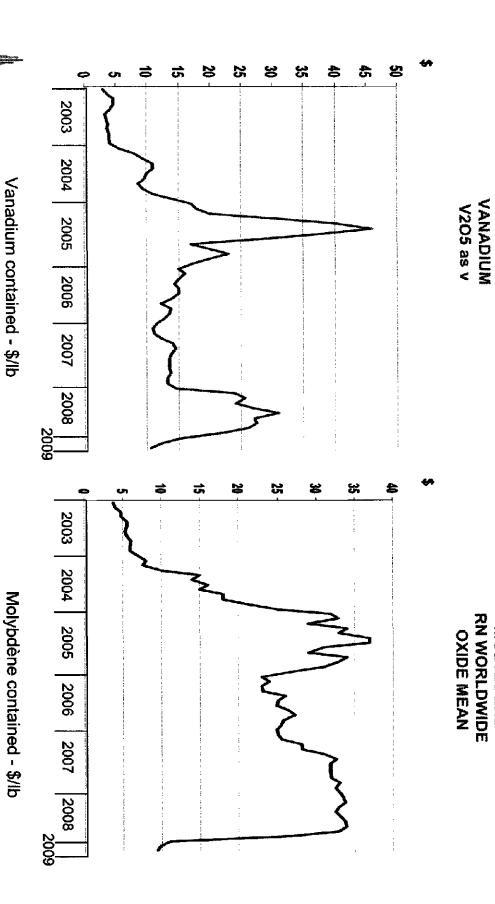
## MANGANESE ORE PRODUCTION





# VANADIUM AND MOLYBDENUM PRICES

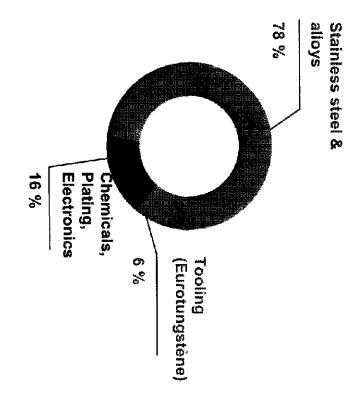
MOLYBDENE

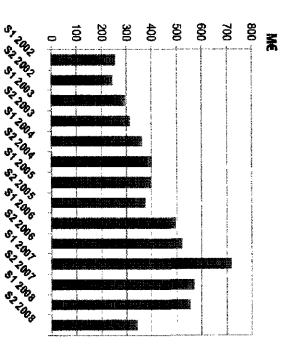




#### 2008 TURNOVER

## DECLINE OF 30% TO EUR 897M IN 2008, MAINLY DUE TO THE CHANGE IN NICKEL PRICES



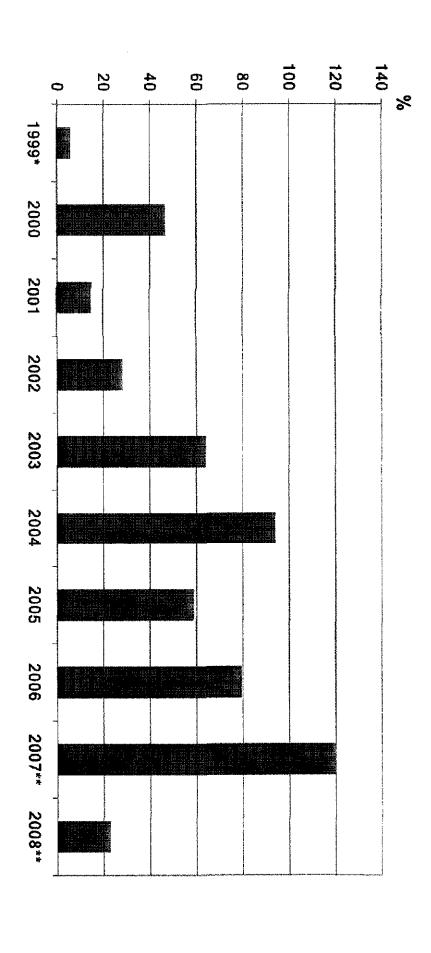




TURNOVER BY MAIN WARKET

HALF YEAR TURNOVER

# NICKEL ROCE BEFORE INCOME TAX

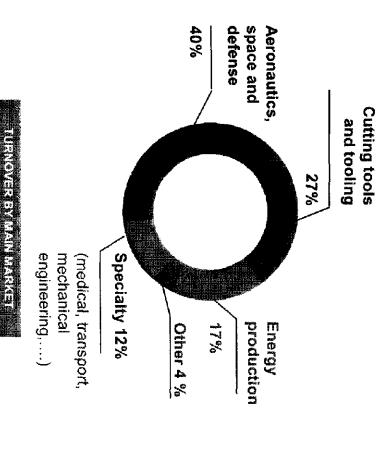


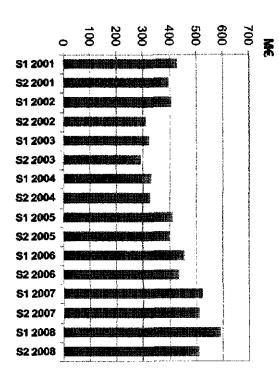


\* 1999 : calculated with the proforma operating income and the year end capital \*\* excluding Weda Bay acquisition cost

# 2008 TURNOVER

# MARKED DECLINE IN ACTIVITY IN THE 2ND HALF-YEAR INCREASE OF 7% IN 2008, TO EUR 1,102M, DESPITE A

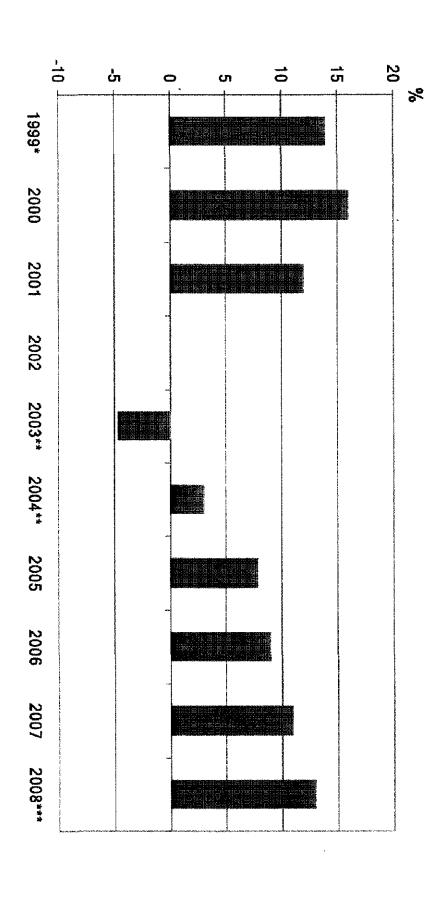




HAIS - YEAR TURNOVER



# ALLOYS ROCE BEFORE INCOME TAX





\* 1999 : calculated with the proforma operating income and the year end capital

\*\*\* excluding provisions for restructuring
\*\*\* excluding effect of securitization since the second half of 2007

# DESTOCKING EFFECTS

# DECEMBER CAN BE MAINLY EXPLAINED BY DESTOCKING THE DROP OF ALLOYS DELIVERIES IN NOVEMBER AND

Destocking at constructors Average Steel Consumption in November and December Destocking at distributors Destocking at steelmakers Final consumption drop materials by steelmakers **Expeditions metal alloys** November December January to October And services center Destocking of raw And conveyors Breakdown of the drop in alloys consumption by reason\* Production of steelmaker in november and december 75% 25 75 8



\* World average, the breakdown by region is vary widely Source : Publication des entreprises, Steel Business Briefing, Estimation Laplace Conseil

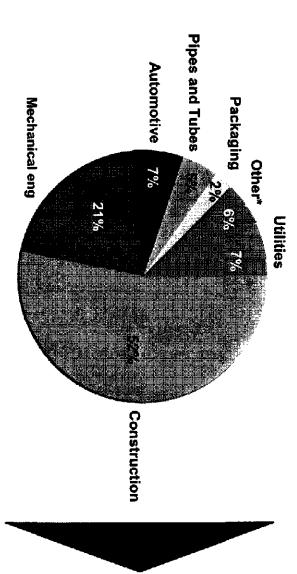
ISBI ERAMET 2008 RESULTS - 71

# STEEL DEMAND

# STEEL DEMAND WILL MAINLY DEPEND ON THE REBOUND OF THE CONSTRUCTION SECTOR

# **World Steel Consumption**

100% = 1 344 Mt en 2007

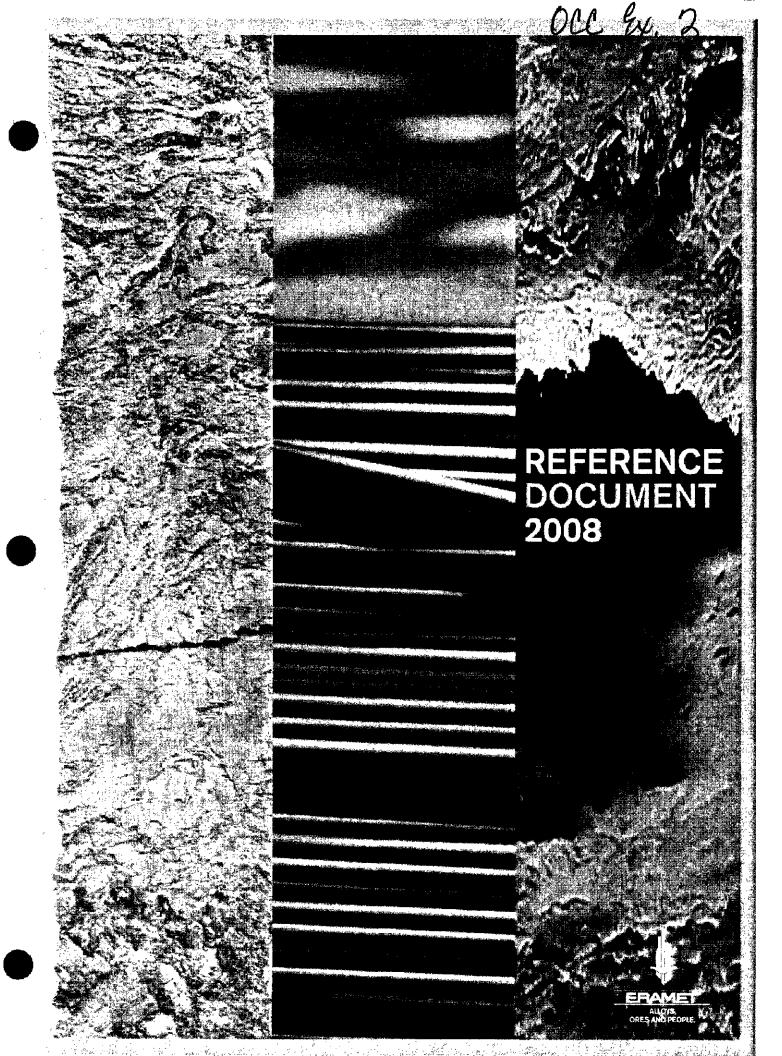


The major urbanisation expected in developing countries should recover and should draw a rebound of the steel demand growth



\* Other: Defence: 1%, Appliances: 1%, Railway track & vehicles 2%, Shipbuilding: 2%

Source: MBR, WorldSteel, analyses Laplace Conseil



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A public limited company with a share capital of 678,956,454.56

Registered office: Tour Maine Montparnassa, 33 avenue du Maine, 75015 Paris, France. Registered in the Paris trade register under number 632 045 3816

# 2008 REFERENCE

This document prepared on the basis of the 2008 financial statements, includes the material information subsequent to the approval of those financial statements to the date of its filings



This Reference Document was filed with the AMF on 10 April 2009, pursuant to Article 212-13 of its General Regulations. It may not be used in support of a financial transaction unless accompanied by a prospectus approved by the AMF.

# Person responsible for the Reference Document



# 1.1. NAME AND POSITION OF PERSON RESPONSIBLE

Patrick Buffet

Chairman and Chief Executive Officer of ERAMET.

# 1.2. DECLARATION BY THE PERSON RESPONSIBLE FOR THE REFERENCE DOCUMENT

I declare that to the best of my knowledge, and after having taken all reasonable measures in this regard, the information in this Reference Document is accurate and does not contain any omission that could affect its scope.

I declare that to my 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 the Management Report presents a true and fair view of the business developments, results and financial position of the Company and of all compenies within the scope of consolidation as well as a description of the main risks and uncertainties they face.

The Statutory Auditors have provided me 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 Reference Document and that they read the document in its entirety.

The 2009 consolidated financial statements presented in the Reference Document were the subject of a report from the Statutory Auditors presented on page 199 of said document and contains an observation regarding the change in presentation in the balance sheet.

Patrick Buffet Name: Title: Chairman and CEO Paris, 10 April 2009 Signature:

Presented in Chapters 3, 4, 6, 11, 15 and 21 and in Appendix 3.

# Statutory Auditing – Name of Statutory Auditors

The separate and consolidated financial statements for the past three financial years have been audited by the Statutory Auditors listed below.

# → 2.1. STATUTORY AUDITORS

# A. Ernst & Young Audit

Simplified joint-stock company with a variable share capital.

Part of the Ernst & Young group.

Address: Tour Ernst & Young, 11 ailée de l'Arche - Paris - La Défense

Represented by François Carrega.

Partner responsible for the audit: François Carrega.

First appointed by the Ordinary General Shareholders' Meeting of 21 June 1985, with its term of office renewed by the Meeting of 28 June 1991 and subsequently by the Meeting of 31 July 1997 and the Meeting of 21 May 2003. The renewal of this term of office for an additional six years is being proposed to the Ordinary General Shareholders' Meeting to be held in 2009 to approve the 2008 financial statements through the nomination of Ernst & Young et Autres, 41 rue Ybry - 92200 Neuilly-sur-Seine, Nanterre Trade Register 438 476 943, with the new partner responsible for the audit being Mr. Aymeric de la Morandière.

Date of end of term: General Shareholders' Meeting called in 2009 to approve the 2008 financial statements.

# B. Deloitte & Associés

Public limited company with a share capital of €1,723,040.

Address: 185 avenue Charles de Gaulle, 92254 Neuilly-sur-Seine cedex.

Represented by Nicholas L.E. Rolt;

Partner responsible for the audit: Nicholas L.E. Rolt.

First appointed by the Ordinary General Shareholders' Meeting of 31 July 1997, with its term of office being renewed by the Meeting of 21 May 2003. The renewal of this term of office for an additional six years will be proposed to the Ordinary General Shareholders' Meeting to be held in 2009 to approve the 2008 financial statements, with the new partner responsible for the audit being Alain Penanguer.

It should be noted that, because of the merger in 2004 of Deloitte Touche Tohmatsu (Statutory Auditors) and Deloitte Touche Tohmatsu Audit (Alternate Auditors), the position of Statutory Auditors is held by Deloitte Touche Tohmatsu Audit, which changed its name to Deloitte & Associés.

Date of end of term: General Shareholders' Meeting called in 2009 to approve the 2008 financial statements.

# → 2.2. ALTERNATE AUDITORS

# A. Jean-Marc Montserrat

Address: Tour Ernst & Young,

11 allée de l'Arche - Paris - La Défense cedex.

First appointed by the Ordinary General Shareholders' Meeting of 21 June 1985, with its term of office renewed by the Meeting of 28 June 1991, subsequently by the Meeting of 31 July 1997 and lastly by the Meeting of 21 May 2003. The Ordinary General Shareholders' Meeting called in 2009 to approve the 2008 financial statements will be asked to appoint as alternate auditors Auditex, Tour Ernst & Young, 11 altée de l'Arche - Paris - La Défense Cedex, for a further six-year term.

Date of end of term: General Shareholders' Meeting called in 2009 to approve the 2008 financial statements.

# B. Cabinet BEAS (Bureau d'Études Administratives Sociales et Comptables)

Public limited company with a share capital of €8,000.

Address: 7/9 Ville-Houseay -92524 Neuilly-sur-Seine Cedex.

Represented by Mr. Alain Pons.

It should be noted that, because of the above-mentioned merger, the resignation of Deloitte Touche Tohmatsu Audit (now called Deloitte & Associés) from its position as alternate auditor resulted in its replacement by Bureau d'Études Administratives Sociales et Comptables - BEAS being proposed to the General Shareholders' Meeting of 11 May 2005.

The renewal of this term of office for an additional six years will be proposed to the Ordinary General Shareholders' Meeting to be held in 2009 to approve the 2008 financial statements.

Date of end of term: General Shareholders' Meeting called in 2009 to approve the 2008 financial statements.

# Selected financial information – key business figures

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# 3.1. SELECTED HISTORICAL INFORMATION

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 16,000 people in 2008 in some 20 countries, generated annual sales of €4.3 billion. All three businesses show long-term growth.

The Nickel Division has nickel mines in New Caledonia and transforms virtually all its ore itself. ERAMET is the world's seventh-largest nickel producer, the second-largest ferronickel producer, one of the three leading global high-purity nickel producers and the global leader in nickel chloride. In 2006, ERAMET acquired the Weda Bay nickel deposit located on the island of Halmahera in Indonesia. This world class deposit could ultimately enable the Group to almost double its nickel production.

The Manganese Division is the world's second-largest producer of manganese alloys, the second-largest producer of high-grade manganese ore thanks to its mine in Moanda (Gabon) and the world's leading producer of manganese chemical derivatives.

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 power generation.

The Group has major competitive advantages:

- → high-quality ore reserves in terms of both grades and lifespan;
- strong technological skills in mining, metallurgy, closed die-forging, metal chemistry and hydrometallurgy.

The Group's strategy is to sustainably strengthen its positions and profitability in markets with long-term growth through:

- competitive capacity expansions in nicket and manganese, to maximise returns from its extensive mining resources while supporting the growth of its major global customers;
- → ensuring at all times that its businesses are always world class in terms of competitiveness;
- ⇒ a global presence via the ERAMET International sales network and strategic investments, particularly in China;
- → a dynamic research and development policy, with regard to both processes and products;
- → careful management, enabling the Group to weather the most difficult periods resulting from the cyclical nature of its markets and to invest against the cycle to maximise returns during the most dynamic periods:
- → targeted, complementary acquisitions of existing businesses.

The Group's development is for the long-term. The Group acts responsibly towards its environment, employees and shareholders.

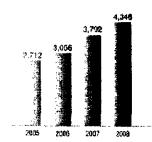
# 🗕 3.2. KEY BUSINESS FIGURES

All data is IFRS compliant.

# Business items (consolidated data in millions of euros) 3.2.1.



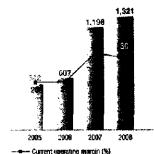
(MILLIONS OF EUROS)



+15%

Sales up 15% on the back of higher manganese prices and the consolidation of Tinfos.

# **CURRENT OPERATING PROFIT** (MILLIONS OF EUROS)

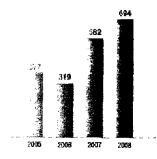


+10%

Current operating profit up 10% despite the effect of the crisis in the second half of 2008.

# PROFIT (LOSS) FOR PERIOD, GROUP SHARE

(MILLIONS OF EÙROS)

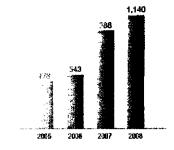


+19%

Profit (loss) for period, group share up 19% to €694 million.

# **NET CASH FLOWS FROM OPERATING ACTIVITIES**

(MILLIONS OF EUROS)

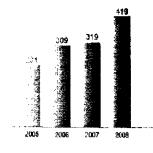


+15%

Up 15% on the back of higher manganese prices and control of working capital requirements.

# **CAPITAL EXPENDITURE**

(MILLIONS OF EUROS)

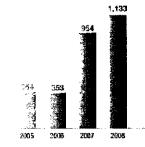


+31%

Capital expenditure up to €419 million despite being scaled back at the end of the year.

# CONSOLIDATED NET CASH POSITION

(MILLIONS OF EUROS)



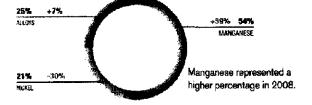
+19%

Strengthened financial position, with a consolidated net cash position of €1,133 million at the end of 2008.

# GEOGRAPHIC BREAKDOWN OF SALES



# BREAKDOWN OF SALES BY BUSINESS SEGMENT



# SALES BY DIVISION

**			2008	2007	2006
- Nickel	e tal		697	1,290	1,019
- Manganese			2,340	1,473	1,147
- Alloys			1,102	1,033	892
- Holding company and miscellaneous	14 . Jane	and store the second	(1)	(4)	(2)
Total Control of the			4,340	3,700	3,05
Sales by geographic region	10.10.68	TOWN TO			
· Europe		1 2 E	2,224	1,985	1,532
North America		grands	812	643	638
- Asia	. Arabi		1,160	922	725
Other regions	Strain Strain		154	242	161
Total			4,340	3.703	3,0846

# 3.2.2. Consolidated financial statements

(IFRS, millions of euros)	2008	2007	2006
Sales	4,348	3,792	3,058
Current operating profit	132 (A. 132 E	1,198	607
Net cash flow from operating activities	1,140	9 <b>88</b>	543
Capital employed	283	2,046	2.001
Capital expenditure	<b>10</b>	319	30 <b>9</b>
Average workforce	tabé	14,178	13,739

Excluding Weda Bay capital expenditure.

For the fifth year running, ERAMET posted excellent results (operating profit of €1,321 million, up 10% on 2007), due to very high manganese ore and alloy prices in the first three quarters of the year. The impact of the crisis was considerable in Q4 2008, 2008 was marked by the acquisition by the Manganese Division of a 56% economic interest and 58% of the voting rights in the Norwegian company Tinfos, ERAMET's financial position improved and its net cash position was €1,133 million.

# Income statement

# SALES

The Group's consolidated sales were €4,346 million compared to €3,792 million in 2007, up 15%.

This €554 million rise was mainly due to the higher manganese sale prices and the consolidation of Tinfos (excluding the trading business recognised in assets available for sale) as from 1 August 2008 (€159 million).

Meanwhile, ERAMET Nickel sale prices, after the effect of nickel hedges, were US\$10.2/pound (US\$22,440/ton), compared to US\$13/pound (US\$28,600/ton) in 2007.

# **CURRENT OPERATING PROFIT**

Current operating profit was €1,321 million compared to €1,196 million in 2007, representing a current operating margin of 30%, slightly lower than in 2007 (32%).

The &1 25 million increase in current operating profit, including &82 million for Tinfos, was mainly due to:

- → a €717 million positive sales price effect, including -€260 million at ERAMET Nickel, €945 million at ERAMET Manganese and €32 million at ERAMET Alloys;
- → an €82 million negative volume effect, basically due to the fall-off in sales at ERAMET Manganese in Q4 2008;
- a very sharp €308 million increase in costs across all three Group Divisions (fuel, freight, coal, alloying raw materials, etc.);
- the negative effect of last quarter production cutbacks on business and productivity (€196 million) and one-off events such as SLN's overhaul of a turnace and extremely bad weather in New Caledonia in the first half;
- ★ the fall in the USD/EUR exchange rate (€68 million): 1.4350 USD/EUR compared to 1.3170 in 2007, after the effect of hedging.

# **OPERATING PROFIT**

Operating profit was €1,243 million, up on 2007 (€1,139 million). It included a €78 million deduction in other operating income and expenses primarily covering €48 million in asset impairment, including €41 million from impairment tests, €16 million in offsetting of the remeasurement of Tintos finished product inventories, and a €14 million expense for changes to the supplementary pension plan.

# PROFIT (LOSS) FOR PERIOD

Profit (loss) for period was €855 million compared to €814 million in 2007, after the effect of:

- → positive net borrowing cost of €34 million as a result of investing cash. in the market:
- → other finance income and expenses, a €75 million expense, mostly due to a €35 million negative exchange rate effect, a €25 million negative remeasurement of financial instruments not eligible for hedging and a €10 million reversal of discounting:
- ◆ €347 million in income tax, representing an effective rate of 29%. compared to 30% in 2007. In 2008, the continuing favourable tax rate enjoyed by ERAMET was due to the tax rate applicable in Norway

(28%) and the use or recognition of previously unrecognised tax losses recognised by ERAMET Manganese.

# PROFIT (LOSS) FOR PERIOD, GROUP SHARE

Profit (loss) for period, Group share was €894 million compared to €582 million in 2007, net of €161 million in minority interests.

# Consolidated balance sheet

The consolidated balance sheet total as of 31 December 2008 was €5,969 million compared to €4,874 million as of 31 December 2007.

- → The working capital requirement amounted to €823 million compared to €781 million as of 31 December 2007, including the Tinfos working capital requirement of €121 million, representing a decrease excluding Tinfos, as a result of the Group's efforts to control the working capital requirement and higher tax liabilities;
- → Shareholders' equity, including minority interests, increased. considerably; from €3,035 million at the end of 2007 to €3,732 million at the end of 2008.

# → 3.3. INFORMATION ON THE GROUP'S SHAREHOLDERS' EQUITY

This section analyses the consolidated balance sheet as of 31 December 2008 compared to 31 December 2007.

### 3.3.1. Operating working capital

The operating working capital requirement (inventory + receivables - payables) was €1,218 million as of 31 December 2008 compared to €1,125 million as of 31 December 2007. The ratio of the working capital requirement to sales was 28% as of the end of 2008 compared to

29.7% as of the end of 2007, a slight decline despite a sharp increase in inventories (+€337 million), offset by the decline in trade receivables due to the sharp fall in sales in Q4 (-€115 million), as well as an increase in trade payables (+€130 million).

# 3.3.2. Consolidated net cash position

# Financing (1)

The Group's net cash position (2) was €1,133 million as of 31 December 2008 compared to £954 million as of 31 December 2007. This increase was primarily the result of the following flows:

- ◆ €1,140 million in net cash flows from operating activities (€988 million in 2007):
- ◆ (€809) million in net cash flows from investing activities, primarily €419 million in capital expenditure and €425 million in financial investments, primarily stemming from the acquisition of Tinfos (including acquisition costs);
- → (€86) million in net cash flows from financing activities, including. €154 million in dividends paid to ERAMET shareholders and €51 million to minority shareholders of consolidated companies and €114 million from a capital increase to pay for part of the Tinfos acquisition.

<sup>(2)</sup> Net cash comprises cash and cash equivalents and other financial assets less short and long-term borrowings. The bonds formatly recognised under "Cash equivalents" were reclassified to "Other current financial assets" for a sum of €144 million as of 31 December 2007 and €103 million as of 31 December 2006. The balance sheets and cash flow statements for the 2007 and 2006 financial years were restated to take account of these changes.

## 3.3.3. **Provisions**

Provisions amounted to €424 million as of 31 December 2008 compared to €398 million as of 31 December 2007. They tall into two main categories:

# Employee obligations

Employee obligations as of 31 December 2008 were measured in line with IAS 19. Pension liabilities are comprised of retirement benefits and supplementary pensions.

Other employee benefits are comprised of long service bonuses and other benefits granted to employees, particularly in New Caledonia.

Obligations also include current restructuring and redundancy plans, particularly in France (Alloys and Manganese Divisions), Norway, Belgium and the United States (Marietta in 2008) for the Manganese Division.

The total provision for employee obligations was €121 million (less €5 million in plan assets classified as non-current financial assets), representing a net of €116 million compared to €112 million in 2007. This relative stability did, however, include material changes: consolidation of the Tinfos companies for €13 million and a decline in the provision in France (€5 million) and the United States (€4 million). The actuarial value of these obligations was €337 million (including €40 million for Tinfos) compared to €247 million in 2007, representing a 20% increase excluding Tinfos due to the change to the supplementary pension plan in France and a change to the pension plan in New Caledonia. Other obligations were flat overall, with the change explained by exchange rate differences, particularly the dollar and the Norwegian Krone.

# **Environmental contingencies and site** restoration

As stated in Chapter 4.3, ERAMET records provisions for the restoration of mining sites in New Caledonia and Gabon on the basis of the estimated discounted cost (rate of 5.40% in New Caledonia and 6.5% in Gabon) of dismantling facilities and replanting sites. These costs are reviewed periodically to factor in mined tonnage and actual costs. The amount of the provision as of 31 December 2008 was €220 million compared to €198 million as of 31 December 2007 (see Note 17.5 to the consolidated financial statements in Chapter 20.1). Other environmental provisions include liabilities stemming from lawsuits or regulatory constraints. They amounted to €38 million as of 31 December 2008 compared to €27 million as of 31 December 2007. The increase was primarily due to an €11 million provision related to pollution of the Fedaljord at Tinfos charged to goodwill. It will be updated in 2009.

### 3.3.4. Other non-current liabilities

Other non-current liabilities amounted to €22 million comprising SETRAG SA's debt payable to the Gabonese State over a period of 25 years following the purchase of own property, a portion of the spare parts inventory for €12 million and tax benefits obtained in New Caledonia (€10 million) and staggered over 5 to 6 years.

### 3.3.5. Shareholders' equity

The Group's shareholders' equity was €3,732 million as of 31 December 2008 compared to €3,035 million as of 31 December 2007.

The changes over the year were primarily due to profit for the year (€855 million), dividends paid (€205 million), the capital increase (€119 million) notably following the acquisition of Tinfos paid for in shares (€114 million), and the impact of the change in the financial instrument remeasurement reserve pursuant to IAS 39 (-€123 million).

# 3.4. FINANCING AND CREDIT FACILITIES

# Revolving credit facilities

On 24 May 2005, ERAMET entered into a five-year agreement for a €600 million syndicated multi-currency revolving credit facility with a select group of banks, with the option of extending it to seven years. In 2006 and 2007, ERAMET asked the lenders to extend the agreement for an additional year. The expiry of this facility has thus been extended to 24 May 2012. The interest rate applicable to the sums borrowed is the benchmark rate, depending on the borrowing currency, plus the applicable spread.

The spread is reduced on a sliding basis in line with the financial ratio of consolidated net debt to shareholders' equity. In addition, ERAMET pays a commitment fee of 30-32.5% of the applicable spread. ERAMET has agreed to a single covenant (net debt/Group shareholders' equity) as discussed in Chapter 4.1.1. This facility had not been drawn down as of 31 December 2008.

# 3.4.2. Commercial paper

In 2005, ERAMET established a €400 million commercial paper programme. Due to the surplus cash position and market conditions, the programme was suspended in early 2008. As of 31 December 2008, ERAMET had no outstanding commercial paper.

# 3.5. RECENT DEVELOPMENTS AND OUTLOOK

# Information as of the date of the Board Meeting 3.5.1.

On 18 February 2009, ERAMET and Mitsubishi Corporation announced their intention to enter into a partnership in respect of the project to develop the Weda Bay nickel deposit in Indonesia, Mitsubishi Corporation agreed to acquire from ERAMET a 33.4% interest in Strand Minerals, which holds a 90% interest in PT Weda Bay Nickel, alongside the Indonesian group

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

# New agreement allowing ERAMET to raise its interest in Eralloys (formerly 3.5.2. Tinfos) to 100%

On 12 March 2009, a new agreement, constituting the second phase of the acquisition of Tinfos, to be executed through in-kind contributions, was entered into with Halvor H. Holta Holding AS pursuant to which the ERAMET's interest in Eralloys (production of alloys, manganese, titanium dioxide and trading) will rise to 94.3% and its interest in Tinfos-Notodden (electricity generation) will fall to 34%. As a result of these transactions, Halvor H. Holta Holding AS will hold a 1.46% interest in ERAMET and the minority interests in Eralloys, holding around 6% of the capital, may elect to sell back their shares for cash or for ERAMET shares.

Eralloys which is fully consolidated at 55.78% since 1 August 2008 will be consolidated at 94.3% as from May 2009. This percentage could be raised later to 100% upon the buy-back of shares held by minority shareholders. There will be no significant impact on Group net cash, as the acquisition will be made by a contribution in kind. Provisional allocation as of 31 December 2008 will be adjusted during the 2009 financial year according to the definitive values of this second phase.

### Outlook for 2009 3.5.3.

# Outlook for the Group and measures taken in light of the global crisis

Over the short-term, the deterioration in the economic climate and significant levels of inventory reduction will continue to weigh down our markets. Early 2009 will be difficult. LME nickel prices are still quite low, at US\$4.92/ pound in January and February, while stainless steel production was still weak. Manganese ore trading is very limited, as steel and manganese alloy producers continue their policy of inventory reduction. Manganese alloy prices continue to erode. The slowdown in most sectors of the Alloys Division also continues.

Given this situation, ERAMET has decided to redouble its efforts to adapt to changing demand:

# → ERAMET Manganese: further cuts in one and manganese alloy production in Q1 2009

Considering the downward market trends, ERAMET Manganese will cut its Q1 2009 production to approximately 40% of its ore capacity (a 600,000 ton reduction for the quarter) and to approximately 35% of its alloys capacity (a 150,000 ton reduction for the quarter).

Beyond Q1 2009, ERAMET Manganese will continue to adjust its ore and alloys production to changes in the market. Moreover, ERAMET Manganese will retain the ability to respond quickly to any rebound in the market.

# → ERAMET Nickel: confirmation of the reduction forecast for Q1 2009

Considering the current sales outlook, nickel production was cut in early 2009 to an annualised rate of approximately 50,000 tons.

A further effort to cut costs will be implemented very shortly. Beyond Q1 2009, ERAMET Nickel will continue to adjust its production to changes in the market and will redouble its cost cutting efforts.

In 2009, hedging will be put in place for close to 5,000 tons of nickel at approximately US\$23,000/ton (US\$10.5/pound).

# ERAMET Alloys: reduction in the production of high-speed steels and adaptation measures throughout the Alloys Division

Given uncertainties in the aerospace market (slowdown of the A320, delays in programmes such as the B787. A400M, etc.), adjustment measures and strengthening of improvement plans were implemented in order to keep ERAMET Alloys competitive.

# Group cost cutting and capital expenditure

Beyond the savings directly generated by production cuts, considerable cost cutting efforts have been agreed throughout the ERAMET Group. After a 19% cut in capital expenditure in 2008 compared to what was originally budgeted, the Group's 2009 capital expenditure target was scaled back to 54%, namely from the originally budgeted €736 million

to €336 million. This figure may be cut further in 2009 depending on how the crisis unfolds.

High-purity chromium production at the Marietta plant in the United States was halted.

Over the coming quarters, the foreseeable end to inventory reduction measures and the progressive effect of the various stimulus plans should help increase demand for the Group's metal alloys.

Over the medium term, efforts to cut production and capacity closures announced by various producers should help curtail excess supply, while the current lack of financing will result in considerable scaling back and delaying of capital expenditure, limiting the growth in production capacity.

Over the longer-term, the continued urbanisation and industrialisation of emerging markets, particularly China and India, will continue to drive demand for metal alloys used in the production of steel, while the economic recovery in developed countries should further stimulate growth in demand. Given the under-investment expected over the coming years, this could trigger a new shortage in supply and result in price increases.

# Partnership with the Bollore group in lithium

As part of its move into new metal markets with strong growth potential, ERAMET entered into a partnership with the Bollore Group for the mining and transformation of lithium for the manufacture of batteries. The two groups are currently examining potential developments, particularly in South America.

# An important milestone in the Weda Bay project in Indonesia: a new partnership with Mitsubishi Corporation

On 19 February 2009, ERAMET and Mitsubishi Corporation announced their partnership in respect of the project to develop the Weda Bay nickel deposit in Indonesia. Mitsubishi Corporation agreed to acquire from ERAMET a 33.4% interest in Strand Minerals, which holds a 90% interest in PT Weda Bay Nickel, alongside the Indonesian group Antam.

This partnership represents a very important milestone in the Weda Bay project. Mitsubishi Corporation is a leading industrial and commercial operator in Indonesia, as well as a major player in mining and metallurgy through its involvement in several major projects and operating assets throughout the world. Weda Bay is a world class deposit, the measured, indicated and inferred resources of which have just been adjusted upwards to 5.1 million tons of nickel content. Studies for Weda Bay will now be carried out with the support of Mitsubishi Corporation, with the full agreement of Antam.

# Risk factors

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# - 4.1. LIQUIDITY, MARKET AND COUNTERPARTY RISKS

# Liquidity risk 4.1.1.

The Group is not exposed to liquidity risks because of its clearly positive net cash position of €1,133 million as of 31 December 2008. 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 2005, ERAMET entered into a five-year agreement for a €600 million multi-currency revolving credit facility with a select group of banks, with the option of extending it to seven years. In line with the terms of the agreement, the Group has twice asked the lenders to extend it for an additional year, in 2006 and 2007. This facility thus expires on 24 May 2012. It is designed to finance operations as well as capital expenditure on assets and was entered into on an arm's length basis. This facility is subject to a single covenant (see the section on covenants below).

# Commercial paper

In 2005, ERAMET established a €400 million commercial paper programme.

Like at 31 December 2007, because of the cash surplus as of 31 December 2008, neither the revolving credit facility nor the commercial paper programme were used.

# Other debts

In addition certain Group subsidiaries have access to credit facilities some of which have been drawn down as of 31 December 2008, notably in the form of finance leases and the borrowings of the Norwegian companies Eralloys Holding A/S and Tinfos A/S, consolidated as of 1 August 2008.

# Covenants

The Group's main covenants are listed in the table below.

Company	Credit/bank facility		Retios	Amounts
ERAMET	Syndicated loan	Net borrowings/Consolidated shareholders' equity	< 1	€600 million
Erachem Comilog Inc.	Miscellaneous bank facilities	EBITDA/Borrowings	> 3	2 M USD
THE STATE PROPERTY OF THE PROPERTY.		Other borrowings	> 500 K USD	
		Borrowings/Shareholders' equity	` <1	
		Current assets/current liabilities	< 1,15	
GCMC	Miscellaneous bank facilities	Net property, plant and equipment	< 90 M USD	5 M USD
		Shareholders' equity/total balance sheet	> 30%	
		Shareholders' equity	> 300 M NOK	
Tinfos AS (1)	Miscellaneous bank facilities	Net debt/Shareholders' equity (excluding Tinfos AS)	< 1	300 M NOK
		Shareholders' equity/total balance sheet	> 35%	
Tinfos <sup>(1)</sup>		Shareholders' equity	> 200 M NOK	
Titan & Iron	Miscellaneous bank facilities	EBITOA/Borrowings	> 0,15	150 M NOK
		Shareholders' equity/total balance sheet	> 35%	
Tinfos Jernverk AS (1)	Gredit facility	Borrowings/ EBITDA	< 3	400 M NOK

<sup>(1)</sup> The addition of covenants for Timbs Group companies follows the acquisition of these companies by the Group. The Group satisfied these various covenants as of 31 December 2008 and 31 December 2007. These foans were repaid as of the end of February 2009.

## 4,1,2. Market risks

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

# 4.1.2.1. Foreign currency risk

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

- → transactional foreign currency risks where a company has income. in a currency other than its functional currency that is not offset by purchases in that currency;
- foreign currency risks to the balance sheet related to the changes in net assets of subsidiaries denominated 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

The breakdown of these hedges is set out in the table below:

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 hedges its balance sheet foreign currency risk wherever possible.

# TRANSACTIONAL RISKS

Since 2007, transactions have been carried out via the special purpose entity Medal Currencies. The subsidiaries in question determine the amount of their net exposure. The associated risks are then hedged with a maximum horizon of thirty-six months if the amount is greater than €2,000,000 or the equivalent thereof per currency, except in the case of exemptions.

Currency hedging primarily involves the US dollar but also includes the Norwegian Krone, the pound sterling and the Swedish Krone.

# FOREIGN CURRENCY HEDGING AS OF 31 DECEMBER 2008

(in millions of foreign	2008 sales		2009 sales			2010 sales and beyond		
curency)	Amounta Currence Price	Amounts	Currency	Price	Amounts	Currency	Price	
EUR/USD	693 USD 1.44	946	USD	1,40	505	USD	1.34	
EUR/USD	(450) USD 1.30	(49)	USD	1.32				
EUR/NOK	(a Eura doer	144	EUR	8.03	38	EUR	8.55	
EUR/GBP	(1) CBB 0.8%	2	GBP	0.79	-	GBP	-	
GBP/USD	1.72	4	USD	1.90	-	USD	-	
GBP/SEK	9 GBP 12.50	2	GBP	12.00	-	GB <b>P</b>	-	
JPY/SEK	30 )PE 0.00	60	JPY	0,06	-	JPY	-	
EUR/SEK	(14)2 EUR 11.29	6	EUR	9.52		EUR		
usd/sek	18 USG 7.40	8	USD	7.41	-	USD		
EUR/JPY	525 JPF (41.86	620	JP <b>Y</b>	147.40	•	JPY	-	

As of 31 December 2008, the fair value of the currency hedges in respect of transactional risks represented a €64 million liability (31 December 2007: a €69 million net asset), primarily due to the recovery of the dollar against all other currencies.

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, 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 and purchases and payments; and
- the contractual rate for unwinding hedges, are recognised by each company under current operating profit (loss) on sales (under

"Translation adjustments on sales" - Note 22.2) or purchases (under "Cost of goods sold").

A change of plus or minus 10% in the dollar rates would have an impact on the hedges charged to shareholders' equity of around -€83 million were rates to rise and approximately +€85 million were rates to fall.

# **BALANCE SHEET RISKS**

In 2008, the US\$232 million loan for the acquisition of Weda Bay Minerals Inc. was renewed. In addition, the Group hedged its Norwegian Krone risk in respect of the payment for the acquisition of the 55.78% interest in the Norwegian companies Eralloys Holding A/S and Tintos A/S (controlling interest 58.93%), The Group used its surplus cash to finance the cash portion of this acquisition denominated in Norwegian Krone.

# FOREIGN CURRENCY HEDGES AS ON DECEMBER 31, 2008

OTHER	<b>HEDGES 2008</b>

(in millions at toreign currency)	Amounts	Currency	Price
EUR/USD	2 <b>68</b>	USD	1.42

# BREAKDOWN OF FOREIGN CURRENCY HEDGES AS OF 31 DECEMBER 2008 (NOTIONAL AMOUNTS IN MILLIONS OF CURRENCY UNITS)

CURRENCY VS. EUR	Forward sales	Forward purchases	Call options	Put options
USING PARTY OF THE PROPERTY OF	1,560	500	2,472	. 1,5 <b>82</b>
JPY:	825		3166	52 <b>0</b>
GEP-				

CURRENCY VS. NOK	Forward sales	Forward purchases	Call options	Put options
EUR	79		V2112 1118 11.	117

CURRENCY VS. SEK	Forward sales Forward purchases	Call options	Put options
JPY CARTON OF THE PROPERTY OF	<b>66</b>	\$	30.
GBB Sept 1 (1) Fig. 12 (1) The sept 1 (1) The sept			Jan and
USD TALL THE STATE OF THE STATE	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (		
EUR (Valley Valley Company of the Co	<b>9</b>		30

CURRENCY VS. GBP	Forward sales	Forward purchases	Call options	Put options
USD A		The second		

# 4.1.2.2. Interest rate risk

 a) As regards its gross debt position, the Group looks at its debt position and market trends when deciding whether or not interest rate hedging is necessary. The Group's Treasury Department is responsible for putting in place any hedges.

As of 31 December 2008, the Group had no interest rate hedges in place on its gross debt.

- With respect to cash surpluses managed by Metal Securities, they are invested:
- in instruments bearing interest calculated on the basis of the EONIA (Euro OverNight Index Average) or EURIBOR (Euro InterBank Offered Rate) rates:
- in fixed-rate instruments swapped against EURIBOR.

On this basis, a 10 basis point drop in the EONIA/EURIBOR rate would have a negative impact of approximately €1 million on the net borrowing cost.

# 4.1.2.3. Commodity risk

The Group is exposed to commodity price volatility, with respect to its sales as a nickel and manganese producer and to its production costs, as an energy (fuel oil and electricity) and commodities (aluminium) consumer.

Neither exposure to manganese nor to coke is hedged since there is no organised market for these materials. Aluminium and electricity hedges are not material.

The Group uses various instruments to hedge and limit its exposure: forwards and options.

Risk management for fuel oil is part of the multiyear policy under the procedures approved by the Executive Committee and is subject to monthly reporting.

# OUTSTANDING AMOUNTS UNDER COMMODITIES CONTRACTS AS OF 31 DECEMBER 2008 (notional amounts in tons)

Nickel	Swaps	Cali options	Put options	
Tons	180	4,500	4,500	
C1-9	0	0-11	Dut outless	
Fuel oil	Swaps	Call options	Put options	
Tons	131,000	292,000	274,000	

As of 31 December 2008, the fair value of hedges put in place for these various commodities was:

- ◆ €32 million asset for nickel (€50 million asset as of 31 December 2007):
- → €55 million liability for fuel oil (€4 million asset as of 31 December 2007);
- → €1 million liability for aluminium (same as of 31 December 2007);
- → E4 million liability for electricity (not hedged as of 31 December 2007).

A change of plus or minus 20% in commodity prices would impact the hedges, charged to shareholders' equity for nickel and to income for fuel oil as

(in millions d'euros)	Nickel	Fuel oil	Aluminium	Electricity
Change of + 20% in commodity prices	(6)	15	n/s	n/s
Change of - 20% in commodity prices	6	(16)	n/s	n/s

# 4.1.3. Counterparty risk

The Group is exposed to several types of counterparty risks: for its customers and its financial partners notably because of its cash surpluses invested with the Group's special purpose entity Metal Securities.

- → 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. Specifically for trade receivables, there is a credit manager for each Group Division.
- → For banking counterparties, the Group determines via the Metal Securities procedures the investment limits on the basis of counterparty ratings. Each counterparty is also subject to regular monitoring of the assessment of credit analysts and/or rating agencies and all risks are reviewed quarterly.



# 4.2.1. The Group's dependency on the legislative and regulatory environment

# 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;
- operation-specific obligations;
- environmental limits and controls; and
- post-mining site restoration.

Since November 2005, the Gabonese railway has been operating under a concession. In addition, all Group plants comply with the regulations applicable to them (particularly operating permits).

# 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 subject to standard French tax legislation. The current income tax rate is 33.33%, excluding an additional social security contribution of 3.3%.

It should be noted that ERAMET is the parent company of a tax consolidation group that comprised 20 companies on 31 December 2008.

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 a rate of 35%. Since 1975, the company has benefited from a tax freeze system that has been renewed several times. It was last renewed for 15 years as from 1 January 2002 pursuant to a local decree of 13 June 2002. Moreover, some of the subsidiary's capital expenditure programmes in New Caledonia benefit from the tax exemption measures introduced by the Paul and Girardin Acts and from the relief granted under the New Caledonian Tax Code for capital expenditure in metallurgy;

- the Comilog subsidiary is subject to income tax at a rate of 35% and to export duty and a mining licence 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 and ratified by the Gabonese parliament in 2005. The tax convention between Gabon and France signed in Libreville on 20 September 1995 took effect on 1 March 2008 and replaced the convention of 21 April 1966;
- in general, subsidiaries based outside France (Norway, Sweden, US. China, etc.) are subject to local tax legislation. Dividends paid by those subsidiaries to the parent company are in some cases subject to a
- withholding tax. On 13 January 2009, France and the United States signed a new amendment to the convention of 31 August 1994 which is currently in force. This provision basically provides for the possibility of American and French companies being under certain conditions exempted from the withholding tax on dividend payments made between the two countries. This amendment should be ratified in the United States and France in 2009. If the amendment ultimately comes into force in 2009, the exemption from withholding on dividends will retroactively apply to all payments made as from 1 January 2009;
- it should be noted that since 1 January 2008, Chinese taxation has been substantially reformed, in particular with the discontinuation of systems favouring certain foreign companies and a unification of the income tax rate at 25%. This reform has had no particular implications for the ERAMET Group's Chinese companies.

# 4.2.2. Risks stemming from contractual commitments to third parties

# Supply and marketing contracts

The Group has overall control of the contracts relating to the supply and marketing of ore and its by-products where 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 plants 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 (see and land). As stated in Section 4.1 - Market risks, these purchases are partly hedged, generally on an annual basis.

The implementation of the Bercy agreements of 1 February 1998 was completed at the end of 2005. The Koniambo massifmining rights reverted to SMSP and those of Pourn to Le Nickel-SLN.

# Note on New Caledonian ore reserves

The French State is guarantor of the proper execution of the Bercy agreements. ERAMET and Le Nickel-SLN will pay close attention to the satisfactory conclusion of the matter, ensuring that Falconbridge (acquired by Xstrata of Switzerland) 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.

# Le Nickel-SLN shareholders' agreement

Pursuant to the Le Nickei-SLN shareholders' agreement of 13 September 2000 between ERAMET and Société Territoriale Calédonienne de Participation Industrielle (STCPI), following the agreement of 17 July 2000 between the State, the provinces of New Caledonia and representatives of the island's main political parties, following the share swap of 23 July 2007 STCPt holds 34% of the share capital of Le Nickel-SLN, in which ERAMET holds a 56% interest and Nisshin Steel a 10% interest. The Le Nickel-SLN shareholders' agreement of 13 September 2007, which runs for ten years, renewable for five-year periods, covers:

- → a distribution of the directorships with, at present, eight for ERAMET and four for STCPt, the latter also having the right to appoint an observer;
- a reciprocal right of pre-emption for each party;
- a reciprocal call option over the shares held by the party that falls under the control of a company, "the main activity of which or the main activity of the group to which it belongs competes with that of Le Nickel-
- → 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, either through the retrocession of shares or joint exercise of the subscription rights in a share capital increase.

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

## 4.2.3. Major lawsuits

The Group's major lawsuits involve the Nickel and Manganese Divisions.

# 4.2.3.1. Nickel Division

# **GROUND POLLUTION LAWSUITS**

Two lawsuits (one of which is ongoing) in New Caledonia involved the Le Nickel-SLN subsidiary and two land-owning stockbreeders, Mr. Gauzère and Mr. Newland, in the Northern and Southern Provinces, respectively, who sued for compensation for alleged damage resulting from pollution of their property by mining work.

The Gauzère case resulted in the court of first instance ruling against Le Nickel-SLN in May 1999, but on 15 June 2000 the Noumea Court of Appeal ordered a new investigation.

The Newland case was the subject of a similar investigative order. The expert's investigation involved other mining concessions and was expanded to include the local authorities. A preliminary report was issued in January 2007 for review by all parties.

The risk represented by these two lawsuits, for which a €1.4 million provision had been recorded as of 31 December 2004, is that the plaintiff's success would encourage other landowners neighbouring the mining massifs to bring proceedings. In a decision on 1 September 2005, the Noumea Court of Appeal dismissed most of Mr. Gauzere's claims, overturning the May 1999 ruling of the court of first instance on the basis of expert findings. In the dispute involving Le Nickel-SLN and Mr. Newland, the expert report was filed on 28 December 2007. It attributed a small portion of the liability to Le Nickel-SLN, but the liability was for the most part shared by the local authorities and other miners. The €1.4 million provision has been maintained.

# 4.2.3.2. Manganese Division

# **CLAIM BY KAZAKH COMPANIES**

Following a 2006 anti-dumping complaint filed with the European Union on behalf of its members by Euroalliages against Kazakh manganese alloy producers, which the latter considered unfounded and wrongful, the producers brought Euroalliages and its members (including ERAMET Comilog Manganèse) before the Court of Brussels on 9 May 2007, claiming €335 million in damages. ERAMET Comilog Manganése, in association with Euroalliages, has done everything possible to fight this clearly excessive claim, which is actually intended to place indirect pressure on the European Union. As it currently stands, it has little chance of succeeding,

the Commission already having placed customs duties on some of the products pursuant to a Regulation of 4 December 2007, a decision that has been challenged before the Court of First Instance of the European Community, On 17 February 2009, the Court of Brussels ruled in favour of Euroalliages and its members, ruling that only European Union courts have jurisdiction to hear this dispute pertaining to an anti-dumping complaint. This ruling may be appealed within one month of its notification.

# FORMER EMPLOYEES OF COMILOG IN CONGO

Before the Transgabonais railway started operating, Comilog exported its manganese ore via the Republic of Congo, where it then employed nearly 1,000 people.

Following a very serious rail accident on 5 September 1991 in the Republic of Congo, Comilog's transportation of one through this country was suspended. As this situation showed no sign of coming to an end, it resulted in the discontinuation of Comitog'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 thus put an end to all past and future disputes, with the latter taking over all liabilities and obligations resulting from Comilog's operations in the Republic of Congo, Under the terms of this agreement, Comilog pays the Republic of Congo the sum of one billion two hundred million FCFA to compensate the employees who were let go. This sum is in addition to the considerable real and movable assets turned over for no consideration by Comilog.

Considering this compensation insufficient, 867 former employees of Comileg in the Republic of Congo summoned three French subsidiaries of Comillog, which never employed these people, and Comillog to appear on 9 October 2008 before the Conciliation Board of the Paris Labour Court.

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.

In view of the weak grounds for these actions, the various defendant companies have not funded any provision.

ERAMET feels that there are no legal or arbitration proceedings that, taken separately or together, would have a materially negative impact on its business, financial position or earnings, other than those set out above.

# 🕨 4.3. INDUSTRIAL RISKS

# Industrial activity and 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.

Given the unique nature of almost endlessly recyclable metals, the Group's business activities naturally dovetail with a sustainable development approach in a global context of scarcity and, accordingly, of the maximum reuse and optimisation of natural resources.

Nevertheless, these, durable and recyclable, products may, at some stage in their conversion or use, present hazards or risks. The issue for the Group is, therefore, to identify all such potential hazards, prevent and control the resulting risks to its sites and the outside environment, while contributing to the sustainability and development of its business activity. The Group has an Environmental Charter (see appendices to this document).

With respect to regulatory compliance, ERAMET has set itself a goal of "zero disputes" as described below. Various industrial risk issues related to the Group's activities involving the status of polluted sites and soil, the Group's positioning with respect to global warming, as well as the adequate prevention of industrial risks are also reviewed.

# "Zero dispute" goal 4.3.2.

The ERAMET Group promotes a policy of strict regulatory compliance and dialogue with the relevant authorities in the event of special operating conditions or temporary difficulties. In this regard, in 2007 the so-called "Zero dispute" goal was set: this means aiming for zero formal notices or legal proceedings potentially arising from any breach on the Group's part of regulatory requirements of operating permits.

The scope of this "zero dispute" policy was broadened in 2008, it includes 12 additional sites and covers over 70% of the Group's industrial sites.

After the number of disputes was halved in 2007, it remained very low in 2008. Furthermore, the Group has had no environmental legal action filed against it within the scope reviewed.

It should be noted that a significant portion of the disputes date back to before the implementation of this policy and the industrial sites are no longer solely liable for them.

### 4.3.3. Polluted sites and soil – Restoration actions

The Group carefully monitors the management of issues that could have potential impact on soil and subsoil because of past or ongoing operations. Expertise in this field was developed with the experience gained from the discontinuation of operations at the Comilog France site in Boulogne-sur-Mer and is leveraged in the management of current dossiers or furthermore in asset disposals or acquisitions. Thus, whenever appropriate, tests were carried out and financial provisions funded.

In 2008, tests on the environment conditions were carried out at a number of sites, as part of responsible dossier management.

At Aubert & Duval in Gennevilliers, an approach complimentary to that taken in 2002 was taken for the section of the site where operations are currently suspended.

At Firminy, two old waste heaps are undergoing detailed testing. Similarly, the actions undertaken in 2007 with respect to the impact of hydrocarbon pollution at the site were completed in a fully satisfactory manner.

At other sites such as ERAMET Sandouville, the soil testing was brought up to date.

In the Manganese Division, the Freeport site saw the completion of an original restoration process on a waste storage facility via the complete recovery of metals found in the waste, thereby eliminating a storage area that had existed for many years.

Finally, the restoration work at the Comillog France production site at Boulogne sur Mer, closed in 2003, was completed within the agreed timeframe and in strict compliance with environmental protection and prevention requirements. The authorities signed off on the site restoration in May 2008, highlighting the excellent manner in which the dossier had been managed. The land was then returned to the regulatory authorities.

Meanwhile, the site having discontinued operations at its hazardous waste storage facility in Manihen in July 2007, work was able to begin from June 2008 following receipt of the site restoration permit from the Prefect in May 2008.

# 4.3.4. 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, Eurometaux and Euroalliages) that represent the industry vis-a-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;
- \* defining and rolling out the Group's policy with respect to climate change, in close cooperation with the "energy management" unit in the Industrial Affairs Department;
- providing information on CO, 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 (42) and Ancizes (63) sites and Erasteel, Commentry (03) and Söderfors (Sweden) sites.

First period: 2005-2007 (reminder)

Cumulative allowance for the 4 sites over the period (3 years) = 308,707 ailowances

Cumulative CO, emissions = 289,230 tons of CO,

Representing a surplus of 19,377 allowances for the period.

Second period: 2008-2012

Annual allowances for the 4 sites = 137,452 allowances

2008 emissions at the 4 sites = 95,146 tons of CO,

Representing a surplus of 42,308 allowances for the first year.

It should be noted that between 2005 and 2008, specific total emissions at these sites fell from 1.03 to 0.88, tons of CO, per ton of liquid steel produced, representing a 15% decline over 4 years. This reduction was achieved through efforts to improve the energy efficiency of emitting facilities and through the switch from fuel oil to gas at several reheating and heat treatment furnaces in Erasteel Commentry.

# Proposed amendment to Directive 2003/87/ EC in order to enhance and extend the Community system for greenhouse gas emission allowance trading (post 2012)

The new proposed Directive has been adopted by the European Council and Parliament. The next period of application will cover 8 years (2013 - 2020).

The extension of the emission allowances trading system will impact the Group, with in addition to the 4 steelworks already included under the original Directive (see above), the European manganese alloy production sites (ferromanganese and silicomanganese) also being included in the system, meaning Comillog Dunkirk, ERAMET Norway and Tinfos sites (Norway, although not part of the European Union, will be party to the new system).

The Group's total emissions thus subject to allowances will rise from approximately 100,000 tons of CO, per annum at present to around one million tons of CO, per annum during the third period.

Participation in European commission DG ENTR surveys made it possible to place our activities within the sectors at "risk of carbon leakage". This will mean that the facilities will qualify for free allowances instead of having to buy them at auction, representing a considerable reduction for the Group in the potential financial impact.

The Group still needs to work with the professional bodies and authorities in order to define the number of allowances that will be allocated to the Group, It is very likely that these allowances will be considerably lower than those allocated in periods 1 and 2, since the overall reduction target for European CO, emissions by industry is 21% in 2020 as compared to 2005 levela.

# 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 programme, which helps sites to define their "energy savings" action plans, was launched in the form of a pilot programme at six Group sites. It was then gradually rolled out to all Group sites with high levels of energy consumption.

A site's action plan is defined in cooperation with the Group 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

The actions generally adopted cover at least the following subjects:

- → production equipment and its energy performance (improvement and maintenance):
- operation of the equipment (best practices, etc.);
- energy metering and monitoring of energy performance, etc.

Once the action plan has been drawn up, the Group Industrial Alfairs 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 COMEX annually.

As of the end of 2008, 22 sites (out of the 28 targeted) had their action plan, and progress on them varies from one site to another. However, specific measures were implemented which not only allowed substantial gains to be made but sometimes also enabled the environmental impact to be reduced.

# Group Carbon Balance

At its 10 December 2007 meeting, the COMEX approved the carrying out of a "Bilan Carbone®" (carbon balance) for the whole Group, using the method proposed by the ADEME (French Environment and Energy Management Agency).

The primary goal of a carbon balance is to provide a high-level overview of an activity with an indicator of greenhouse gas emissions that is no longer primarily economic but rather physical in nature. The review brings to light "physical" dependence that may not show up in a purely economic review, but which are nevertheless drivers of long-term constraints.

ERAMET's carbon balance was carried out jointly by the unit responsible for climate change, Carbone 4, a company in receipt of ADEME approval as regards methodology, the "energy management" unit of the Industrial Affairs Department, the Group Purchasing Department, the environmental contacts at all Group sites and the logistical units in the 3 Divisions (for CO, emissions relating to freight transportation).

A comprehensive report on the results of the review is expected in early 2009. It showed up annual emissions of approximately 4 million tons of CO, equivalent.

A detailed analysis of emission sources by the Group, by each Division and by each site will make it possible to identify reduction targets and to define appropriate action plans as well as to continue cutting specific emissions, like that already in place within the scope covered by the European directive.

# 4.3.5 Industrial risk prevention policy

# Group crisis management procedures

These set out communication requirements and best practices for three

- prevention of crises: identification of local and national landscape (authorities, elected representatives, media, etc.), contact plans, identification of poor 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.

# Methodology assistance with risk analysis

DC2D gives support to the industrial sites with their hazard studies.

These analyses are used to enhaustively 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 as part of the Group's damage/business interruption insurance policy

In 2008, ERAMET continued its policy of biannual engineering visits (prevention audits) to all industrial sites in close cooperation with the insurer and the Group Insurance Department. All sites with real industrial risks are assessed every two years. The following 15 sites have been visited:

Alloys: AD Firminy, Erasteel Commentry, AD Les Ancizes, AD Issoire, Interforge.

Mangariese: Erachem Comileg Inc. Baltimore and New Johnsonville, Comilog Dunkirk, Erachem Comilog Tertre, ERAMET Norway Porsgrunn and Sauda, Comilog Ferro Alloys Guilin and Guangxi, GECC Chongzuo.

Nickel: ERAMET Sandouville.

The action monitoring indicators agreed upon following these visits are updated 3 times a year, in line with standard fire safety procedures and the actions to protect strategic installations that have already been implemented at all sites.

For example, in the case of the standard Group procedures drawn up with the insurers, in 2 years the performance indicator for all industrial sites covered by the Group policy has gone from 39% to 68% for strict procedural compliance and fallen from 42% to 32% for partial procedural con-compliance.

Lastly, close involvement of the leading insurer's engineering teams in all capital expenditure programmes helps ensure that new facilities have optimum protection. Along with the prevention visits, 10 meetings were held to present the insurers with the major capital expenditure projects in order to include their recommendations in the facility design stage and there has been much contect for less significant projects.

# Environmental insurance policy - Prevention

In 2007, ERAMET signed an extension of its Group Civil Liability policy including an Environmental Damage component (RCAE).

It was then agreed with the insurer that 3 site visits would be carried out, in cooperation with the DC2D for the initial July 2008 - July 2009 period. Three sites representative of the operations of each of the Group Divisions were selected.

This entails a one-day prevention visit to each site comprising an assessment of the regulatory position of the site, an analysis of documentation, and an inventory and assessment of environmental impact factors, a field visit with the operator, a technical analysis through the collection of the data necessary to assess the impact and a review of the action plans in place. A visit report including the identification of risk sensitivity and improvement recommendations will be prepared by the insurer with internal follow-up of the relevant action plan coordinated by the DC2D.

# → 4.4. OTHER SPECIFIC RISKS

# Transportation-related risks

# Sea freight

The Group makes extensive use of sea freight to ship its products first, in various stages, to production sites, and then for delivery to customers, because of the long distances between the mines where raw materials are extracted and the sites where they are processed, and between those sites and 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.

The risk of property damage is, moreover, covered by specific insurance coverage (see above).

# Rail transport

The Group was awarded the concession to operate the Transgabonais train for a 30-year period beginning in November 2005. In addition to providing a public service and transporting miscellaneous goods, the railway carries manganese are from the Moanda mine to the port 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.

# **Energy-related risks** 4.4.2.

As energy represents a non-negligible portion of production costs, to protect itself against rises in those costs, the Group has adopted a policy of diversifying its energy sources (electricity, fuel oil, coal and gas), which does not exclude hedging whenever possible.

Nevertheless, a significant change in the price of energy resources could, notwithstanding the measures taken, have a negative impact on the Group's future performance.

### 4.4.3. **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 significant impact on its business.

### Asbestos risk 4,4.4,

Items related to asbestos risk are described in the "Health and Safety" Chapter in Section 17.8.5.



# -> 4.5. THIRD PARTY RELATIONSHIPS

## 4.5.1. 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 has a 10% interest (see Section 4.2.2.).

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

Société Territoriale Calédonienne de Participations Industrielles (STCPI) has a 34% interest in Le Nickel-SLN (in which ERAMET has a 56% interest). 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 (of mostly Melanesian population) on the other hand.

This interest, initially 30%, which was sold by the French state when ERAMET was privatised, has political, financial and strategic value because it aligns local interests with the Group's mining and industrial interests in New Caledonia.

The interest was raised to 34% following the General Shareholders' Meeting of 23 July 2007, pursuant to the terms of the shareholders' agreement of 13 September 2000.

STCPt is a simplified limited liability company, the sole purpose of which is to hold shares in Le Nickel-SLN and ERAMET (approximately 4%). Four out of twelve Board members, plus one observer, represent STCPI on Le Nickel-SLN's Board of Directors, while two others out of fourteen represent STCPI on the ERAMET Board of Directors. The Board members and observer are selected so as to ensure that, on one hand, the Southern Province and, on the other hand, the Northern and Island Provinces, have balanced representation.

# 4.5.2. Manganese Division

# With the Gabonese State

Comitog has had a special relationship with the State of Gabon since it was founded, with the latter being a shareholder since 1973 with an interest of just over 25% and represented by four members on the Board of Directors. From the outset, the State has supported Comilog through both tax (a mining agreement and special tax agreement to finance the sintering complex) and industrial measures (as Comilog's partner in building the Owendo Port) 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. The 3.5 million ton project effectively contributes to social and economic growth in Gabon.

# With the Carlo Tassara Group

Carlo Tassara France (belonging to the Group of Mr. Romain Zaleski) holds 3,394,146 ERAMET shares (namely 12,94% of the capital and 7,77% of the voting rights as of 31 December 2008, based on an estimate derived from the most recent threshold crossing declaration by this company, No. 207C0134 of 17 January 2007). On 17 January 2007, it replaced Carlo Tassara International, which had in turn on 20 December 2004 replaced Maaldrift BV (based on declarations of intent filed with the AMF under numbers 204C1559, 207C0134 and 207C0137 - Chapter 21.3.6). In addition, Carlo Tassara France is now also a shareholder in Comillog, replacing Formang and Maaldrift BV (also belonging to the Group of Mr. Romain Zaleski).

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

# 4.6.1. The Group's general coverage policy/risk coverage strategy

# Group organisation

The Group Insurance Department was established in 2003 with the goal of putting in place Group programmes, monitoring the prevention policy in liaison with the DC2D and seeking optimal risk-premium-coverage solutions, including via the Group's reinsurance captive.

# Risk identification and control

The Group has drawn up an audit programme in order to accurately map major risks, determine the impact that might result from their occurrence and, ultimately, to put in place the necessary arrangements to prevent them. and limit their impact.

# Use of insurance market

As risks are identified and their impact controlled, the Group seeks the most appropriate solutions on the market that offer an optimum balance between cost and coverage.

Through brokers, the Group has thus put in place global insurance programmes with pools of internationally renowned and financially solid insurera.

The Group also uses the market to cover risks that are specific to some of its subsidiaries' activities or non-recurring operations, as well as where insurance is required under local regulations.

# Reinsurance

The Group, moreover, 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 a retrocession mechanism and to decide limits. The Divisions are accordingly encouraged to develop their own prevention programmes.

# Coverage levels

The Group feels that it has established sufficient coverage, both in terms of scope and amounts insured or coverage limits, for the main risks relating to its global operations.

# 4.6.2. Various types of insurance taken out

The three main insurance programmes cover civil liability, property damage and business interruption and shipping risks.

# 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, lessors' insurance, 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, 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 policies, it is used on top of these

policies and to compensate for differences in conditions and/or limits on a DIC/DIL basis worldwide.

On top of local policies, the programme is based on a Master policy issued in France covering €50 million and on two additional Excess policy lines. of €50 million each complementing the Master policy, 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 flability, and on top of mandatory insurance policies in the United Kingdom such as employer's civil fiability.

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 was renewed on 1 July 2006 for a period of three years with no increase in premiums.

In addition, in 2007, a specific environmental civil liability policy was taken out for €10 million for certain subsidiaries in France and Europe and a similar policy was taken out for US\$25 million in early 2008 for the US and Canada.

# Property damage and business interruption insurance

This global programme covers direct 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, it applies on a DIC/DIL basis on top of and to compensate for differences in conditions and/or limits for the local policies of companies in the programme, as well as companies not included in the programme. In 2008, only the companies located in China were not included in the programme.

The programme 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.

It was renewed on 1 January 2006 for two years with very substantial improvements.

Subsequently, on each anniversary date, namely without waiting for the end of the two-year term, the programme benefited from significant new technical improvements regarding coverage and excesses. It is moreover expected to be renewed for additional 2-year periods. Particular attention is given to recommendations made by the insurers based on site prevention visits. This makes it possible to customise both the prevention programme and the coverage terms for the sites.

# Shipping insurance

Up to the end of 2007, the Nickel and Manganese Divisions each had a shipping insurance programme for ore and product shipping between industrial sites and to customers; the Alloys Division did not have a specific

At the end of 2007, a call for tenders was launched in order to establish a Group global shipping programme.

This programme covers the period from 1 January 2008 for all Group entities worldwide and for all types of shipping: sea, river, land or air. This covers all types of goods, freight or equipment shipped.

The programme comprises three policies: "marine cargo" for goods shipping with AIG, "charterer" with RAETS Club and "hull and machinery" with AXA.

The introduction of this programme provided for both particularly favourable coverage conditions and a very substantial reduction in premiums.

# Information about the issuer

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# 5.1. INFORMATION ON THE COMPANY

# Company name (Article 2 of the Articles of Association) 5.1.1.

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".

## 5.1.2. Company registration number

# 5.1.2.1. Trade register/SIRET number

The Company is registered in the Paris trade register under number 632 045 381 and under SIRET number 632 045 381 000 27.

# 5.1.2.2. NAF code and business sector

- NAF code: 515 C.
- → Business sector: exploring for and operating mining deposits of any kind, metallurgy of all metals and alloys and trading thereof.

# 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.

# Registered office (Article 4 of the Articles of Association) 5.1.4.

Tour Maine Montparnasse 33 avenue du Maine 75015 Paris

Telephone: + 33 (0) 1 45 38 42 42 Fax: + 33 (0) 1 45 38 41 28 Website: www.eramet.fr

# Legal form and applicable legislation

ERAMET is a French public limited company with a Board of Directors, governed by the provisions of Articles L 224-1 et seq. of the French Commercial Code (legislative and regulatory part) as well as by the provisions of its Articles of Association.

# Statutory auditing of the Company (Article 20 of the Articles of Association).

As per the law, the Company is audited by two principal statutory auditors and two alternate auditors.

Pursuant to Article 20 of the Articles of Association, the statutory auditors must be nationals of one of the member states of the European Union.

#### 5.1.5. History and development of the Company

The Company was incorporated in 1880 under the name Le Nickei, 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-Penarroya-Mokta group). Later milestones in the life of the Company and Group are as follows:

1974- The nickel business is spun off into a subsidiary under the name Société Métallurgique Le Nickel-SLN: Elf Aquitaine acquires a 50% interest in this new company. The former company Le Nickel changes its name to Imétal and holds 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, acquires a 70% interest in the Company's share capital. Imétal and Elf Aquitaine's interests are reduced to 15% each.

1985- The assets located in New Caledonia are grouped together in 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 on, in order to smooth out the effects of nickel cycles, the Company adopts a strategy of diversifying into complementary business activities, with the goal of holding strong global positions in its main

1989-1991- Acquisition of the French company La Commentryenne and the Swedish company Kloster Speedsteel, respectively the world's thirdlargest and largest producers of high-speed steels. These 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% market share.

1991- Long-term commercial and financial partnership with Nisshin Steel (one of the leading Japanese stainless steel producers), resulting in the gradual acquisition of an interest 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 take on their current names of Le Nickel-SLN and ERAMET, respectively.

1994- Acquisition of a 51% interest in Eurotungstène, a cobalt and tungsten powder producer.

Private investment 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) contributes its Cofremmi subsidiary, owner of nickel ore reserves in New Caledonia, in return for granting shares representing 2.34% of ERAMET's new share capital.

1995- Transfer of the ERAMET stock to the Paris Stock Exchange Premier Marché (Monthly Settlement compartment).

1995-1996- ERAMET acquires a 46% interest 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 of manganese based chemicals.

1997- Agreement with GenCahon under which this Gencor group company sells 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 carried out, resulting in the current capital structure and the Group's current business configuration:

- → integration into the Group of SIMA (Duval family), a leading global producer and transformer of high-performance special steels and nickel alloys;
- → disposal of 30% of Le Nickel-SLN to ERAP in exchange for ERAMET. shares; ERAP then transfers that interest to a New Caledonian stateowned entity, Société Territoriale Calédonienne de Participation Industrielle (STCPI). The French State transfers ERAP's remaining interest to Cogerna, which then becomes part of 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.

Following these transactions, the ERAMET Group had been dramatically transformed. Its businesses are divided into three Divisions - Nickel, Manganese and Alloys - of similar size and the Group's share capital is mostly held by private shareholders, with the French state retaining a minority interest.

2000- Acquisition of the Mexican company Sulfamex, which produces manganese-based agrochemicals.

Inauguration of the Moanda industrial complex (Gabon), a manganese ore beneficiation and sintering plant that strengthens Comilog's product range and extends the lifespan of its reserves.

2001- Launch of a programme to increase New Caledonian production capacity by 25%.

Launch of capital investment project for a new forging and closed dieforging plant in France with a 40,000-ton 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 takes 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 carbon. black business, both based in Belgium;
- launch of a capital expenditure programme in a new high-speed steel plant in China, as a joint venture with the Chinese company Tiangong.

Acquisition of a 100% interest in Centre de Recherche de Trappes (research centre, France) and a 100% interest in Eurotungstène.

2004- New Caledonia: commissioning of 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 minority interest in the Manganese Division.

Purchase from Comitog of 80% of Comitog Asia, the company holding the Guillin and Guangoi joint ventures in China.

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

In November 2005 ERAMET was granted the concession to operate the TransGabonais railway for 30 years.

Erasteel: Joint venture with the Chinese company Trangong called off.

2005- Aubert & Duval: Opening of the tool steels distribution centre in Wuxi (China)

Acquisition of Weda Bay Nickel.

Manganese ore production reaches 3 million tons.

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

2007- Electrolytic manganese dioxide plant in China; opening of new plant at Chongzuo, in southern China.

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 took place in November 2007.

July 2007; swap of shares in ERAMET for those in SLN for STCPI as part of the SLN shareholders' agreement.

New Caledonia; end-2007, opening of Pour mine.

2009- July: acquisition of a 58.93% controlling interest in the Norwegian group Tintos (55.78% economic interest).

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

2009- January: agreement signed with the Southern Province of New Caledonia with a view to studying the development of the Prony and Creek Pernod nickel deposits in New Caledonia.

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



### 5.2. INVESTMENTS

#### 5.2.1. Goals

The Group's capital expenditure has risen considerably in recent years, to over €1.5 billion in five years. The ultimate aim is both to improve competitiveness and grow the business of the three strategic Divisions (Nicket, Manganese and Alloys). The policy is based on product differentiation with a focus on markets with structural medium to long-term

#### 5.2.2. Main capital expenditure programmes

#### 5.2.2.1. Total amount of capital expenditure

Capital expenditure on property, plant and equipment recognised at Group level amounted to €231 million in 2005, €309 million in 2006, €319 million in 2007 and €419 million in 2008, in 2008, capital expenditure was sharply scaled back in the second half by almost €100 million compared to what had been planned, in response to the crisis. The capital expenditure priorities for 2009 have also been revised with the revised target down by over half

Financing methods for major projects vary depending on each investment. The Nickel Division programme is funded from own resources and, in part, by a tax exemption granted under the Paul Act. The 40,000-ton programme in the Allovs Division is partly funded by a finance lease. The 3.5 million ton Gabon programme was also financed from own resources.

Current capital expenditure is generally funded from own resources.

Financial investments of an industrial nature amounted to €164 million. in 2006 and €32 million in 2005, In 2005, acquisitions were mostly comprised of the buyout of minority interests in Bear Chemicals, a GCMC subsidiary, for €10 million, the €13 million share capital increase in Setrag (company holding the TransGabonais railway concession), and the €6 million acquisition of SAS Poum, in line with the Bercy agreements (see Chapter 4.2.2.), in 2006, investments involved the acquisition of Weda Bay in Indonesia following a friendly takeover bid. There were no material financial investments in 2007. In 2008 financial investments totalled E425 million, mainly relating to the purchase of a majority interest in Norway's Tinfos AS.

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

#### NICKEL DIVISION

Nickel Division	2005	2006	2007	2008
Recognised capital expenditure	€68 million	€125 million	€195 million	e 189 miller
Of which:				
- Capacity expansion project				
- Mobile equipment		and manufactured and rest in the Second Country in the Second Coun	**************************************	
- Furnace FD 9 SLN				70.0057 (\$50.05)
- Weda Bay studies				
- Financial investments: Weda Bay				

- → Le Nickel-SLN capacity increase. The last part of this programme involving the commissioning of the Tiebaghi mine ore processing unit, concluded with its inauguration in November 2008. The facilities are currently being subject to tests/refinements and the transportation of output to Doniambo has begun.
- → Modernisation of Le Nickel-SLN's production equipment To achieve the production target, a major upgrade of production equipment at Doniambo and of mining facilities is also being carried out in New Caledonia.

This programme began in 2006 with the renovation of two rotary furnaces in Doniambo. The N° 9 electric furnace was renovated in 2008. on schedule. This programme contains a very important environmental component: the "Clean Doniambo" project.

In mines, the renewal of the mobile equipment is progressing, with the fixed facilities of SLN's current sites being modernised. The opening of several mines, the operation of which will be outsourced, is under preparation.

- → Study of a new Le Nickel SLN electricity plant, Pre-project studies regarding the construction of a new electricity generation plant continued.
- → Eurotungstèrie and Le Havre-Sandouville. At Sandouville, an investment in manufacturing a new product designed mainly for the electronics market came on stream. At Eurotungstène, several projects have been carried out that while small in scale should enable the production of new products.
- Weda Bay project. The studies are continuing in both Indonesia and France in order to bring together all items necessary for the various decisions relating to the project. The administrative permit process is in progress in line with local regulations.

For the Nickel Division as a whole, the global crisis that arose at the end of 2008 resulted in the review of capital expenditure levels and plans for the end of 2008 and 2009. Certain transactions planned for the end of 2008 were pushed back to 2009 or later.

#### **MANGANESE DIVISION**

Manganese Division	2005	2006	2007	2008
Recognised capital expenditure	E94 million	€122 million	€129 million	€145 milion
Of which:				
- Comilog project				
- EMD project				
- Setrag upgrade project				
- Relining of furnace at Sauda				

#### Information about the issuer INVESTMENTS

- → Studies for a capacity increase in Gabon. The project to increase capacity to 3.5 Mt/annum is complete. In 2008, a project was undertaken to move up to the next level. This has medium-term goals of:
- maximising the value of unexploited Moanda site resources (Moulili river sediment):
- ending all waste from the washing plant; and
- achieving 4 Mt/annum in annual capacity.
- "Okouma" feasibility study. This study is looking at working a plateau just a few kilometres from the plateau currently being worked by Comiliog SA in Gabon. Containing ore as rich as that mined from the current plateau and allowing the reuse of some of the existing facilities, this plateau should make it possible to sustain ore production at around 4 Mit/annum (at current rates) beyond 2050.
  - in 2008, the test programme set up in 2007 was intensified. In parallel, steps were taken to learn more about the edges of the Bangombé plateau currently being worked. This has enabled additional reserves to be updated.
- Setrag upgrade project. The project to renovate track and infrastructure follows the granting of the concession to Setrag, a subsidiary of Comillog SA, to operate the TransGabonais railway. The project is staggered over a number of years and involves upgrading and modernising track, rail

facilities and rolling stock. It guarantees the future conduit for Comilog SA's ore while improving service to other TransGabonais customers.

2007 saw the first significant achievements with 37,000 sleepers and 7,200 metres of rail laid. In 2008, this rate accelerated with the replacement of 64,000 sleepers and 29,000 metres of rails.

→ SiMn and Mn metal project feasibility study at Moanda:

This new plant project, located near the Moanda mine, would make it possible to maximise the value of the currently unexploited low-grade mineral resources in order to produce SiMn and Mn metal. The electricity supply would be obtained from a government hydro-electricity plant to be built in an area close to Moanda.

- → Study of New Guilin project. This project consists of building a new manganese alloy plant at Guilin, to replace the current obsolete plant, which is located in an area that the authorities want to designate for non-industrial activities. The new plant will be focused on producing refined alloys, in line with developments both in the Chinese market and in the Division's strategy.
- → "Electrolytic Manganese Dioxide" project ("EMD") China. The project to build an Electrolytic Manganese Dioxide production unit in China has entered its second phase, which should be completed in 2009.

#### ALLOYS DIVISION

Alloys Division	2005	2006	2007	2008
Recognised capital expenditure	686 million	€58 million	€54 million	685 million
Of which:				
- 40KT project				
- Expansion project at Ancizes steelwork	and the part is an experience to make up it is to have the side in the base of American Ameri			

The Alloys Division considerably stepped up its capital expenditure in 2008 to €83 million:

Aubert & Duval mostly invested in all plants as part of its cycle reduction, competitiveness improvement and capacity increase plan. Significant levels of capital expenditure were on the capacity/reliability improvements to the Ancizes steelworks and the renovation and expansion of the heat treatment furnaces at all plants. The 40,000 ton unit benefited from additional capital expenditure to round off the initial project.

Erasteel's capital expenditure mainly involved a project to improve electric furnace smoke emission capture and a shavings compacting and oilremoval unit at Commentry; the second phase of capital expenditure on a drawing workshop at Tianjin in China; and the installation of an SAP ERP system at the Swedish and Champagnole sites. There was further capital expenditure on productivity, quality improvements, energy cost optimisation and capacity increases to underpin the industrial plan.

# Business overview

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### → 6.1. NICKEL DIVISION

#### 6.1.1. Nickel market

#### 6.1.1.1. Nickel demand

#### PROPERTIES OF NICKEL

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

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

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

Given nickel's electrochemical properties, it can be plated by electrochemistry in the form of a thin deposit and is used in rechargeable batteries. It also has catalytic properties.

The periodic table symbol for nickel, "Ni", is a commonly used abbreviation.

#### **USES OF NICKEL**

Stainless steel is by far the sector that consumes most nickel worldwide. Global nickel consumption in 2008 broke down as follows:

Stainless steel (8-12% nickel)*	58%
Nickel-based alloys (25-1 00% nickel)	14%
Electroplating	9%
Casting and alloy steels (less than 4% nicket)	9%
Rechargeable batteries	5%
Coins	2%
Other (including catalysis)	3%

Austeninc properties, including low-nickel 200 series. Sources: ERAMET estimates.

#### **END USES OF NICKEL**

End uses are highly varied and essential to modern life. Nicket 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 hygiene properties, key to ensuring consumer safety and is particularly used in the following forms: household equipment (sinks, cutlery, saucepans, dishes, etc.); domestic appliances (washing machines, microwave overs, catering ovens); food industry and pharmaceutical production tools; surgical equipment etc. Stainless steel's properties mean its use is often legally prescribed in developed countries.

#### **Heavy industries**

Chemicals, petrochemicals, paper, power generation.

#### **Building, construction**

Lifts, ramps, street furniture, water cistems and building decoration and accessories. Stainless steel is used for its aesthetic qualities, its low maintenance costs and its long-lasting nature.

#### Transportation

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

#### Nickel alloys

#### Superatioys

The growth of modern aviation (jet engines) was largely driven by the development of superalloys, which have a 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 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 construction.

#### Rechargeable batteries

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

#### Coinage

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

#### Other

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

#### SUSTAINABLE DEVELOPMENT AND NICKEL

In all its applications, nickel ensures a long lifespan for the components that contain it. In addition to its intrinsic qualities, the economic rationale for using nickel over other materials is evident from an analysis of the life cycle of the components.

Nickel is infinitely recyclable and its high economic value makes its collection and recycling worthwhile. The structure of the nickel recycling industry has been firmly established for many years. Products are usually collected for recycling (industrial scrap and products from the destruction of appliances and equipment) by small businesses that sell them on to the major companies in the nickel recycling industry. These firms put together the various alloys containing nickel (stainless steel, superalloys, alloy steels, etc.) in carefully defined proportions to make a new product that is suitable for use by their stainless steel producing customers. In 2008, recycled nickel accounted for approximately 47% of the nickel used in producing stainless steel worldwide.

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

### THE NICKEL MARKET

Thanks to the number of fast-growing applications, nickel has historically enjoyed average annual growth of 4% since 1950, which compares very favourably with other industrial products. Stainless steel, the leading use of nickel, has itself seen growth of 5% per annum.

As a growing share of the population in newly industrialised nations gains access to higher standards of living, the nickel demand in these countries is accelerating sharply. Historically, Japan, and later the Asian "tigers" are testament to this. The current focus of development is China, where a middle class of several hundred million people is emerging.

More recently, substitution has begun between stainless steel grades. The very high nickel prices up to 2007 gave rise to the development of the low-nickel "200 series" grade (1-4% Ni content) or the nickel-tree "400 series", while austenitic "300 series" stainless steel (with around 8-10% Ni content) lost around 18 percentage points in global market share between 2002 and 2007. This trend towards substitution slowed sharply in 2008, with the "300 series" even regaining a percentage point market share.

### 6.1.1.2. 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);
- gamieritic 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.). In these ores, nickel is found with several other metals such as copper, cobalt, gold, silver and often platinoids.

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

#### Oxide ores: laterites, upper mining levels.

Laterites are mined in opencast mines and generally located in tropical zones (New Caledonia, Indonesia, Philippines, Cuba, etc.). Nickel content is low, usually at 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, lower mining levels.

Opencast mines, generally in tropical zones (New Caledonia, Indonesia, Philippines, Colombia, Dominican Republic, etc.). Garnierites are located under laterites. They have higher nickel grades (approx. 1.5-3%) and 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, more rarely, an intermediate product, matte (nickel sulphate), which is refined to make nickel metal.

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 is generally not a very competitive process and has a substantial environmental impact.

#### MINING PRODUCTION PER COUNTRY IN 2008

#### 2008 MINING PRODUCTION IN THOUSANDS OF TONS OF NICKEL CONTENT

Rusaia	267,5	18%
Canada	257,1	17%
Indonesia	204,1	14%
Australia	191.0	13%
New-Caledonia	1 <b>07,8</b>	7%
Colombia	77,0	5%
Cuba	70,5	5%
China	68,4	5%
Brazil	38,4	3%
Botswana	34,9	2%
Philippines	34,8	2%
South Africa	31,7	2%
Oominican Republic	18,8	196
Greece	18,6	1%
Macedonia	15,3	196
Venezuela	10,9	196
Ukraine	8,0	1%
Zimbabwe	7,9	196
Spain .	7,6	196
Serbia	5,4	096
Finland	3,3	D96
Turkey	1,2	0%
Zambia	1,2	0%
Kazakhstan	0,8	0%
Norway	0,4	0%
World	1,482.6	100%

Forecast - Source: International Nickel Study Group, INSG.

#### **NICKEL INDUSTRY INVESTMENT COSTS**

Capital expenditure levels are particularly high in the nickel industry. A new project comprising a new mine and a new integrated plant with an annual capacity of 55,000 - 70,000 tons (i.e. some 4% of global supply) requires capital expenditure of approximately USD 4 billion. This corresponds to a cost of around 28-36 USD/lb (US dollars per pound) (i.e. 62,000-80,000 USD/ton) of annual capacity.

It should be noted that the cost of a capacity expansion is estimated to be approximately just half that of a new plant.

#### INTEGRATED PROJECT DEVELOPMENT TIMELINES IN THE NICKEL INDUSTRY

Development timelines for new integrated projects (mine + plant) are long.

Several stages are essential:

- geological surveys: three to seven years;
- pre-feasibility study: one to two years;
- pilot plant for any new process: two years;

- bank feasibility study: one to two years;
- construction (mine and plant): three to four years.

The minimum amount of time is thus 10-15 years, but it can sometimes be several years longer 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. Indeed, it enables processing of both laterites not exploited pyrometallurgically and low-grade garnientes. Furthermore, this process is not very energy-intensive and enables the ore's cobalt content to be used. ERAMET has developed a proprietary hydrometallurgy procedure to be introduced industrially for its Weda Bay Nickel project in Indonesia and that would be particularly suited to the New Caledonia ore that cannot be processed pyrometallurgically at Doniambo.

Acid leaching technology now seems the key means of delivering the nickel quantities the market needs.

### 6.1.1.3. Nickel producers

2008 (thousands of tons of makel content)			Metalturgical production Finished products
Norlsk	Russia/Finland	254,6	19%
Vale Inco	Indonesia/Canada	237,9	17%
SHP Billiton	Australia/Colombia	120,1	9%
Xstrata (Falconbridge)	Canada/République Dominicaine	108,9	8%
Jinchuan	China	104,6	8%
Sumitomo Metal Mining	Japan	55,5	4%
ERAMET"	France/New-Caledonia	51,1	4%
Cubaniquel	Cuba	36,7	3%
Shamit	Cuba/USA	32,0	2%
Раптов	Japon	30,5	2%
Other		332,9	24%

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

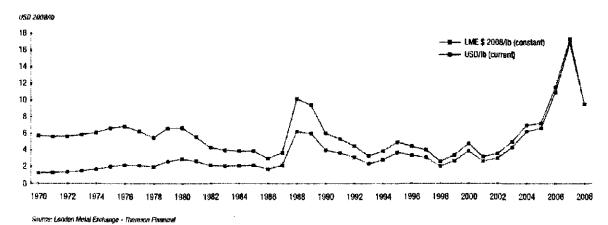
### 6.1.1.4. Nickel prices

Until 1979, nickel prices were set by the main nickel producers. Since 1979, nickel has been listed on the London Metal Exchange (LME), where players can trade futures and carry out hedging transactions. Every trade on the LME can in theory result in a physical delivery of metal. However, in practice, only a small fraction of trading results in physical delivery. Annual trading volumes for nickel on the LME represent 15 to 30 times global physical demand.

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

The considerable weight of financial players on the LME is reflected in shortterm volatility and speculation as regards the outlook for developments in the physical market.

The chart below illustrates historical trends in nickel prices (in current USD/lb and constant 2008 USD/lb):



ERAMET: garnisirite for the Donisunbo plant (New-Caledonia).

Nevertheless, over the long-term the physical market remains the main factor in 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.

Historically, the average nickel price on the LME from 1979 to 2008 was USD 4,3/lb, namely USD 9,500 per ton. The long-term future price estimated by metal commodity analysts is in a range of roughly USD 8-9/ lb, namely USD 17,600-USD 19,800/ton.

#### 6.1.1.5. State of the nickel market

2008 saw a very sharp fall in the nicket price on the international market.

The average price in USD seen on the London Metal Exchange was USD 9.58/lb over the year, down 43% on the 2007 average of USD 16.89/lb. The nickel price fell in particular from April 2008 onwards. from USD 13.05/lb at the time to USD 4.39/lb in December (-66%). This sharp fall mainly stemmed from the significant contraction in nickel demand that worsened considerably in Q3. This phenomenon accelerated further in Q4 as the global economic crisis unfolded. In addition, amounts invested in non-ferrous metals by non-physical investors like pension and hedge funds also fell sharply, contributing to the downtum.

In 2008, the stainless steel market, which absorbs around 60% of primary nickel worldwide, saw a collapse in global demand in the second half of the year, whereas the market had held up relatively well in the first half.

The stainless steel industry was directly impacted by the crises in the automotive and construction sectors, which are among its main markets. As a result, in O3 2008 global stainless steel production shrank by 15% compared to Q2, followed by 25% in Q4 compared to Q3 2008, reaching the lowest quarterly output since Q1 2002. This very sharp slowdown affected all geographic areas, including China.

Unlike in previous years, the phenomenon of substituting for grades with less/no nickel alloy slowed considerably, with austenitic grades even regaining market share.

Worldwide, visible consumption of primary nickel in stainless steel was down 16% on 2007. Nickel demand in sectors outside stainless steel held up well, rising 4%.

Overall, visible nickel consumption contracted by 8% in 2008.

In the second half of the year, faced with the very significant contraction in demand and nickel prices no longer allowing the least competitive producers to cover costs, global nickel supply also fall 5% on 2007 to 1,363 thousand tons. Chinese nickel pig iron production thus slowed drastically in the second half, from 85 thousand tons in 2007 to an estimated 68 thousand in 2008 (-20%). High-coat producers suspended operations indefinitely (Utaleinicket and Falcondo) and more and more production cutbacks were announced, particularly in Q4.

However, visible consumption contracted much more brutally than supply and the nickel market posted a considerable surplus in 2008, of over 100,000 tons. LME inventories increased sharply from 47,940 tons at the end of 2007 to 78,822 tons at the end of 2008.

#### NICKEL DEMAND AND SUPPLY SUMMARY

(thousands of tons)	2 <b>002</b>	2003	2004	2005	2006	2007	2008 E
Stainless steel production	19,835	21,917	23,712	23,929	27,951	28,095	20,371
Austenitic stainless steel production	15,454	17,180	18.243	17,560	21,233	19,942	19,024
Primary nickel %	56.5%	56.4%	54.3%	52.4%	53.3%	53.7%	53.396
Primary nickel in stainless steel, tons	767.4	842.1	841.5	811,5	892.0	791.6	742.0
Nickel - other sectors	386.8	405.9	415.5	470.2	499.2	523.8	5444
Visible nickel consumption	1,154.2	1,248.0	1,257.0	1,258.1	1,381.1	1,369.9	1,256.06
Nickel supply	1,177.3	1,196.0	1,258.6	1,283.3	1,354.6	1,432.6	1,302.7
Net	23.2	(52)	1.6	27.1	(26.5)	62.7	107.0
Inventory in weeks' consumption (year-end)	10.5	7.8	7.4	8.8	6.7	9.5	18.7

Sources: INSG - Producers - ERAMET estimates.

#### 6.1.2. Presentation of ERAMET's Nickel Division

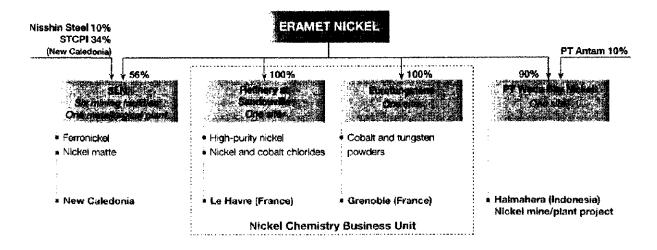
### 6.1.2.1. Nickel Division key points

- → ERAMET has a strong and very long-standing (1680) presence in New
- \* ERAMET is the world's sixth-fargest nickel producer, though it moved to seventh place in 2008 due to the renovation of one of the three Demag furnaces.
- ERAMET operates high-quality mines in 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.

- → ERAMET has developed a policy of gradual expansion, enabled by constant process improvements.
- → ERAMET implemented capital expenditure programmes to increase its production capacity at Doniambo. Fulfilment of this goal will in particular depend on market developments.
- Since 2006, in partnership with the Indonesian company Antam (10%) shareholder in PT Weda Bay Nickel) and Mitsubishi Corporation (shareholder since 18 February 2009 of 33.4% of Strand Minerals (Indonesia) Pte Ltd., which owns 90% of PT Weda Bay Nickel).
- ERAMET has owned Weda Bay Nickel, the world class nickel deposit at Halmahera in Indonesia, enabling it to double its size in nickel over time (project in the study phase).
- → Prony/Creek Pernod: ERAMET and the Southern Province of New Caledonia signed an agreement in January 2009 with a view to developing the Prony and Creek Pernod deposits.
- → The two projects at Weda Bay and Prony/Creek Pernod will use hydrometallurgical technology developed by ERAMET.

#### 6.1.2.2. Nickel Division structure

#### ORGANISATIONAL STRUCTURE ON 31 DECEMBER 2008



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

#### Le Nickel-SLN

Le-Nickel-SLN, founded in 1880, has been mining nickel deposits continuously 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 the studies with a view to building a mine and a plant using the hydrometallurgical process developed by the Group at its research centre. In February 2009, ERAMET sold the Mitsubishi Corporation 33.4% of Strand Minerals (Indonesia) Pte Ltd, which owns 90% of PT Weda Bay Nickel, with the remaining 10% owned by PT Antam, an Indonesian company.

#### **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 to Le Nickel-SLN in several areas, particularly purchasing management, research, engineering and legal and financial matters.

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

Le Nickel-SLN sells all metallurgical production at Doniambo to ERAMET. The sale price of the ferronickel sold to ERAMET depends on the average price at which ERAMET sells to its customers, minus marketing costs and a mark-up for ERAMET. The sale price of matte depends on ERAMET's average selling price to its customers for Sandouville's 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's acquisition of an interest in 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 the end of 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 SIMA share contribution transaction, the ERAMET Group reorganised the capital of Le Nickel-SLN, resulting in a 30% interest for STCPI, a special purpose New Caledonian state-owned entity. STCPI simultaneously received a 5.1% interest in ERAMET's share capital.
- → 2006: In December, STCPI exercised a call option enabling it to raise its interest in Le Nickel-SLN to 34%. The transaction took place on 23 July 2007, via the exchange of ERAMET/SLN shares, with STCPI only owning 4.1% of ERAMETs share capital.

#### Eurotungstène

Since 21 August 2003 ERAMET has also wholly owned Eurotungstene 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 stones and building materials.

The research work done 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 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 (average 2.7%) 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.

#### Nickel ore reserves

See Chapter 11.2.3.

#### Operation of nickel mines

Le Nickel-SLN's oxide ore deposits (garnierite) are opencast-mined. 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;
- → Kouacua, operated since 1960 and re-opened in 1977;
- → Népoui Kopéto, operated from 1970 to 1982, reopened in 1994;
- → Tiébaghi, operated since 1997; and
- Poum: the mine opened at the end of 2007. It is currently undergoing preparatory work with outsourced and SLN teams.

The sixth mine, Étoile du Nord, has been operated since 1988 by a subcontractor, Minière Georges Montagnat. This operation is to end in

Le Nickel-SLN has tremendous experience in mining deposits in New Caledonia. Deposits are defined 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 tons, 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 at Népoui or Tiébaghi in the form of slurry. At the port, the ore is stored and standardised before it is loaded onto ships for transfer to the Doniambo plant.

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

#### Népoul and Tiébaghi beneficiation plants

In 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 enables a broader part of the deposit (including lower-grade ores) to be exploited, thus extending the lifespan of the reserves. This process has been adapted to process ore from the Tiébaghi mine, where the new beneficiation plant was opened in November 2008.

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

fin thousands of wet tons)		2008	2007	2006
Direct production		2,430	2,885	2,344
Sub-contracted production		530	766	695
Total	vii apa	2,900	3.85E	3,039
Laterites bought from contractors	k kalek	2037	359	350

#### Doniambo metallurgical plant

The Doniambo plant produces directly marketable ferronickel (approx. 80% of its output) and nickel matte (20% of output), which is used in its entirety by the Sandouville plant.

The one received from mines is standardised and then dried. It is then calcined in five rotary furnaces after addition of a reducing agent. The following stage involves melting the ore 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 enabled the technology and equipment used there to evolve steadily. Its proximity to the port at Nouméa. also gives the plant the benefit of direct access for cargo ships and ore carriers

A major production equipment modernisation programme for Doniambo is in progress. Accordingly, in 2007 two calcination furnaces were renovated and in 2008 one of the three electric furnaces was rebuilt, explaining the reduction in output.

#### **METALLURGICAL PRODUCTION (FERRONICKEL AND** MATTE) AT THE DONIAMBO PLANT (in tons of nickel content)

1994	50,129
1995	52,343
1996	53,418
1997	54,892
1998	<b>56,502</b>
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

#### Sandouville refinery

The Sandouville-Le Havre refinery uses a high-performance hydrometallurgical process that was specially developed by ERAMET's research teams. The 75% nickel matte used is completely sourced from Le Nickel-SLN's metallurgical plant in Doniambo, New Caledonia.

The matte is crushed and then corroded by an iron chloride solution using 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. The very pure nickel cathode obtained is usually cut up and put into drums. The Sandouville refinery has undertaken a policy of making high value-added products for various applications such as electronics and chemicals.

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

#### NICKEL DIVISION MARKETING POLICY AND PRODUCTS

The Group has a global sales network, ERAMET International, that markets most of its nickel. 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 has long-term partnerships with its customers. Ferronickel sales are usually covered by multi-year contracts with specific tonnage commitments.

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

#### Ferronickei: world's number two producer

The Group's entire ferronickel production is sold to stainless steel producers, Ferronickel is a (23%-30%) nickel and iron alloy. SLN 25 ferronickel provides stainless steel producers not only with nickel, but also with top quality iron. Steelmakers can use ferronickel in shot form in a converter to achieve substantial productivity gains. The Group is the world's second largest terronickel 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 related products: one of just three high-purity nickel producers worldwide

- Nickel Metal (HP Nickel): nickel cathodes are mainly sold to nickel alloy manufacturers (superalloys for aerospace and nuclear power and alloys produced to constraints that improve resistance to corrosion, expansion, pressure etc.), as well as nickel electroplating workshops;
- Nickel chloride (SELNIC): ERAMET is the world's leading producer of nickel chloride, a product used in electroplating and in the chemicals industry (catalysts);
- Nickel carbonate (Nickel ONE): NiCO3 is mainly used in the refining sector to make catelysts 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.

#### Ore

Ore is mainly sold to ferronickel producers in Japan and to BHP Billiton in Australia.

#### Breakdown of Sales

The Group is active in all the major nickel consumption markets. The geographic breakdown of sales excluding Eurotungstène is as follows:

(en%)	2008	2007	2006
Euro zone	40	46	42
Americas	<b>O</b>	7	7
Asia and other regions		47	51
Total	108	100	100

## NICKEL DIVISION RESEARCH AND DEVELOPMENT POLICY

The Nickel Division's research and development policy has brought about major developments over the past 30 years. The Group has research resources with ERAMET Research (see Chapter 11 - Research and Development).

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 Nepoui (1991) and Tiébaghi (2008) plants; and

#### mining geology techniques.

Furthermore, the process improvements attained through research and development have enabled the capacity of the three Demag furnaces to be expanded gradually and reliably with production advancing from 40,000 tons in 1990 to 62,300 tons in 2006.

More recently, the Group passed another major milestone in its development by creating its own hydrometallurgical process for laterities. This could be applied industrially in the Weda Bay deposit and could also be rolled out in other deposits over time, particularly in New Caledonia for working the Prony/Creek Pernod deposits.

#### NICKEL DIVISION RETURN ON CAPITAL EMPLOYED (ROCE)

ROCE: Restated current operating profit /Capital employed at \$1/12, year N-1"

#### ROCE NICKEL

<b>%</b>	2004	2005*	2006	2007 2008
Nickel	93,5	58,6	79,7	119,6

<sup>\*</sup> Normes IFRS

<sup>\*</sup> Current operating profit - net valuation differences from fair value tests.

The Division's shareholders' equity, plus net borrowings, plus the Pount/Konlambo mining indernity, plus provisions for major lawsuite, redundancy plans and restructuring, lass non-current financial assets and excluding the Weda Bay investments.

#### 6.1.2.3. The Nickel Division in 2008

#### KEY FIGURES

(IFRS, millions of euros)	2008	2007	2006
Sales	14.8.4.8.1. <b>997</b>	1,290	1,019
Current operating profit	1801	693	388
Net cash flows from operating activities*	168	556	317
Capital employed*	gen	703	580
Capital expenditure	188	1 <b>35</b>	125
Average workforce	3,09%	2,875	2,668

Excluding Weda Bay capital expenditure.

#### COMMENTARY

ERAMET Nickel's sales were down 30% in 2008 compared to 2007 at €897 million. In O4 2008, they amounted to €176 million, namely 47% down on O4 2007.

2008 current operating profit amounted to €169 million, down 76% on 2007. The lower profit was due mainly to the fall in nickel prices from the very high levels in 2007.

The nickel market had a very difficult year due to a sharp reduction in business and prices in the second half of 2008. The decline was particularly marked in Q4, when global stainless steel production decreased by 24% on Q4 2007, and when LME nickel prices plummeted 63% on average compared to Q4 2007. Over the year prices declined 43% compared to 2007.

Nickel hedges in 2008 involved 16,500 tons at an average price of USD 10/ib. They included new hedges put in place since 2007 for 9,000 tons at an average of USD 12,5/lb.

ERAMET Nickel's nickel deliveries totalled 51,700 tons in 2008, 6% lower than in 2007. Appual nickel metallurgical production had been cut back to 51,000 tons by the end of 2008 (-14% on 2007) in response to falling demand.

Capital expenditure amounted to €189 million, namely 40% up on 2007, although this figure had been revised down during the year compared to the pre-crisis target.

In New Caledonia, ERAMET Nickel completed construction of the new Tiébaghí ore beneficiation plant and rebuilt one of the three electric furnaces at SLN. The latter has undergone significant modernisation in recent years thanks to large capital investment programmes, with nearly €710 million invested at SLN over the 2003-2009 period.

The studies for the Weda Bay project in Indonesia continued in 2008. Exploration work enabled an upward revision in resources to 5.1 million tons of nickel (total measured, indicated and inferred resources) while the proportion of measured resources rose to 25% compared to 5% at the time of the acquisition by ERAMET.

### → 6.2. MANGANESE DIVISION

#### 6.2,1, The manganese market

#### 6.2.1.1. Manganese demand

#### 6.2.1.1.1. **MAIN APPLICATIONS**

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 ton 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 concerning 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 food;
- > various chemicals: pigments, fine chemistry;

 other metallurgical uses: mainly as a hardening agent for aluminium (beverage cans),

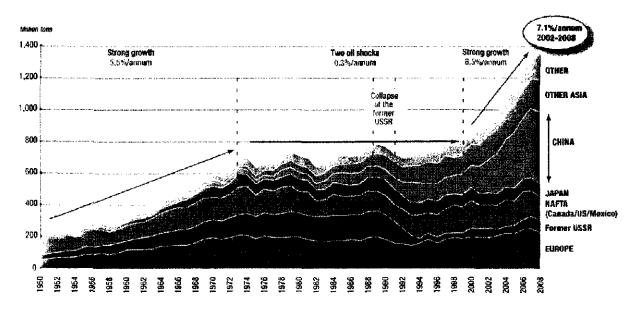
#### 6.2.1.1.2. HISTORICAL CONSUMPTION TRENDS AND OUTLOOK

Manganese demand is primarily influenced by trends in global carbon steel production. This market had long been considered stagnant or slow growing.

From 1998 to 2007, there has been strong average growth in global carbon steel consumption. This was due to the end of the downturn in steel consumption by the former soviet bloc, the slight upturn in demand in traditional regions and, above all, sharp growth in Chinese demand.

From 2002 to 2008, global demand even grew by over 7% annually, mainly driven by growth in Chinese demand of almost 14% per annum. In 2008, global carbon steel production decreased by 1%.

#### CHART OF VISIBLE CARBON STEEL CONSUMPTION BY GEOGRAPHIC AREAS



2008: Estimates. Source: ERAMET and World Steel.

#### GLOBAL CARBON STEEL PRODUCTION BY GEOGRAPHIC AREA

(Invitions of tons)	2006	%a	2007	%	2008	%
EUROPE (27)	206.9	16.5%	209.6	15.6%	198,6	14.9%
Former USSR	119.9	9.6%	124,2	9.2%	1141	8.6%
NAFTA (Canada/USA/Mexico)	130.5	10,4%	131.3	9.8%	1942	9.3%
JAPAN	116.2	9.3%	120.2	8.9%	1167	8.9%
CHINA	423.0	33. <b>8%</b>	489.2	36.4%	502,0	37.8%
INDIA	49.5	4.0%	53.1	3.9%	5 <b>5.0</b>	4.1%
OTHER ASIA & OCEANIA	96.2	7.7%	102.6	7.6%	10 <b>3.2</b>	7.8%
OTHER	108.9	8.7%	115.2	8.6%	113.9:	8,6%
Total	1,250.0	100.0%	1,348.4	100.0%	1,329.3	100.0%

Source: World Steel.

### 6.2.1.2. Manganese supply

#### MANGANESE ORE

Global ore production in 2008 was estimated to be 13.5 million tons of manganese content. Ore production is mainly from eight countries: South Africa, Australia, China, Gabon, Brazil, Ukraine, India and Ghana.

#### MANGANESE ORE PRODUCTION IN 2008 (IN THOUSANDS OF TONS OF MANGANESE CONTENT)

Chine*	3.064
The state of the s	
South Africa	2,883
Australia	2,246
Gabon	1,441
Brazil	1,258
Ukraine*	609
India*	540
Kazakhatan*	408
Ghana*	327
Mexico*	159
Georgia*	132
Other*	464
World	13,524

<sup>\*</sup> Low grade ore, Sources: International Manganese Institute and ERAMET estimates.

The main producers of high-grade manganese are BHP Billiton, Comilog (ERAMET), VALE (CVRD) and Assmang,

#### **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, due to the local availability of coke. Outside China, blast furnaces are exclusively located in Japan and Eastern Europe.

There are four product families:

- → high carbon ferromanganese (HC FeMn): containing 65-79% manganese and 6-8% carbon. HC FeMn can be produced by two types of process, electric furnaces or blast furnaces;
- silicomanganese (SiMn): with 60-77% manganese, SiMn can only be made in an electric furnace, using either ferromanganese slag or ore;
- → 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, in particular low-carbon silicomanganese. Tinfos has developed unique expertise in this alloy, which is intended mainly for the production of stainless steel, one of the ERAMET Group's main markets.

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

#### **BREAKDOWN OF GLOBAL MANGANESE ALLOY PRODUCTION IN 2008**

Silicomanganese:	60%
High carbon ferromangenese:	30%
Refined ferromanganese:	10%

Sources: ERAMET estimates,

#### **GLOBAL MANGANESE ALLOY PRODUCTION IN 2008** (IN THOUSANDS OF TONS OF ALLOY)

	***************************************
Europe	1,080
CIS	1,670
North America	210
China	6,380
Other Asia and Oceania	2,480
Other	1,600
Globally	13,420

Sources: ERAMET estimates.

The manganese alloy industry is highly fragmented. Producers are located in a large number of countries, even though China appears dominant. There are no major technological barriers for high carbon ferromanganese and silicomanganese, which are standard products. The industry's capital expenditure levels are low, particularly in China.

#### 6.2.1.3. Manganese prices

#### MANGANESE ALLOYS

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

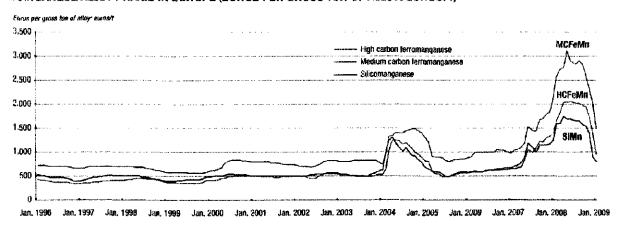
The manganese market is above all global and highly competitive. However, prices can sometimes vary between geographic areas (Europe, North America and Asia) because of movements in currency rates or out-of-stap economic cycles. These differences are usually only temporary.

Furthermore, the positions of the various alloy groups also vary 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 traded in euros. Prices are determined per gross ton of alloy and not per 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 TON OF ALLOY: EUROS/T)



Squice: CRU.

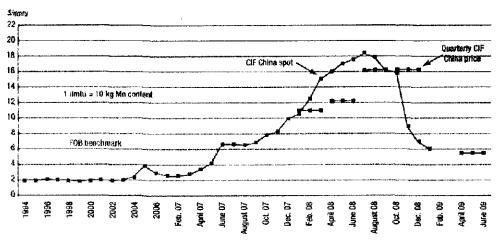
Manganese alloy prices are historically less volatile than those of LME-listed metals.

#### **MANGANESE ORE PRICES**

The selling price of manganese are, as with alloys, is agreed directly between sellers and buyers. They are typically stated in USD/dmtu (dry metric ton unit). A dmtu corresponds to 10 kg of manganese content. The price of a drittuis higher for rich ores and also depends on the granularity and the presence or absence of impurities.

The graph below shows the historical trend in manganese ore prices agreed annually between BHP Billiton and Japanese consumers, which served as the main reference in the ore market worldwide (source: Tex Report, a specialised Japanese publication). Taking into account the growing importance of the Chinese market, we more recently added the Chinese manganese ore spot price curve, as followed by the CRU, as well as the quarterly price information monitored by the Tex Report.

#### CONTRACT PRICE FOR MANGANESE ORE EXPORTED TO JAPAN FOR METALLURGICAL USE AND CIF SPOT PRICE OF MANGANESE ORE IMPORTED INTO CHINA



- Contract price for manganese one exported to Japan for metallurgical use - USD per 1% manganese content. FOB Australia

CIF spot price for manganese ore (45%) imported into China?

Quarterly contract price for manganese one for regular sales to the main Chinese alloy producers\*

Source: CRU and Tex Report\*.

#### 6.2.1.4. Recent market conditions

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

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

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 uptum in prices that accelerated in 2006, taking them to record levels.

Manganese ore supply has faced certain logistical bottlenecks in the railways and ports of certain large producer countries like South Africa.

Few large capital expenditure projects have been announced to meet rapid demand growth.

In manganese alloy production, higher energy bills such as for electricity and coke are adding to the ore costs and logistical constraints and thereby contributing to price increases. 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 certain number of metallurgical products, including manganese alloys. This has resulted in successive export duty increases.

In Q4 2008, global carbon steel production declined sharply, resulting in a considerable fall-off in manganese demand. Although manganese producers reacted by cutting output, spot prices for one and manganese alloys fell sharply.

#### 6.2.2. Presentation of ERAMET's Manganese Division

#### 6.2.2.1. Manganese Division key points

The Group is the world's second-largest producer of high-grade manganese ore and manganese alloys and the leading global producer of manganese chemical derivatives. It benefits from a long-standing presence in Gabon with high-quality mines (grades and reserves).

The Group undertook a programme to expand manganese one production capacity with the aim of increasing it to 3 million tons in 2006 and to 3.5 million tons in 2008.

#### 6.2.2.2. Manganese Division history

1957: Founding of Comilog.

1962: Mining of the Moanda deposit begins in Gabon.

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

1991-1994: Comillog acquires Sadacern (manganese chemistry), SFPO (ferromanganese production by blast furnace in Boulogne-sur-Mer, France) and DEM (production of alloys by electric furnace in Dunkirk, France).

1995: Comiliog acquires the Guangxi and Shaoxing manganese alloy plants (China).

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

1999: ERAMET acquires the Elkem group's manganese businesses, which are merged into ERAMET Manganese Alliages.

#### 2000:

- acquisition of the Mexican company Sulfamex, which produces manganese-based agrochemicals;
- inauguration of the Moanda industrial complex (Gabon), a new manganese ore beneficiation and sintering plant, which enhances 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

- → closure of the Boulogne-sur-Mer ferromanganese plant and the Shaoxing (China) manganese alloy plant. Manpower reductions at most other ERAMET Manganese sites;
- disposal by Comilog of Sadaci (molybdenum reasting) and the carbon black business, both based in Beigium;
- provisional management contract for the TransGabonais train granted to Comilog by the Gabonese government.

2004: Launch of a capital expenditure programme for a 60% expansion in manganese ore production at Comilog in Moanda to 3 million tons.

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

Effective 1 July 2004, the Group acquired the 30% and 7% interests held by Cogerna (Areva group) in ERAMET Manganese Alliages and Comillog, 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 tons by 2008. ERAMET bolsters its oil catalyst recycling business through two capital expenditure programmes by its Gulf Chemical and Metallurgical Corporation (GCMC) subsidiary (GCMC): acquisition of a 100% interest in Bear Metallurgical and launch of the construction of a new oil catalyst recycling unit in Canada.

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

2006: Comilog production successfully increased to 3 Mt.

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

#### 2008:

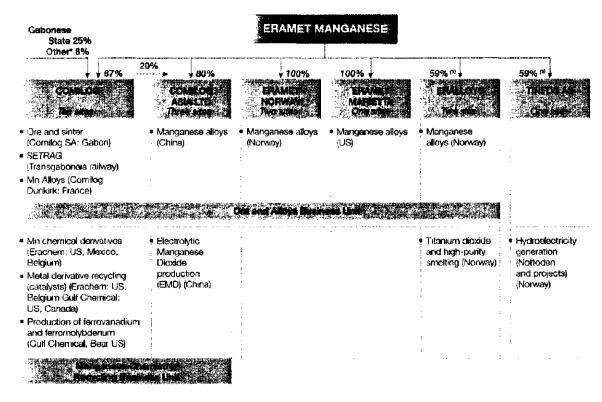
→ acquisition of 58.93% of Tinfos, a Norwegian group (56% economic interest):

- start-up of the new Canadian catalyst recycling plant;
- agreement with the shareholders in Otjozondu Mining (Pty) Ltd (Namibia) to study the development of a manganese deposit in Otjozondu.

#### 6.2.2.3. **Manganese Division structure**

#### 6.2.2.3.1. ORGANISATIONAL STRUCTURE AS ON 31 DECEMBER 2008

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



(1) 55.78% economic interest, percentage control 58.93%.

Of which 7.04th is owned by Carlo Tassara France, belanging to the group of Mr Romain Zaleski. (see Chapter 21.2.5. - Capital structure).

- Comilog is a company operating under Gabonese law and 67% owned. by ERAMET. Its business activities include:
- operation of the Moanda Manganese mine and sintering plant,
- operation of Setrag (TransGabonais railway),
- production of manganese alloys in Dunkirk (France),
- production of manganese-based chemical derivatives,
- recycling of metals contained in oil catalysts and electronic industry products (copper),
- production of ferrovanadium and ferromolybdenum;

- Comileg Asia has the two manganese alloy plants at Guilin and Guangxi, as well as the manganese chemical derivatives plant at Chongzuo;
- → ERAMET Norway has two Norwegian alloy plants at Porsgrunn and
- ERAMET Marietta (US) produces manganese alloys;
- ◆ Eralloys includes the Kvinesdal manganese alloy plant and the Tyssedal titanium dioxide plant in Norway (see acquisition of Tinfos); and
- Tinfos AS: Hydroelectricity production Nottoden plant in Norway and hydroelectricity development projects.

#### 6.2.2.3.2. 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%. One reserves are discussed in Section 11.2.

The mine is opencast. The 4-5 meter-thick layer of overburden covering the are is extracted by draglines. The run-of-mine are is extracted using excavators and loaded onto 110-ton trucks. The ore is processed at the beneficiation plant. The beneficiated ore is subsequently transferred to Moanda railway station by conveyor.

Non-marketable are fines were previously stored in heaps but are now dispatched to the Moanda industrial complex. There they go through dense medium beneficiation, which increases their content from 43% to 52%. This concentrate is then mixed with coke and sintered in a furnace at 1.300 degrees Celsius to obtain a product containing approximately 58% manganese. This is transferred by conveyor to Moanda railway station, where it is loaded onto wagons. The sintering plant has an annual production capacity of 600,000 tens.

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

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

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

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

Comiting has its own one port, Owendo, with storage capacity that corresponds to some three months' production. The port can take in 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, high value-added products. ERAMET, with seven manganese alloy plants, is the only alloy maker with plants in all three main consuming regions (Europe, United States and Asia), which allows it to offer better customer service and further protects it from foreign exchange and market fluctuations.

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

#### PRODUCTION OF MANGANESE ALLOYS FOR THE STEEL INDUSTRY

(thousands of tons)	2008	2007	2006	2005	2004	2003	2002
High-carbon ferromanganese (including China)	287	299	279	290	295	402	370
Silicomanganese	172	191	201	185	202	225	224
Refined alloys (medium and low-carbon FeMn)	249	270	271	262	233	247	20 <b>5</b>
Total Min alloy production	70 <b>8</b> *	700	751	727	730	874	799

Excluding Tintos

#### MANGANESE ALLOY PRODUCTION SITES

Site	Country	Production capacity	Furnace type	Products
Dunkirk	France	70 kt	Electric	SiMn
Sauda	Norway	180 kt	Electric	HC, MC, LC FeMn, SiMn
Poragrunn	Norway	150 ki	Electric	HC, MC, LC FeMn, SiMn, LC SiMn
Kvinesdal	Norway	180 kt	Electric	SiMn, LCSiMn
Marielta	United States	180 kt	Electric	HC, MC, LC FeMn, SiMn
Guangxi Prov.	China	95 kt	Blast	HC FeMn
Guilin	China	140 kt	Blast and electric	HC FeMn, SiMn

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

In China, the Guillin and Shaoxing plants are both located in Guangzi province, close to local manganese mines, which enables them to optimise their ore supply between Comilog and local sources.

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

#### 8.2.2.3.3 MANGANESE CHEMISTRY/RECYCLING/ SPECIAL PRODUCTS BUSINESS UNIT

#### Manganese chemistry business

The Group is the global leader in manganese chemical derivatives. The manganese chemistry business is grouped together within Erachem Comillog and comprises five plants:

Location	Products
Tortre (Belgium)	Manganese salts and oxides
Baltimore (USA)	Manganese salts and oxides
New Johnsonville (USA)	Electrolytic manganese dioxide (or "EMD")
Tampico (Mexico)	Manganese sulphate and oxide
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 chemistry.

#### Recycling business

This is currently carried on at four sites:

Tertre (Belgium)	Recycling of copper solutions
Freeport (USA)	Recycling of oil catalysts and recovery of metal content (vanadium, molybdenum, etc.)
White the state of	Ferremolybdenum and ferrovanadium
Butler (USA)	production
Fort Saskatchewan (Canada	Oil catalyst recycling

### 8.2.2.3.4. TITANIUM DIOXIDE AND HIGH-PURITY SMELTING BUSINESS

	Titanium diexide (pigment industry) and high purity
Tyssedal (Norway)	smelling production

#### 6.2.2.3.5. HYDROELECTRIC BUSINESS

Nottoden (Norway)	Hydroelectric production

#### Manganese Division marketing policy

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

The Group has partnerships with its customers and provides important technical support to help them derive maximum benefit from its products in their own production processes. It has a global sales network, ERAMET International, that markets most of the Manganese Division's products. In countries where ERAMET International does not operate, the Group is represented by agents.

## Extent of the Manganese Division's research and development

The Group has extensive research facilities with ERAMET Research. These have allowed, in particular, the development and implementation of the sintering process at the Moanda (Gabon) manganese fines plant.

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

#### Manganese Division return on capital employed (ROCE)

ROCE: Restated current operating profit /Capital employed on 31/12 of year N-1"

#### **ROCE MANGANÈSE**

%	20 <b>04</b> (1)*	2005	2006	2007 2008
Manganese	77.0	65.6	32.7	75.9

<sup>(1)</sup> Excluding provisions for resructuring.

<sup>\*</sup> IERS

Current operating profit – net valuation differences from fair value lests.

<sup>\*\*</sup> The Division's shareholders' equity, plus net debt, plus provisions for major lawsuits, redundancy plans and restructuring, less non-current financial assets.

#### 6.2.2.4. The Manganese Division in 2008

#### KEY FIGURES

(IFRS, millions of euros)	2008	2007	2006
Sales	2.348	1,473	1,147
Current operating profit	1,080	440	170
Net cash flows from operating activities	7. (1982) A. A. A. B <b>ORN</b>	307	193
Capital employed	T 2 7 7 8 6 2 1.045	685	587
Capital expenditure	14	129	122
Average workforce	6.72	6,503	6,415

#### COMMENTARY

Thanks to record manganese alloy and ore prices, ERAMET Manganese's sales were up 59% in 2008 compared to 2007 at €2,348 million, including the consolidation of Tinfos as from 1 August. Tinfos's sales over the five months, excluding the international trading business (recognised as assets held for sale) amounted to €159 million.

In Q4 2008, the crisis had a very significant impact. Excluding Tinfos, ERAMET Manganese's sales were down 20% on Q4 2007. Including the five-month contribution of Tinfos, ERAMET Manganese's sales amounted to €522 million, up 15% on Q4 2007.

ERAMET Manganese's 2008 current operating profit was up 147% on 2007 at €1,088 million, including the five-month contribution of Tinfos of €62 million.

Global carbon steel output shrank slightly in 2008 (-1%), following several years of strong growth. The decrease was concentrated in the second half and more particularly in Q4, when global carbon steel production was 19% down on Q4 2007, due to the effect of the worldwide crisis and inventory reduction.

Inventory reduction by purchasers exacerbated the fall-off in business for manganese alloy and ore producers.

ERAMET Manganese reacted swiftly by cutting manganese alloy and ore output to reflect demand.

In Q4 2008, Cornilog's ore and sinter output was down 23% on Q4 2007 to 690,000 tons, with annual production in 2008 thus limited to 3,250,000 tons, namely 3% down on 2007.

Manganese alloy production was also down 23% on Q4 2007 at 150,000 tons. Over the year, it was thus limited to 708,000 tons, namely down 7% on 2007.

Spot manganese are prices soared in 2008 to record levels in excess of USD 16 dmtu/CIF in Q3 2008, before declining due to a very pronounced contraction in volumes at the end of 2008.

Spot manganese alloy prices also reached record levels, before plummeting at the end of the year against a background of sharply declining volumes.

Furthermore, the catalyst recycling business saw sales rise sharply in the first half of 2008 before falling in the second half due in particular to tumbling molybdenum and vanadium prices. Over full-year 2008, its sales were down a modest 1% on 2007.

The new Canadian oil catalyst recycling plant began operating in mid-2008. Given the new earnings outlook for this investment as a result of the crisis the Group recorded €31 million in asset impairment in ERAMET's financial statements.

The manganese chemistry business had a good 2008 both in terms of prices and volumes. The new plant at Chongzuo in China producing electrolytic manganese dioxide for the alkaline battery market reached full capacity.

### 6.3. ALLOYS DIVISION

#### Alloys Division businesses 6.3.1.

The Alloys Division makes special steels, tool steels, high-speed steels and superalloys and converts them by forging and rolling. It has developed considerable business in the specialised field of closed die-forging. This process involves hot-shaping metal with a press or a ram, using specific tooling for every part to be manufactured.

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

#### 6.3.2. Alloys Division markets

The materials and products marketed by the Alloys Division have much higher selling prices than carbon steel or even stainless steel. Market volumes are also far smaller.

#### **ESTIMATED GLOBAL PRODUCTION**

billion tons	
milions tons	el
million tons	THE BOOK SALE THAT HAS STREET AND SHOULD BE SHOULD PROBE NO. SHEET AND SHOULD SHOW THE SHOULD SHOW
25,000 lons	et <b>eci</b> s
80,000 tons	
3	MET estimates.

#### 6.3.2.1. High-speed steels

High-speed steels have a high carbon content and also contain tungsten, molybdenum, vanadium, chromium and sometimes coloalt. They do not contain nickel. After thermal 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 and trimming cutters and reamers, etc. Flat products are used to make saw blades, cutting disks and industrial knives.

Outside the cutting tools market, there are several other applications for high-speed steels, particularly for shaping metals and auto parts subject to wear and tear

Western consumption of high-speed steels has been affected by competition from tungsten carbide. Furthermore, in recent years highspeed steel-consuming industries have tended to relocate to countries such as China and, to a lesser extent, Brazil, particularly for less technical applications. The Western high-speed steel market has been on a slightly 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).

#### 6.3.2.2. Tool steels

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

Tool steels are used to make tools for shaping metals, plastics and glass. The 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 accompanied with good fatigue resistance (ability to withstand repeated stress).

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

There are three families of application:

- → cold working (manufacturing of tools for cutting and stamping);
- hot working (manufacturing of tools for embossing, extrusion and light alloy injection);
- plastic injection moulds.

#### 6.3.2.3. Nickel based alloys

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

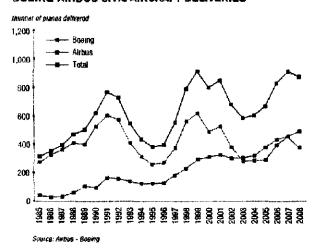
- → alloys with special physical properties: low-expansion alloys, alloys with magnetic properties mainly for electronics industries, electrical elements (for industrial heating and domestic appliances) and alloys for the transportation of liquefied natural gas;
- alloys for corrosion resistance (chemistry,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

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

Superalloys contain 40-75% nickel This is alloyed with chromium (15-30%) and, depending on the required grade, cobalt, molybdenum, titanium, aluminium or niobium. They are known for their good mechanical performance at high temperatures. Their main outlet is aerospace (engines). The gas turbine sector is also a major outlet for superalloys. The third market in terms of size is the automotive sector.

Demand for superalloys is mainly driven by aerospace, where annual medium to long-term growth is generally estimated at 5%. The sector does, however, go through marked cycles. The new engine business is also complemented by the maintenance of existing engines.

#### **AEROSPACE MARKET: SATISFACTORY PERFORMANCE** IN 2008 BUT UNCERTAINTY REGARDING THE FUTURE **BOEING-AIRBUS CIVIL AIRCRAFT DELIVERIES**



### Production processes for steels with highly advanced characteristics and superallovs

#### 6.3.3.1. 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 processes 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 ladie furnace to add other alloying metals, remove impurities (inclusions and gases) and obtain the required chemical composition.

Two solidification methods are conventionally 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 (nitrogen content, oxygen-reactive alloying elements, etc.). It is carried out in vacuum induction melting-type (VIM) furnaces.

#### REMELTING

Remelting takes place in slag (ESR -Electro Slag Remelting-furnace) or in a vacuum (VAR -Vacuum Arc Remelting- furnace). For some types of alloys for aerospace, the two processes are carried out one after the other.

Remelting enables 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.

#### 6.3.3.2. 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).

- Rolling consists of shaping and work hardening the material into sheets, bars (typically 20-200 mm in diameter) or wire (5-20 mm in diameter) in order to ensure geometry (section), the surface condition and use characteristics. The operation is carried out through a series of runs between rolling cylinders.
- → Forging involves shaping bars (typically 200-600 mm in diameter) or simply-shaped blanks in order to guarantee geometry and characteristics. 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.

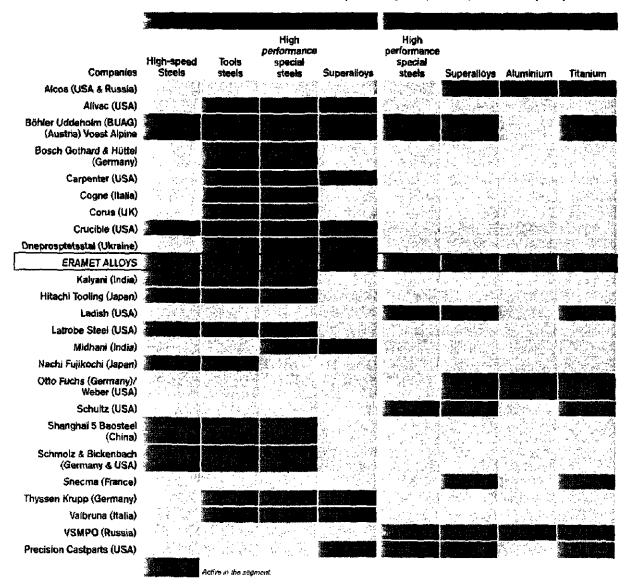
\* Closed die-forging consists of shaping the material into closed dieforged blanks by hot pressing between two moulds machined in the shape of the parts. Closed die-forging is carried out with a press or ram. It is usually followed by machining and finishing operations.

#### 6.3.4. Alloy producers

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 operating 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.



#### 6.3,5. Alloys Division structure

#### 6.3.5.1. Alloys Division key points

The key facts on the Alloys Division are as follows:

- → global leadership; leading global producer of high-speed steels (Erasteel) and second-largest global producer of closed die-forged parts for aerospace (Aubert & Duval);
- a strategy based on technological expertise and niche markets;
- markets experiencing long-term growth;
- start-up of a new closed die-forging plant in 2006;
- a new titanium partnership (UKAD).

#### 6.3.5.2. Alloys Division history

Within the Group, the development of the Alloys Division first began with the formation of Erasteel from 1990 to 1992. Subsequently in 1999, the various companies contributed by the SIMA group, most of which are now merged into Aubert & Duval, gave the Alloys Division its current scope.

#### HISTORY OF ERASTEEL

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

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

1956; Founding of Commentnyenne des Aciers Fins Vanadium Alloys.

1982; Kloster Speedsteel is founded in Sweden by merging the highspeed steels divisions of Üddeholm and Fagersta.

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

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

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

1992: ERAMET founds Erasteel, comprised of 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 allows the company to take off. Plants are opened in Les Ancizes and Gennevilliers, Aubert & Duval participates in the manufacturing boom in automobiles (engines, gearboxes) and in aircraft engines, which increasingly contain special steels.

1945/1960: The Group positions itself in cutting edge sectors, the development of which play 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 weathers the steel industry crisis (resulting from the fall in orders for the automotive, public works and construction sectors) thanks to its policy of specialities primarily for high-tech markets.

1977: Founding of Interlorge (with a 13% interest for Aubert & Duval).

1984: Aubert & Duval is turned into a holding company of the same name and a wholly owned operating company is incorporated, Acièries Aubert

1987: Interest taken in Special Metals Corporation (SMC)

1989: The holding company Aubert & Duval is renamed SIMA

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

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

1997: Dilution of SIMA's interest in SMC from 48% to 38.5% following SMC's IPO on the NASDAQ via a capital increase, Usinor sets 40% of CIRAM's capital to SIMA, which henceforth holds 95%. FISID, the Tecphy and Fortech holding company, is renamed HTM.

1999: Integration of SIMA's businesses into the ERAMET Group, in which the shareholders of SIMA become the largest shareholder. The Alloys Division, comprised of Erasteel and the companies contributed by SIMA, is formed.

#### **ALLOYS DIVISION HISTORY**

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

SMC: The Group's interest in SMC is fully written off.

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

2003: A major restructuring programme is announced at Aubert & Duvel.

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

2005: Opening of the new closed die-forging plant in Pamiers ("40,000ton press")

Aubert & Daval - opening of the tool steels distribution centre in Wuxi (China).

2007: Erasteel - opening of high-speed steel drawing workshop at Tianjin in China.

2008: Signing of a titanium partnership (UKAD).

#### 6.3.5.3. Alloys Division organisational structure

# **ERAMET ALLOYS** 100% 100%

Production of high-speed

products, flat products

France, Sweden, UK.

Conventional metallurgy

- Pre-alloyed powder

US and China

Steelmaking

metalkurgy

steels in the form of long

- Production and transformation of steels and superalloys in the form of long products, flat products and forged and closed die forged parts - France
- High-performance special steels
- Nickel-based superalloys
- Forged and closed die forged parts - France
- Titanium and aluminium alloys
- Special steels
- Superalloys
- Tool steel distribution centre and heat treatment - China
- Special steel distribution centre - France

#### 6.3.5.4. **Alloys Division production**

#### 6.3.5.4.1. ERASTEEL

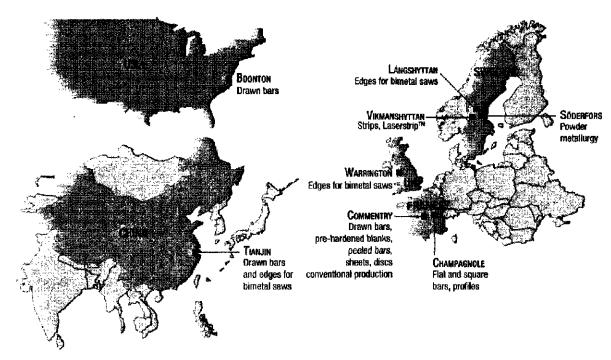
#### Erasteel's production

Erasteel is the only specialist producer of high-speed steels and is the global market leader. Its competitors are general steel compenies: Boehler-Uddeholm (Austria), Latrobe (US) and Hitachi (Japan).

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's industrial organisation

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



#### 6.3.5.4.2. AUGERT & DUVAL

Aubert & Duval's strategy has always been to focus on speciality products that are technically advanced and 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 specialties.

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

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

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

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

The closed die-forging sector's industrial assets The sector has the following equipment:

- closed die-forging presses from 4.5 kt to 65 kt;
- one to 16 ton rama:
- > various finishing (grinding), heat treatment, non-destructive testing and machining (towers, milling machines) facilities.

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

#### The Interforge press

Interforge, located in Issoire, was founded in 1977 around a 65,000-ton press that is the most powerful in the western world. Interforge carries out subcontracted closed die-forging solely for its shareholders and in proportion to their interests (namely 94% for Aubert & Duval and 6% for SNECMA),

The press is a key strategic advantage, as its puts the Aubert & Duval group in a favourable situation 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 tons. Only three western producers apart from Aubert & Duval have presses with capacities over 30,000 tons;
- two 75,000-ton presses exist in Russia (aluminium producer Rusal and intanium producer VSMPO).

#### The Airforge press

The new Airforge closed die-forging plant at Pamiers was completed in mid-2006. Built around a fully integrated 40,000 ton 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 tons), 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, etc.) and structure and equipment parts (Airbus, Boeing, Embraer, Spirit, Dassault Aviation, Messier Dowty, etc.);
- → the gas turbine industry: turbine makers such as General Electric Power Systems, Siemens and Alstom.

Aubert & Duval uses CAD software together with simulation software that, in direct cooperation with the customer, enable the characteristics and costs of parts to be optimised. This also shortens research, development and production cycles considerably.

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

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

The closed die-forging business was strengthened in 2007 by a new plant with in particular a 40,000-ton press in Pamiers, France.

This new 40,000-ton press is designed to drive strategic development in aerospace engine parts. On the new site, Aubert & Duval has automated workshops and facilities with much shorter cycle times, which puts it in a favourable position to meet the ever more complex requirements of its customers.

Furthermore, Aubert & Duval is 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, Schultz and Ladish and the Austrian group Böhler.

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

Finally, for the closed die-lorging of titanium, its main competitors are the PCC, Ladish and VSMPO (Russia) groups.

#### Aubert & Duvai's other business sectors Industrial assets for other sectors include:

→ arc furnaces of up to 60 tons, combined with ladle metallurgy tools (ladle, AOD or VOD furnaces);

## Business overview

- VIM furnaces of up to 10 tons for vacuum alloy production;
- powder metallurgy production units;
- vacuum or slag remelting furnaces with capacity up to 30 tons;
- mill trains for making long products with 5.5 mm-200 mm in diameter;
- forging presses and machines with force of up to 4,500 tons;
- machining facilities (for milling, turning, reaming or drilling);
- heat freatment equipment, including for parts up to 50 tons or 20 meters in length, as well as surface treatment equipment (case hardening or nitriding);
- non-destructive testing equipment (sweating, ultrasound, X-ray, magnetic particle inspection, etc).

All these tools have computerised management and supervision systems and are certified in accordance 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 conversion 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 ongoing contracts and a high number of marketed grades, often in small quantities.

The main competitors are the Carpenter (US), Latrobe (US), Allvac (US), Corus (UK) and Böhler 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 (large number of customers) and regional. As a result, distribution plays an important role. The main players on the tool steels market are the Böhler Uddeholm, Thyssen, Hitachi and Daido groups.

Aubert & Duval is specifically positioned up range, with significant levels of technical support. Moreover, Aubert & Duval plans to develop this business geographically by strengthening its distribution, particularly in China, with the tool steels distribution centre in Wwxi, inaugurated in early 2006.

#### Individual forged parts and specialties sector

This area combines various related activities of very specific expertise:

- individual torged 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;

- remetting alloys;
- powder metallurgy: semi-finished products for turbine disk closed die-forging and surfacing powders.

#### 6.3.5.5. 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. These offer a wide range of services. Elsewhere, Erasteel is supported by the ERAMET International sales network wherever it operates.

In other countries, sales are made by local agents. To support this sales network, product managers are responsible for the technical and sales promotion of their product line. Erasteel has the most comprehensive product range.

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

Multi-year contracts (typically three to five years) with major aerospace buyers usually specify the market shares to be ordered each year. Shipments are therefore related 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.

Specific 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 level of integration, starting with part design in cooperation with the major buyer's research department, is a key requirement. Aubert & Duval's sales engineers work closely with those departments.

## 6.3.5.6. Alloys Division research and development

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

The Alloys Division ploughs back close to 2% of its sales into R&D. Work is conducted both on process improvement and the development of new alloys and products.

#### ALLOYS DIVISION'S RETURN ON CAPITAL EMPLOYED (ROCE)

ROCE: Restated current operating profit /Capital employed on 31/12 of year N-1"

#### **ROCE ALLOYS**

177	2004"	2005	2006	2007 2008
Alloys	3	7.9	9	10.8
· IEDQ				

### 6.3.5.7. The Alloys Division in 2008

#### **KEY FIGURES**

(IFRS, millions of euros)	200B	2007	2006
Sales	THE END ATOM	1,033	892
Current operating profit		78	62
Net cash flows from operating activates	<b>B0</b>	125	36
Capital employed	700	687	730
Capital expenditure		54	58
Average workforce	4,702	4,684	4,573

#### COMMENTARY

The Alloys Division's sales were up 7% in 2008 on 2007 at €1,102 million. After a first half of 2008 with sustained demand in all the ERAMET Alloys markets, the second half saw a downtum that intensified at the end of the year. In Q4 ERAMET Alloys posted sales that were 7% down on Q4 2007 at €265 million.

Aerospace sector demand was impacted by the two-month strike at Boeing and negative revisions and delays in certain aircraft programmes.

Deliveries of high-speed and tooling steels were affected by an accelerated decline in orders in the last few months of 2008. The Commentry and Söderfors (Sweden) steel plants were shutdown for three weeks at the end of 2008.

In the Energy sector, the gas turbine market gave clear signs of slowing although the nuclear sector continued to expand.

The current operating profit of ERAMET Alloys increased by 10% in 2008 to €86 million, despite a 16% fall in the second half compared to the second half of 2007. The current operating margin was stable in 2008 at 8% of sales.

The operating working capital requirement shrank by €30 million and at the end of 2008 represented 132 days of sales.

Meenwhile, capital expenditure was 54% up on 2007 at €83 million, though this was below the initial target.

Current operating profit - net valuation differences from fair value tests.

<sup>\*\*</sup> The Division's shareholders' equity, plus net debt, plus provisions for major lawsuits, redundancy plans and restructuring and less non-current financial assets.

## 

ERAMET SA, the consolidating parent company, the separate financial statements of which are set out in Chapter 20.2, has two main operational

- → a pure holding role called ERAMET Holding bringing together the various support departments such as General Management, the Administration & Financial Department, the Legal Department, the Human Resources Department, the Purchasing Department and the Communications and Sustainable Development Department; and
- ◆ a section of the Nickel Division (General Management and 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 on behalf of the parent company. The main ones are:

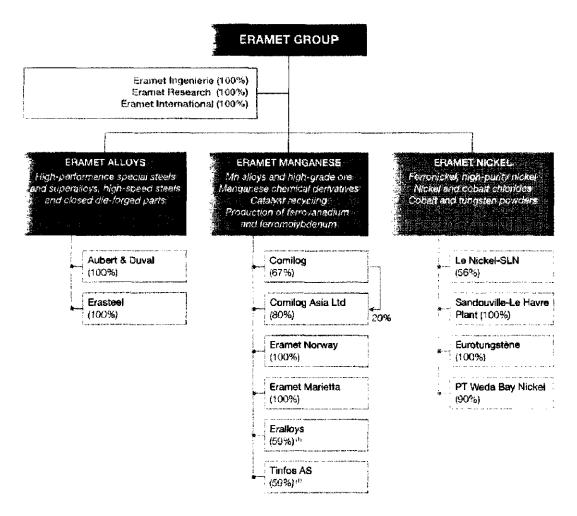
→ ERAMET Research, ERAMET's research centre responsible for research and development;

- → 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 Securities: the Group's foreign exchange management company, which carries out the foreign exchange hedging for the Group as a whole:
- → ERAS: 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).

# Organisational chart

## -> 7.1. GROUP ORGANISATIONAL CHART ON 31 DECEMBER 2008



(1) 55.78% economic interest, percentage control 58.93%.

# The Group's property, plant & equipment



Generally speaking, the Group owns its plants and the equipment therein. Some large items of equipment are financed under finance leases (40,000-ton press in the Alloys Division and furnaces in the Nickel Division) and are restated in the consolidated financial statements.

The breakdown of property, plant and equipment by Division and by unit is set out in the table below; around 80% of the value of these items of property, plant and equipment belong to ten or so industrial sites:

(millions at euros)	Gross amount	96	Net amount	%
Le Nickel-SUN (New Caledonia)	1,448	37,25	696	39.48
Other	103		32	
Nickel Division	1,551	39.90	728	41.29
Comilog S.A. (Gabon)	441	11.35	210	11.91
ERAMET Norway (Norway)	145	3,73	79	4.48
ERAMET Marietta (USA)	101	2.60	37	2.10
GCMC (USA)	95	2.44	56	3.18
Other	575		242	
Mangarese Division	1,387	35.68	624	35 <b>.39</b>
Aubert & Duvat (France)	492	12.68	210	11.91
Airforge (France)	107	2.75	92	5.22
Erasteel Kloster AB (Sweden)	104	2.68	25	1.42
Erasteel Commentry (France)	101	2.60	23	1.30
Other	123		50	
Alloys Division	927	23.85	400	22.69
Holding Company	22		11	

The main industrial sites and major commitments are set out in Chapter 6, "Business Overview".

Leased machinery and equipment (excluding finance leasing) is relatively insignificant (it represents an annual expense of some €40 million). The main leases are as follows:

- Nickel Division: leasing of ships carrying ore to the Doniambo plant and of industrial machinery and equipment (some €20 million);
- → Manganese Division; leasing of railway maintenance equipment and of industrial machinery and equipment;
- → Alloys Division: leases have been put in place as part of ongoing business activities (industrial equipment) and are usually renewed on an annual basis.

# Operating and financial review

09

See Chapter 3.

# Capital resources – market risk

See Chapter 3.

# Research & development, mineral resources and reserves

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Process innovation and the development of new materials are key for the Group to differentiate itself and remain competitive, as well as acting as a growth

# 11.1. RESEARCH & DEVELOPMENT – A DEDICATED ORGANISATION SERVING THE DIVISIONS

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 100 employees, including 85 researchers, engineers and technicians. The operation currently represents €12 million, up 10% on 2007;
- additional divisional staff (around 150 employees) deal with more specific areas, such as products, coordination of industrial tests and, in particular, the critical final industrialisation phases of research projects;
- these significant resources represent around 1% of sales at the Nickel and Manganese Divisions and 2% at the Alloys Division (i.e. a total budget of close to  $\in$ 30 million),

Since 2008, ERAMET has been steadily increasing its research & development efforts in order to meet the needs of its industrial clients, improve its competitiveness, offer new services and identify new development opportunities. Potential environmental impact is a constant factor when developing new processes. The lowering and quality of waste are key factors when selecting a new process.

For ERAMET's mining, metallurgical and chemical businesses, the effectiveness of the research is a key advantage. To meet or even exceed client expectations, the research and development programmes enable the Group to strengthen its positions, including in 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's teams work in close collaboration with those responsible for development at the various units, who in turn are in direct contact with operational teams. This results in considerable efficiency, from determining programmes to introducing innovations, whether involving products, processes themselves or productivity.

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 extensive experience in processes for extracting and purifying various metals and the cutting-edge expertise of the teams at ERAMET Research. This process makes it possible to 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 corroded 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 does not use any fossil fuels, the solid waste produced is inert and storable and the liquid effluent meets the most stringent environmental standards. Work in 2008 was focused on essential fine tuning work regarding the development of the most robust operating conditions for each phase, reducing processing costs and validating peripheral stages. To do so, ERAMET Research ran its hydrometallurgical pilot equipment continuously, with pilot phases continually succeeding pilot equipment modification between phases. In total, the equipment was piloted for 17 weeks, a new record overtaking the one set for the piloting of the Sandouville process

ERAMET Research worked hard in 2008 to increase direct reduction in the ferromanganese smelting furnaces. This is the most effective way of reducing the energy consumption of the process. Notably, it includes the design of a brand new pilot furnace that is tallored to the requirements of the process and five times larger than the existing furnaces.

2008 also saw the launch of the capital expenditure programme to extend the ERAMET Research pilot pyrometallurgy half. In December 2007, ERAMET Research began a new phase in ferronickel production piloting in New Caledonia with a new, larger pilot furnace, the perfect tool for meeting the challenges related to the development of ore chemistry in New Caledonia. This expansion was undertaken to improve safety conditions when operating this larger furnace and in response to the need for a new installation to provide for low-impedance processes in the Manganese Division (direct reduction project), and will be completed in 2009.

ERAMET Research has also taken numerous steps to improve products and processes both for the Alloys (Erasteel high-speed steels) and Manganese Divisions.

ERAMET Research's role as incubator continued to expand in 2008. The pyrometallurgy and hydrometallurgy departments are now large enough to train two engineers in each area for the Group. In addition to normal staff turnover, 58 engineers and technicians have been recruited over the past three years to meet this target.

# 11.2. MINERAL RESOURCES AND RESERVES

# 11.2.1. General remarks

### 11.2.1.1. Location

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

In New Caledonia, Le Nickel-SLN opencast mines 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, Comillog S.A. opencast mines a rich tabular manganese deposit, located under thin caprock and formed by superficial weathering of volcano-sedimentary rocks.

In Indonesia, the Weda Bay Nickel project study is underway.

## 11.2.1.2. Legal claims

Reserves and resources are presented with regard to mining claims to which the Group has long-term rights, mainly perpetual concessions and rights granted for a renewable period of 75 years in New Caledonia, a renewable 75-year concession in Gabon and a renewable 30-year Contract of Work in Indonesia. The carrying amount of reserves is recognised at historical cost for purchased claims and granted concessions are not measured. The balance sheet amount does not necessarily reflect market value.

## 11.2.1.3. Estimates

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.

### BASIS OF ESTIMATES

Estimates are based on sampling that can never be fully representative of the entire deposit. As and when deposits are explored and/or exploited. estimates may move up or down in line with improvements in knowledge of the mass.

# **ESTIMATION METHODOLOGY**

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.

### **MINERAL RESOURCES**

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

A drilling and/or intercept is considered positive if:

- \* it contains at least two metres of ore at a higher grade than the cut-off
- .betalozi ton a'ti 🌑

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

### RECOVERABLE MINERAL RESOURCES

Recoverable resources are mineral resources into which mining recovery and ore dressing were factored on the basis of experience acquired on those sites. They are thus referred to as recoverable resources and the nickel or manganese tonnages given correspond to the quantity of metal present in the ore on leaving the mining units for shipment to metallurgical or chemical processing plants. The mining allowances for dilution and losses, those relating to the one 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 and metal and exchange rates, etc.), commercial constraints (quality, clients, 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 make the recovery of certain deposits or parts of deposits economically viable or otherwise.

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, which provides an indication of the remaining mine life.

### 11.2.1.4. 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 outcraps, trenches, pits, workings and drill holes. The locations are too widely or

inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

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

### **DEFINITIONS OF RESERVES**

An Ore Reserve is the economically mineable part of a Measured and/ or Indicated Mineral Resource. Reserves are estimated on the basis of a preliminary or actual feasibility study (a mining project in the broader sense), which takes account of any technical (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 may be likely 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.

# 11.2.2. Comilog S.A. reserves and resources

## 11.2.2.1. Mineral resources

The table below sets out the figures for the mineral resources of Comilog S.A. on 1 January 2009. The Bangombé plateau, which is currently being mined, has been re-estimated. The estimate includes the data from several hundred additional holes drilled mainly in 2007 and 2008. These figures are based on the following parameters:

- ♦ a 30% Mn cut-off grade for the Bangombé and Okouma plateaus for the measured and indicated mining resources;
- Comilog SAs mining concession also covers other plateaus in the Moanda region, i.e. 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. The reconnaissance work done on Yéyé indicates the existence of ore masses but the quantity and quality of available information are not sufficient to estimate inferred resources;

- → a "Moulili" fine Manganese ore deposit was verified by drilling in 2006. and was assessed for mineral resources, which were included in measured resources:
- \* recorded tonnages and grades characterise the entire ore layer (with no vertical selection):
- tonnages of manganese content are calculated with 9% humidity for rock ore and 12% for fines (figures given in Dry Metric Ton Units: "millions of Mn DmtU" - 1 DmtU Mn = 10 kg of manganese).

### MINERAL RESOURCES IN MANGANESE ROCK ORE AND FINES ON 1 JANUARY 2009 (MILLIONS OF DMTU)

		Me	asured		ic	ndicated			Interred		Total	
Deposit	Kts	% Mn	DMTU	Kts	% Mn	DMTU	Kts	% Mn	OMTU	Kts	% Mn	DMTU
Rock are > 10 m	m					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Bangomba	27,800	45.3	1,260	7.300	44.0	320		_,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		35,100	45.0	1,580
Okouma	18,800	49.0	920	34,600	47.9	1660	The same same same and	,		53,400	48.3	2,580
Bafoula		a manifest de mention de mention	The second second				23,000	34.0	280	23,000	34.0	780
Massengo							12,000	40.0	480	12,000	40.0	480
Total	48,600	46.8	2180	41,500	47.2	1,980	35,000	36,1	1,288	123,500	43.8	5,420
Fines 2-10 mm												
Bangombe	23,850	42.9	1,020	5.750	41.3	240				29,600	42.6	1.260
Okouma	18,800	46.4	870	33,400	44.4	1,480				52,200	45.1	2,350
Moutili	4,800	45.8	220							4,800	45.8	220
Bafoula		- Company of the Company of					15,000	32.4	490	15,000	32.4	490
Massengo						THE PERSON NAME AND ADDRESS OF THE PERSON	7.900	38.1	300	7,900	38.1	300
Total	47,450	44.6	2,116	39,150	43.9	2,530	22,900	344	790	109,500	43.2	4,820

## 11.2.2.2. Recoverable resources and reserves

The table below sets out the figures for recoverable resources and reserves in the Bangombé and Okouma plateaus on 1 January 2009. They include the mine dump comprised of surplus fines not previously marketable.

The "Moulili" deposit, included in recoverable measured resources, underwent test working and processing in 2006 which proved positive.

The figures are based on:

- → 30% manganese (Mn) cut-off grade;
- → similar processing to that currently used for Bangombé plateau ore, i.e. from a run-of-mine production of 10-80 mm rock ore and 1-10 mm
- → commercial specifications amended on 1 January 2009 with the simplification of the product range.

# RECOVERABLE MANGANESE ORE RESERVES AND RESOURCES ON 1 JANUARY 2009 (IN MILLIONS OF DMTU)

		Reser	ves	Recoverable	e resources	Production
Deposit		Proven	Probable	Measured	Indicated	in 2008
Bangombé	> 10 mm	1,220	260	NICE AND		1,480
Okouma	> 10 mm				2,100	2,100
Total rock ore		1,220	260		2,1 <b>09</b>	3 580 50
Bangombé	1-10 mm	600	110			710
Okouma	1-10 mm				1,300	1,300
Moulii	1-10 mm			180		160
Temil	1-10 mm	35				35
Total fines and sinter		635	110	180	1,300	<b>1,226</b> . 53

Given the uncertainties regarding the ore recovery and dressing factors that may apply to inferred mineral resources, no recoverable resources have been calculated for the Bafoula and Massengo ore masses.

The production figures indicated in the above table correspond to ore shipments made in 2008.

# 11.2.3. Le Nickel-SLN's reserves and resources

# 11.2.3.1. Saprolite reserves and resources for pyrometallurgy

## 11.2.3.1.1. MINERAL RESOURCES

The mineral resources set out below have been grouped together by major geomorphologic unit, based on the official classification in effect in New Caledonia.

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.

Most mineral resource estimates are made using 3D block modelling.

Humidities vary from 22% to 38% depending on the mass in question.

These figures were drawn up with:

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

## SAPROLITE MINERAL RESOURCES FOR THE DONIAMBO PYROMETALLURGY PLANT ON 1 JANUARY 2009

	Me	easured		in.	dicated			nferred	
Geomorphologic units	Kts	%Ni	KtNi	Kts	%Ni	KtNi	Kts	%Ni	KtNi
Moneo Nord	-	-	-			•	3,44 <b>6</b>	2.59	89
Monéo Centre	-	_	-	•	•		5,083	2.55	130
Kouaoua	4,335	2.55	111	5,983	2.63	167	6,060	2.61	158
Poro	1,737	2.84	49	-	-	-	2,394	2.63	63
Boakaine	-	-	•	-	-	-	833	2.6B	22
Nakety	27 <b>9</b>	2.44	7	153	3.06	5	363	2.77	10
Dothia	3,783	2.84	107	4,716	2.79	131	1,687	2.74	46
Thio	108	3.08	3	860	3.05	27	710	3.05	22
Ouenghi		-		84	3,40	3	56	2.84	2
Kombwi N'Goye	527	2.84	15	1,391	2.84	39	2,803	2.71	76
Tontouta	2,123	2.76	59	251	2.63	7	1,0 <b>36</b>	2.53	26
Me Adeo	-	<del>-</del>	-	-	-	-	131	3.74	5
Ме Месуа	321	2.89	9	-		•	429	3.17	14
Kopeta - Boulinda	7,741	2.30	178	5,781	2.25	130	22,780	2.14	487
Tchingou	•	-	-	-		-	1,750	3.34	5 <b>8</b>
Kaale	351	2.70	9	1,797	2.68	48	252	2.77	7
Tiébaghi	8,872	2.54	225	28,042	2.31	647	900	2.75	25
Poum	441	2.57	11	11,441	2.65	303	424	2.42	10
Total	30,610	2.56	784	60,516	2.47	1,497	51,137	2.44	1,256

The major differences compared to the figures on 1 January 2008 concern Kouacua, Tiebaghi and Poum, where the drilling pattern reduction work has resulted in a re-evaluation of mineral resources. On the Pourn massif, some resources have been declassified following database review.

The exploration results set out below also correspond to the weathered phase of saprolite with 25% humidity and using the same regional classification. Exploration results represent 489kt Ni. The 100kt Ni increase on 2008 is a result of the intense prospecting work carried out in Tontouta, Pour and Dothio.

## SAPROLITE EXPLORATION RESULTS FOR THE DONIAMBO PYROMETALLURGY PLANT ON 1 JANUARY 2009

	Exploration res	sults at 1 January 2009	
Geomorphologic units	Kts	% Ni	KIN
Monéo Centre	1,500	2.51	37.7
Kouaoua	601	2.74	16.5
Bel Air	1,875	2.63	49.3
Boakaine	132	3.06	4.0
Mare	750	2.72	20.4
Nakety	6 <b>26</b>	2.90	18.2
Dothio	108	2.86	3.1
Thio	1,480	2.84	42.0
Quenghi	148	3.02	4.4
Port Souquet	194	3.05	5.9
Kombwi N'Goye	704	2.93	20.6
Pourina - Qunia	196	3.04	6.0
Oua Tilou	21	5.13	1.1
Domaine lateritique du Sud	296	3.32	9.8
Tontouta	2,091	2.71	55.0
Mont Da	1,841	3.03	55. <b>8</b>
Me Adeo	516	3.07	15.8
Me Maoya	214	2.78	5.9
Kopeto - Boulinda	2,528	2.65	67.0
Kania	184	2.79	5.1
Poum	1,610	2.65	42.7
le Pott	86	2.63	2.3
le Yande	32	2,63	0.8

## 11.2.3.1.2. RECOVERABLE RESOURCES AND RESERVES

The table below sets out the figures for recoverable seprolite reserves and resources for the Doniambo pyrometallurgy plant on 1 January 2009. The data is in thousands of tons of nickel content in shipped ore, calculated at constant humidity for ongoing or estimated production. These figures come from the above-mentioned mineral resources and factor in the following:

\* conventional treatment of run-of-mine similar to current practices on Le Nickel-SLN and/or subcontracted sites: approximately 80 mm screening with or without recovery of part of coarser fractions depending on mineralisation;

- → mineralurgical processing in Népoui Kopèto (în existence) and Tiébaghi (in the process of opening);
- mining projects in the case of reserves. Saprolite reserves and recoverable resources for the Doniambo pyrometallurgy plant on 1 January 2009 (in thousands of tons of nickel).

Resources and reserves at 1 Januar	esources and reserves at 1 January 2009								
Recoverable resources	Mts	% Ni	KUNI	Reserves	Mts	%   横	KtNi		
Measured	23.1	2.65	613	Proven	17.5	2.67	469		
Indicated	39.9	2.65	1058	Probable	20.0	2.70	540		
Interred	32.0	2.60	832	-					

Recoverable resources and ore reserves intended for mineralurgical processing are estimated as washery concentrate.

The production given above relates to nickel tonnages (stated as thousands of tons of nicket: Kt Ni) contained in the ore transported to the various ports (wharves or mechanical loading), it therefore includes the low tonnages of nickel relating to exported saprolitic ones (currently approximately 2 Kt Ni per year).

Reserves on 1 January 2009 were estimated to be around 1009kt Ni. Significant efforts on projects made it possible to convert resources into reserves at Tontouta and Kouaoua, and to a lesser extent at Kaala, Poya and Dothio. The reserves are included in recoverable resources.

The indicated and measured recoverable resources are estimated to be 1,671kt Ni. The proportion of measured resources is lower than in 2008 as a result of changes to the classification criteria.

Inferred recoverable resources are estimated to be 832kt Ni. The increase on 1 January 2008 is attributable to the result of prospecting work carried out in 2008 and the inclusion of masses following additional studies primerity in Kouaoua, Poum and Kaala.

The recovery rate of saprolite recoverable resources for pyrometallurgy was 146%.

An external audit was carried out in 2008 by Melabar GeoConsulting, which certified that the resources and reserves estimated by Le Nickel-SLN have been evaluated satisfactorily in accordance with the recommendations of the JORC code.

## 11.2.3.2. Mineral resources for hydrometallurgy

in July 2008, Le Nickel-SEN submitted two research permit applications for Prony Quest and Emouche. These permits cover the laterites located in the southern part of Grand Terre, with inferred and indicated mineral resources currently estimated at 6,000kt Ni, which Le Nickel-SLN plans to recover using hydrometallurgical technology. In December 2008, the Southern Province approved the granting of these permits to Le Nickel-SLN when it signed the development agreement.

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

At the cut-off grade of 1.6% nickel and outside centres with mineralurgical processing, 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.

# 11.2.4. Resources of Pt Weda Bay Nickel

## 11.2.4.1. Mineral resources

The data on mineral resources relates to the tonnages. Ni content and thousands of tons of nickel contained in the ore estimated to be in the 1% Ni strata in the laterites and saprolites, without applying any transformation or enrichment factors.

The average dry densities of the laterites are around 0.8-0.9 in the masses in question, and nearly 1 for the saprolites. The Bukit Limber Barat mass. which has a higher proportion of rock ore, has an average dry density of 1.26 in the saprolites. These figures are based on measurements taken in 1999-2001 and 2008 and which are ongoing in 2009.

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

The resources are estimated using 3D block modelling. Measured and indicated resources are estimated by ordinary kriging, while interred resources are estimated either by inverse square distance or by ordinary kriging when variogram quality permits it.

Tenzing PTY LTD, an external consultant specialising in geostatistics, made an estimate of local nickel resources in the Bukit Limber Barat deposit. The results obtained have made it possible to draw up tonnage-content graphs and to visualise the selectivity in the deposit. They have also made it possible to confirm, at the cut-off grade of 1% Ni, the results obtained internally using ordinary kriging and the measure the smoothing effect of this latter on higher cut-off grades.

Mineral resources are grouped together by prospect by identifying latente and saprolite products. They are calculated at the cut-off grade of 1% Ni in the stratum modelled at 1% Ni. The figures set out below are the results of the study undertaken by Tenzing PTY LTD on the Bukit Limber Barat mass and the studies carried out by the Weda Bay Nickel team for the other masses.

## SAPROLITE AND LATERITE MINERAL RESOURCES ON 1 JANUARY 2009

		Ме	easurec	i			In	dicated	i			1	nferred		
Prospects	MTs	%Ni	KtNi	% Co	KTCo	MTs	%Ni	KtNi	% Co	KTCo	MTs	%Ni	KtNi	% Co	KTCo
Lateriles							alterial Communication								
Bukit Limber Barat (Santa Monica West)	B.91	1.30	258	0.19	37.7	4.1	1.32	54	0.17	6.9					
Bukit Limber Timur (Santa Monica East)	6.6	1.23	81	0.18	10.5	8.8	1.21	106	0.18	15.8					
Coastal Deposits						7.8	1.13	88	0.19	14.B					
Big Kahuna											4.2	1.33	55	0.22	9,2
Ake Jira (Jira River)	PRINCIPALI					7.2	1.14	82	0.20	14.4					
Boki Mekot											7.2	1.23	89	0.12	8.3
Pintu						9.2	1.23	113	0.18	16.5	5.0	1.18	59	0.22	11.0
Jiguru											1.1	1.23	14	0.16	1.8
Tofu Blowen			7.0411-								9.1	1.26	115	0.15	13,7
Total Laterling	26.4	1.28	331	0.18	44.2	37.0	1.20	442	0.18	69.4	26.6	1,25	381	0.17	43.9
Saprolites															
Bukit Limber Barat (Santa Monica West)	51.1	1.53	782	0.03	13.3	10.5	1.55	163	0.03	3.2					
Bukit Limber Timur (Santa Monica East)	11.1	1.46	162	0.03	3.3	42.2	1.41	595	0.03	12.7					- Allenda
Coastal Deposits		**				28.7	1.59	456	0.04	11.5					
Big Kahuna											9.4	1.81	170	0.05	4.7
Ake Jira (Jira River)	Hirth Merwilliands				HEALTH PROPERTY	14.9	1.64	244	0.04	6.0					
Boki Mekat											18.7	1.63	305	0.02	3.7
Pintu						13.5	1.53	206	0.03	4.0	15.9	1.59	253	0.03	4.8
Jigaru		-,									4.4	1.25	55	0.03	1.3
Tofu Blowen										The second series	34,4	1.70	585	0.03	10.3
Total Saprolites	62.2	1.52	943	0.03	16.6	109.7	1.52	1,664	0.03	37.3	82. <b>8</b>	1.65	1,368	0.03	24.9
Total Control	88.6	1.45	1,28%	0.02	64	144.7	1.44	2,108	0.07	100%	1084	1.58	1,600	0.00	. 6 <b>0</b>

At a constant cut-off grade, the measured, indicated and inferred resources were one million tons higher than the estimates made at the time of acquisition in May 2006 (5.1 Mt Ni compared to 4.1 Mt Ni).

An internal audit was carried out in November 2008 on the stages used to estimate mineral resources and an external audit, performed by Melabar GeoConsulting, is scheduled for March 2009, which will also be used to check the criteria applied to the transformation of resources into reserves.

# 11.2.4.2. Reserves

The figures below relate to the saprolite and limonite reserves intended for hydrometallurgical processing. They are calculated on the basis of the mineral resources described in the paragraph above. The masses grouped together as "coastal deposits" and the Bukit Limber Barat and Bukit Limber Timur deposits (Santa Monica West and East) were covered by mining projects in pre-feasibility study phase.

## SAPROLITE AND LATERITE RESERVES ON 1 JANUARY 2009

		ρ	roven			Probable				
Mass	MTs	% NI	KtNI	% Co	KTCo	MTs	% Ni	KUNI	% Co	KTCo
Laterites										
Bukit Limber Barat (Santa Monica West)	16.4	1.30	214.1	0.17	27.5	2.0	1.33	26.3	0.15	3.0
Bukit Limber Timur (Santa Monica East)	5.2	1.25	64.2	0.15	7.9	5.4	1.24	67.1	C.1 B	9.9
Coastal Deposits	_					4.8	1.15	55.5	0.19	9.2
Total Laboritage	21.6	1.29	278.3	0.10	3 <b>5.4</b>	12.2	1.22	148.0	0.18	22.0
Saprolites	N)-th-u-annual land									
Bukit Limber Barat (Santa Monica West)	29.0	1.63	473.B	0.03	9.5	4.3	1.62	70.1	0.03	1.4
Bukit Limber Timur (Santa Monica East)	6.6	1.53	100.7	0.04	2.3	16.0	1,49	237.9	0.04	5.7
Coastal Deposits						17.9	1.66	297.0	0.04	6.7
Total Saprolites	3 <b>5.6</b>	1.61	574.5	0.03	11.8	38.2	1.58	605,1	0.04	13.8
Total	57.2	1.40	852.0	6.04	47.3	50.4°	1.49	784.6	0.03	35.0

The data on reserves corresponds to the transformation of resources in the masses covered by a mining project and the application of mining factors based on the following criteria:

- \* reserves are calculated in mining projects with a cut-off grade of 1% Ni in the earthy saprolites and laterites and 1.4% Ni in rocky saprolites characterised by high MgO content and deemed more suitable for selective mining;
- → 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 in place. 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°;

- minimum are thickness was also used as a selection criterion for mineable zones. At this stage of the study, this varies from 3 m and 12 m according to the specific climatic, geomorphologic or environmental conditions at each mass.

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

# Trend information

See Chapter 3.

# Profit forecasts or estimates

Not applicable.

# Administrative, Management and Supervisory bodies

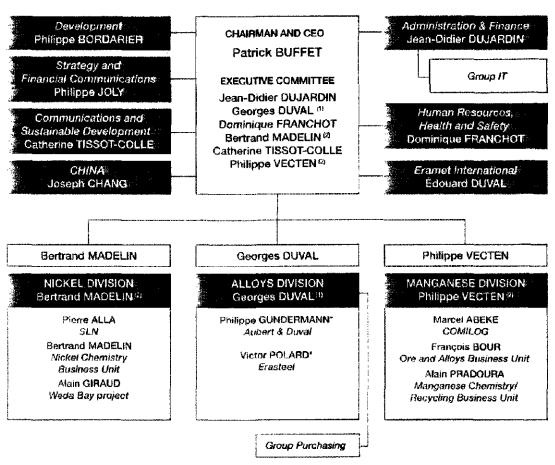
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# 1 4.1. COMPANY AND GROUP MANAGEMENT AND SUPERVISORY

# 14.1.1. General Management

## **ORGANISATIONAL CHART ON 1 JANUARY 2009**



(1) Vice Chairman, Deputy CEO. (2) Deputy CEO.

As from 16 February 2009.

The General Management is presented in Chapter 16.

# 14.1.2. Board of Directors

The Board of Directors is presented in Chapter 16.



# 14.2. PERSONAL SITUATION OF EXECUTIVES

# Other positions held within and outside the Group over the past five financial years

## DIRECTORS AND GENERAL MANAGERS OF THE COMPANY ON 1 JANUARY 2009

Surname, forename or company name or member Main position Family relationship Experience	Date of first appointment	Last renewal date and expiry date of term of office	Other positions
BUFFET Patrick Director, Chairman and CEO since 25 April 2007 Born 19 October 1953 Busines address: Four Maine Montpamasse - 33 avenue du Maine - 75015 Paris - France Mr BUFFET has an engineering degree from Ecole des Mines. He has been General Manager at Suez until 2007.	Director: Co-opted by the Board on 7 March 2007 replacing François Henrot, who resigned Chairmen and CEO: Board Meeting of 25 April 2007	General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In Group companies Chairman & CEO, Le Nickel-SLN Director of Comilog S.A. In non- Group Companies Member of Supervisory Board of: Bureau Veritas; Arcole Industries (unlisted) Director of Barimmo (Belgium) Posts held and left in previous five years Member of Supervisory Board of: AREVA; Astorg-Partners Director of: CDC kis Majority owned Suez group subsidiaries: Suez Energy Services;
	O Paragrama and a property of the angle of the contract of the	an griff or special of and state do to the control to special and the control to the control to the control to	Tractebel (Belgium), Electrabel (Belgium), Société Générale de Belgique (Belgium), Fluxys (Belgium)
AUTEBERT Rémy Director Sorm 20 July 1953 Business address: AREVA Japan Co. Ltd. Jrban Toranomon, Bld. 5-F I-16-4, Toranomon Minato-Ku Tokyo 105-0001 Japan Mr AUTEBERT has held various positions for more than 30 years in the AREVA Group.	General Shareholdors' Meeting of 21 May 2003	Renewal: General Shareholders' meeting of 26 April 2007 for a four-year term Expiry date: General Shareholders' Meeting caffed to approve the 2010 financial statements	In non-Group companies Chairman of AREVA Japan Member of the nuclear executive committee of AREVA Posts held and left in previous five years Directors of Mines – Chemicals – Beneficiation at Cogema (as from June 2004) May 2004 May 2004 May 2004 Chairman and CEO CFMM SA Chairman of Management Board: Eurodif (until 9 December 2005) Chairman: COMUF (Gabon); Urangeselfschaft GmbH (Germany); Somair (Niger); Cogema Australia Manager: SMJ (until 11 February 2005) Vice-Chairman of the Board: Cominak (Niger) Member of the Supervisory Board: Eurodif Mines of the Supervisory Board: Eurodif March 2006); Katco (Kazakhatan); Cogema Resources Canada; SGN; CMA (Côte d'Ivoire) (until 1 January 2005); COMIN (USA); PMC (USA); UG Canada Ltd. (until 1 February 2005); MUL (Canada); Cogema Australia Permanent representative of: Cogema on the boards of: CFM SA; Comhurex SA; Soficif; Somair (Niger); CFM SA on Board of SMJ (until 11 February 2005) Member of the Board of Cogema Deutschland

Surname, forename or company name or member Main position Family relationship Experienca	Date of first appointment	Last renewal date and expiry date of term of office	Other positions
DUVAL Georges Director Vice-Chairman Deputy CEO Born 3 May 1946 Busines address: Tour Maine Montpairrasse - 33 avenue du Maine - 75015 Paris - France Brother of Edouard Duval, cousin of Cyrille and Patrick Duval Mr DUVAL is Vice-Chairman to the Board and Deputy CEO of ERAMET, Manager of SORAME and General Manager of CEIR.	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	Renewal: General Shareholders' meeting of 21 May 2003 and General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In Group companies Chairman: Aubert & Duvel (SAS); S.I.M.A. (SAS); ERAMET Alloys; Erasteel (SAS); UKAD (SAS) In non-Group companies Manager of SORAME General Manager of CEIR
DUVAL Edouard Director Born 2 December 1944 Busines address: Tour Maine Montpatnasse - 33 avenue du Maine - 75015 Pans - France Brother of Georges Duval, cousin of Cyrille and Patrick Duval Mr DUVAL is Chairman of ERAMET International and Chairman of the Management Board of SORAME and General Manager of CEIR.	General Shareholders' Meeting of 21 July 1999	Renewal: General Shareholders' meeting of 21 May 2003 and General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In Group companies  Director of Le Nickel-SLN  Chairman of ERAMET International (SAS)  Deputy CEO of S.I.M.A. (SAS)  In non-Group companies  Chairman of the Management Board  of SORAME  General Manager of CEIR
DUVAL Patrick Director Born 15 May 1941 Busines address: c/o ERAMET - Tour Maine Montparnasse - 33 avenue du Maine - 25015 Paris - France Brother of Cynlle Duval, cousin of Georges and Edouard Duval Mr DUVAL is Chairman of CEIR and General Manager of SORAME.	General Shareholders' Meeting of 21 July 1999	Renewal: General Shareholdera' meeting of 21 May 2003 and General Shareholdera' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholdera' Meeting called to approve the 2010 financial statements	In Group companies  • CEO of S.I.M.A.  In non-Group companies  • Chairman of CEIR  • Marager of SORAME  • Director of Cartonneries dondardennes SA  • Manager of SCI-Compagnie Frantoval, SCI Les Bois de  Batonceau, SCI de la Plaine, SCEA Les Terres d'Orphin
DUVAL Cyritle Director Born 18 July 1948 Busines address: Tour Maine Montparnasse - 33 avenue du Maine - 75015 Pans - France Brother of Patrick Duval, cousin of Georges and Edouard Duval Mr DUVAL is Secretary General for the Alloys Division and General Manager of SORAME and CEIR.	General Shareholders' Meeting of 21 July 1999	Renewal: Ganeral Shareholders' meeting of 21 May 2003 and General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In Group companies Deputy CEO of S.I.M.A. Permanent representative of S.I.M.A. on the Board of Directors of Metal Securities Director of Comilog Chairman of Forges de Montplaiair Manager of SCI Grande Plaine In non-Group companies General Mananer of CEIR and SORAME

company name or member Main position Family relationship Experience	Date of first appointment	Last renewal date and expiry date of term of office	Other positions
GIRAUD Pierre-Noëi Director Born 8 March 1949 Business address: CERNA – 60 boulevard Saint Michel – 75272 Paris Cedex 06 Mr GIRAUD is Professor in economics at École des Mines de Paris where he founded the Centre de Recherche en Économie industrielle.	General Shareholders' Meeting of 21 May 2003	General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In non-Group companies • Director of AREVA N.C. • Locturer at the École des Mines de Paris • Member of the French Technology Academy
LEHMANN Gilbert Director Vice Chairman Bom 28 September 1945 Business address: AREVA 33, rue Lafayette 75009 Paris Mr LEHMANN has held various positions for more than 25 years in the AREVA Group.	Ca-opted by the Board Meeting of 13 December 2008	Co-opting confirmed: General Shareholders' meeting of 27 April 2006 called to approve the 2005 financial statements General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In non-Group companies  In non-Group companies  Director and Chairman of the Board of Directors of SEPI (Switzerland)  Director and Vice Chairman of the Board of Directors of ST Microelectronics N.V. (Netherlands);  Director and member of Audit Committee of Assystem SA Posts held and left in previous five years in France:  Director: Framatome ANP; Sofinel; Framatome Connectors International (PCI); Compagnie Technique d'Assurances (CTA); Framapare; CNS; Intercontrole  Chairman of the Board of Directors of Compagnie d'Études et de Recherche pour l'Émergie (CERE).  Abroad: (USA)  Director of Framatome Technologies; PC USA; Canberra
MAPOU Louis Director Born 14 November 1958 Business address: STCP/ Immeuble Carcopino 3000 98845 Noumea cedex Mr MAPOU is the Chairman of STCPI.	Co-opted by the Board Meeting of 29 March 2001 (Confirmation by General Shareholders' Meeting of 30 May 2001)	Renewal: General Shareholders' meeting of 21 May 2003 and General Shareholders' meeting of 25 April 2007 for a four-year term Expiry date: General Shareholders' Meeting called to approve the 2010 financial statements	In Group companies  • Director of Le Nickel-SLN In non-Group companies  • Chairman STCPI (New Caledonia)  • CEO of Sofinor (New Caledonia)
MARTIN Herold Director Born 8 April 1954 Business address: President of the Government of New Caledonia 8 route des artifices B.P. M2 98849 Nouméa cedex Mr MARTIN is a company manager. He has been President of the Government of New Caledonai since 21 August 2007 and Mayor of Paita since 1995.	Appointed by General Shareholders' Meeting of 11 May 2005	Expiry: General Shareholders' Meeting called to approve the 2008 financial statements	In non-Group companies (in New Caledonie) • President of the Government of New Caledonie (Since 21 August 2007) • Member of Advisory Committee on Mining; of the Board of Mines; of Committee on "Nickel an dits environment", of the Advisory Committee on the Environment; of the Committee for Foreign Trade; of the Local Finance Committee • Mayor of Parts since 1995 Posts held and left in previous five years • President of the Congress of New Caledonia (from May 2004 until August 2007) • Member of Southern Province Parliament • Member of Advisory Committee on Research • Chairman of Advisory Committee on Research

# Administrative, Management and Supervisory bodies PERSONAL STRATEGY OF EXECUTIVES

company name or member Main position Family relationship Experience	Date of first appointment	Last renewal date and expiry date of term of office	Other positions
ROSSIGNOL Jacques	General Shareholders'	Renewal: General	In non-Group companies
Director	Meeting	Shareholders' meeting	<ul> <li>Former CEO of SNECMA and Arianespace</li> </ul>
Born 6 February 1940	of 21 July 1999	of 21 May 2003 and General	Posts held and left in previous five years
Business address: c/o ERAMET		Shareholders' meeting	• CEO of CFMI
Tour Maine Montparnasse		of 25 April 2007	<ul> <li>Director of Imaprocess</li> </ul>
33, avenue du Maine		for a four-year term	
75015 Paris - France		Expiry date:	
Mr ROSSIGNOL is former		General Shareholders'	
CEO of SNECMA		Meeting called to approve the	
and Arianespace.	and the contract of the contra	2010 financial statements	A CONTRACTOR OF THE CONTRACTOR
SOMNOLET Michel	General Shareholderal	Renewal: General	in non-Group companies
Director	Meeting	Shareholders' meeting	<ul> <li>Former Director of Sanoti-Synthelabor</li> </ul>
Born 6 February 1940	of 21 May 2003	of 21 May 21 2003	<ul> <li>Former Director, Deputy Chairman &amp; CFO</li> </ul>
Business address; c/o ERAMET		and General	of L'Oréal
Tour Maine Montparnasse		Shareholders' meeting	Director of:
33, avenue du Maine		of 25 April 2007	L'Oréal USA; L'Oréal Maroc
75015 Paris - France		for a four-year term	<ul> <li>Perinvest Dividend Equity Fund</li> </ul>
Mr SOMNOLET is former		Expiry date:	
Director, Deputy Chairman		General Shereholders*	
and CFO of L'OREAL.		Meeting called to approve the 2010 financial statements	
AREVA	Co-opted by Board Meeting	Co-opting confirmed: General	In non-Group companies
Director	of 27 March 2002	Shareholders' meeting	<ul> <li>Member of the Board of the École Nationale Supérieure de</li> </ul>
Represented by	_	of 23 May 2002	Géologie in Nancy
Frederic TONA		General Shareholders'	<ul> <li>Chairman of SOMAIR (Niger)</li> </ul>
Permanent representative		meeting of 25 April 2007	<ul> <li>Director of Osead (SAS), OMM (Morocco), CMT (Morocco).</li> </ul>
of AREVA on the Board		for a four-year term	COMINAK (Niger) and Fondation d'Entreprise AREVA
of Directors		Expiry date:	Posts held and left in previous five years
Born 27 August 1947		General Shareholders'	(All posts ended at the latest December 2004)
Business address:		Meeting called to approve the	<ul> <li>Director of Mines and Chemistry</li> </ul>
AREVA		2010 financial statements	at Cogema, then Director of Mines, Chemistry & Seneficiation,
For the attention			Cogema, then special assistant to the Chairman of Cogema/
of Frederic Tona			AREVA (until 31 January, 2005)
33, rue Lafayette			<ul> <li>Chairman of Gomurhex, CFMM and CFM</li> </ul>
75009 Paris			<ul> <li>Vice-Chairman, Cominak (Niger)</li> </ul>
Mr TONA has held various			<ul> <li>Director of SGN, Eurodif SA, Eurodif Pro, Sofidif, Urangesellehaft</li> </ul>
positions for more than 30 years			(Germany), COGEMA Australia, COGEMA Resources Canada,
in the AREVA Group.			Pathfinder Mines Corp (USA), COGEMA Inc. (USA) and Uramin
			inc. (BVI)
			<ul> <li>Permanent representative of CFMM on the boards of Cominor SA and SMJ</li> </ul>
TREUILLE Antoine	General Shareholders'	Renewal: General	In non-Group companies
Director	Meeting	Shareholders' meeting	<ul> <li>Chairman of the French American Foundation (USA)</li> </ul>
Born 7 October 1948	of 21 July 1999	of 21 May 2003	<ul> <li>Executive Managing Director of: Altamont Capital Partners, LLC</li> </ul>
Business address:	,	and General Shareholders'	(USA); Mercantile Capital Partners LLC (USA)
French American Foundation		meeting of 25 April 2007	<ul> <li>Chairman of Charter Pacific Corporation (USA)</li> </ul>
28 West 44" Street		for a four-year term	<ul> <li>Director of: BiC SA (France); Harns Interactive, Inc. (USA),</li> </ul>
Surte 1420		Expiry date:	Partex Corporation (USA), Harlem Furniture, LLC (USA), Imperial
New York, NY 10036		General Shareholders!	Headwear, Inc. (USA)
Mr TREUILLE is Executive		Meeting called to approve the	Posts held and left in previous five years
Managing Director of Altamont		2010 financial statements	Skip's Clothing, Inc. (up to May 2007)
Capital Partners LLC.			- · · ·

Surname, forename or company name or member Main position Family relationship Experience	Date of first appointment	Last renewal date and expiry date of term of office	Other positions
MADELIN Bertrand Deputy CEO (not a Director) Born 13 September 1954 Busines address: Tour Maine Montparnasse - 33 avenue du Maine - 75015 Paris - France Mr MADELIN is Deputy CEO.	Appointed by Board Meeting of 12 December 2007		In Group companies  Director of Le Nickel-SLN Director of PT Wada Bay Nickel Chairman of Eurotungstène Posts held and left in previous five years Director: ERAMET Narway, ERAMET Marietta, Cornilog France, Guarua Comilog, Guilin Comilog, Comilog Asia, Comilog Far East Development Chairman Comilog stalia
VECTEN Philippe Deputy CEO (not a Director) Bom 22 April 1949 Busines address: Four Maine Montparnasse - 33 avenue du Maine - 75015 Paris - France M. VECTEN is Deputy CEO.	Appointed by Board Meeting of 23 May 2007		In Group companies  * Director of Comitog S.A.; Comitog US; Societé Le Nickel-SLN, SETRAG, Tinfos AS, Tinfos International  * Chairman of ECM and Eralloys Holding  * Manager of Comitog Holding  Posts held and ended in five previous years  * Deputy CEO of Le Nickel – SLN

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

# → 14.3. INTERESTS HELD BY CORPORATE OFFICERS

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

# 14.3.1. Indirect interests

Patrick Duvel is Chairman & CEO of CEIR,
Édouard Duvel is Chairman of the Management Board of SORAME,
Georges, Édouard, Cyrille and Patrick Duvel are shareholders of SORAME and CEIR.

# 14.3.2. Direct interests on 31 December 2008

	Shares	Voting rights
Patrick Buffet	10	10
Rémy Autebert	100	200
Cyrille Duval	307	513
Édouard Duval	265	429
Georges Duval	601	602
Patrick Duyal	102	152
Pierre-Noël Giraud	1	1
Gilbert Lehmann	100	100
Louis Mapou	1	1
Harold Martin	1	1
Jacques Rossignol	10	20
Michel Somnolet	100	200
Antoine Treuille	160	320
AREVA	6,757,277	13,514,554
Frédéric Tona	100	101
Bertrand Madelin	2250	2250
Philippe Vecten	150	150

No Director has a direct 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 of EC Regulation No. 809/2004 or has entered into a service agreement with ERAMET.

# 14.3.3. Loans and guarantees granted to or put in place for members of administrative, management or supervisory bodies

None.

# Total remuneration and benefits of corporate officers and Executive Committee

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# → 15.1. DIRECTORS' FEES

The amount of directors' fees paid to ERAMET's corporate officers in respect of 2008 amounted to €375,100 (€380,000 in 2007). The total sum allocated to the Board of Directors was set at €550,000 at the General Shareholders' Meeting of 18 April 2008 (resolution Six), to be distributed freely amongst the Directors by the Board.

The directors' fees for 2008 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, €1,525 in travel expenses is paid for each Director living abroad in respect of each Board/Committee Meeting.

The directors' fees paid to ERAMET's corporate officers by other companies in the Group amounted to an overall total of €40,340 in 2008 (€11,106 in 2007).

The directors' fees were distributed as follows (in euros):

	ERAMET	Other companies	Total 2008	Total 2007	Total 2006
Remy AUTEBERT	16,525		18,525	21,575	8,623
Patrick BUFFET <sup>111</sup>	21,500	23,080	44,690	18,223	
Jacques BACARDATS	AV . / / / / / / / / / / / / / / / / / /		- 基层的选辑	9,723	15,188
Cyritte DUVAL <sup>(1)</sup>	19,000	13,600	32,600	19,000	7,623
Édouard DUVAL ***	19,000	1,830	20,890	20,830	7,6 <b>23</b>
Georges DUVAL (1)	19,000		19,000	19,000	7,623
Patrick DUVAL	18,000		18,000	18,000	7,623
Pierre-Noël GIRAUD	17,000		17,009	14,000	7,623
François HENROT				2,000	7,623
Gilbert LEHMANN	31,000		31,000	31,000	9,623
Louis MAPOU	20,575	1,830	22,405	22,405	12,503
Harold MARTIN	18,050		18,080	12,000	9,148
Jacques ROSSIGNOL	35,000		35,000	33,000	10,823
Michel SOMNOLET	62,250		69,250	58,725	22,773
Frédéric TONA	35,000		38,000	33,000	10,623
Antoine TREUILLE	43,200		43,200	38,625	16,723
Total	375,100	40,346	415,440	371,10	161,566

<sup>(1)</sup> Other remuneration; see Chapter 15.2 below.

# 15.2. TOTAL REMUNERATION AND BENEFITS OF CORPORATE OFFICERS AND/OR MEMBERS OF THE EXECUTIVE COMMITTEE

The table below shows the individual breakdown of the gross amount of compensation allocated in 2008 to corporate officers and members of the Group Executive Committee ("Comex"):

# SUMMARY TABLE OF THE COMPENSATION, OPTIONS AND SHARES ACCRUING TO EACH CORPORATE OFFICER AND/ OR COMEX MEMBERS

	Compensation due in respect of the financial year (as detailed in the following table)		Valuation of the bonus shares/ stock options awarded during the financial year		Total	Total
(in earns)	2008	2007	2008	2007	2008	2007
Patrick Buffet (1)(1)	1,273,116	752,066		1,551,900	1,278,116	2,303,966
Chairman and CEO			Topics and the second section of the second		i Walion Pality	
Georges Duval <sup>(1)</sup>	3 <b>60,913</b>	298,584	The second of th	93,114	360,913	391, <b>698</b>
Deputy CEO			The state of the s			
Bartrand Madelin (1909	244,991	The state of the s			244,991	O
Deputy CEO						
Philippe Vecton (1)(4)	397,124	271,428		155,190	397,124	426,618
Deputy CEO		- Arrangi de and Innersal Arrangi Arrangi			a de la	
Edouard Duval	283,712	248,105		31,039	203,712	279,143
Chairman of ERAMET international					144204	
Cyrille Duval	237,879	188,480		31,038	297,879	219,518
General Secretary - Alloys division						
Total Corporate officers	2,797,730	1,758,863		1,862,200	2,797,736	3,620,943
Dominique Franchot <sup>(1)</sup>	391,029	363,202		217,266	391,029	580,468
Human Resources Manager					1.750	
Jean-Didier Dujardin (1)	35 <b>2,630</b>	261,740		217,266	352,630	479,006
Chief Financial Officer					72-11 A	
Catherine Tissot-Colle <sup>(1)</sup>	195,099	163,147		124,152	198,009	287,299
Director of Communication and Sustainable Developme	ent					
Total Corporate officers and Comex members	3,756,468	2,540,752		2,420,966	3,756,460	4,967,716

<sup>(1)</sup> Member of the Comex.

<sup>(2)</sup> As Irom 25 April 2007.

<sup>(3)</sup> Member of the Comer and corporate officer as from 1 January 2008.

<sup>(4)</sup> Corporate officer as from 23 May 2007 and member of the Comex since 1 January 2007.

# SUMMARY TABLE OF THE COMPENSATION OF EACH CORPORATE OFFICER AND/OR MEMBER OF COMEX

400	Amounts for financial yea	г 2008	Amounts for financial yes	ar 2007
	Due	Pald (8	Cua	Paid
Patrick Buffet				
Chairman & CEO		- AWINE		
Fixed compensation	515,600	615,600	406,922	406,922
Variable compensation	604,636	326,174	325,538	
Directors' fees	44,5 <b>60</b>	18,223	18,223	
Fringe benefita (III	8,300	8,300	1,383	1,383
ToldFig. 1 - YV A St. 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2	1,273,118	948.297	752,080	400,300
Georges Duvel				
Deputy CEO				
Fixed compensation	254,917	264,917	234,107	234,107
Variable compensation	84,407	42,872	42,672	43,129
Directors' lees	19,000	19,000	19,000	7,623
Fringe benefits <sup>(1)</sup>	2,569	2,589	2,605	2,605
Total	360.913	31937	298.686	297.444
Berkand Madelin		,	M =	
Deputy CEO	.,,,,		en indicata elle ser impresenta anni ini ammini anticolori.	
Fixed compensation	190,000	190,000	op med typholometric in a consister is more to a group promptly debugging magnetic database and or	
Variable compensation	49.63 <b>8</b>	17,068		-
Directors' fees	1,830	Q.		
Fringe benefits (1)	3,523	3,523		
Total	244.091	210. <b>80</b> 15		0
Philippe Vector				
Deputy CEO				
Fixed compensation	252,300	252,300	210,260	210,260
Variable compensation	112,274	45,756	43,003	0
Directors' fees	2B,006	9,020	9,020	0
Frings benefits <sup>(1)</sup>	4,544	4,544	9,145	9,145
Totals (10) All All All All All All All All All Al	397.124	311.833	271.420	219.40
Édouard Duval				
Chairman of ERAMET International				
Fixed compensation	253,567	253, <b>56</b> 7	219,775	219,775
Variable compensation	9,315	7,763	7,500	7,763
Directors' legs	20,830	20,830	20,830	7,623
Fringe benefits <sup>(1)</sup>	0	0	0	0
	283.712	202-160	246.10	235,161
Cyrille Duvei				
General Secretary - Alloys division		the little describes that the special property controlled the	The state of the s	
Fixed compensation	176,880	189,748	166,905	168,905
Variable compensation	25,824	0	0	Ō
Directors fees	32,600	19,000	19,000	7,623
Fringe benefits (1)	2,575	2,575	2,575	2,575
Total	237.879	211.323	188,490	177.108
Sub-total Commission officers	2797.738	23030	1738.005	137/3
Dominique Franchot			A STATE OF THE STA	April 2 To John S. Con.
Human Resources Manager				# # * * * * * * * * * * * * * * * * * *
Fixed compensation	275,139	275,139	259,141	259,141
Variable compensation	73,820	66,079	66,079	37 465
Exceptionnal Bonus	21,033	21,033	33,287	33,287
Directors' tees	15,430	1,372	1,372	0
Fruinge benefits (1)	5,607	5,607	3,328	3,323
Total	391,029	349,230	383,202	333.216
Jean-Didler Dujardin				
Chief Financial Officer				
Fixed compensation	270,000	270,000	222,317	222,317
Yanable compensation	55,120	30,347	30,347	29,743
Directors' fees	22,100	3,615	5,615	7,565
Fruige benefits (1)	5,410	5,410	3,461	3,461
Total - 32 - 3.4 -	352,630€	309.372	261,740	263.0m
Catherine Tissot-Colle			and the state of t	uran managarin da m
Director of Communication and Sustainable Developme	nt			
Fixed compensation	150,000	150,000	136,330	136,330
Variable compensation	38,272	11,797	11,797	3,303
Exceptionnal Sonus	3,888	3,886	12,888	12,688
Directors' fees	0	0,000	12,000	.2,509
Fruige benefits <sup>[1]</sup>	2,939	2,939	2,132	2,132
	195,099	168,624	163,147	154,655
Total 1887 Control of the Control of	5 - 2 STUDE	Section and property of the con-		

<sup>(1)</sup> This relates to the provision of a company car.

<sup>(2)</sup> Any differences between the amount paid in 2008 and that shown as owing in respect of the 2007 linancial year stem from the final calculation of variable remoneration based on actual results.

The top ten earners at ERAMET in respect of 2008 received total remuneration of €4,071,232, as certified by the Statutory Auditors.

Information on the directors' fees received by the other corporate officers is provided in Chapter 15.1 (directors' fees). Information on options or bonus share grants to corporate officers and employees is provided in Chapter 15.6. No options or bonus shares were granted to corporate

officers or employees during the financial year. Information on the supplementary pension plan and indemnities or benefits owed, or that may be owed as a result of leaving or changing positions, is provided in Chapter 15.5.

# RECORD OF SHARE SUBSCRIPTION OPTION/PURCHASE OPTION/BONUS SHARE GRANTS

Plan	Plan D	Plan G	Plan H	Plan I	Plan J
Date of General Shareholders' Meeting	27/05/1998	23/05/ <b>2002</b>	11/05/2005	11/05/2005	11/05/2005
Date of Board meeting	12/12/2001	15/12/2004	13/12/2005	25/04/2007	23/07/2007
Type of plan	Subscription	Subscription	Bonus shares	Bonus shares	Bonus shares
Number of options granted at outset	153.000	130,000	14,000	10,000	16,000
Number of beneficiaries at outset	61	80	90	1	61
Total number of shares that may be subscribed/ecquired/vested	i		I/dh		
- by corporate officers at outset, including:	66,000	31,500	3,400	10,000	13,550
Patrick Buffet		-		10,000	-
Of which remaining on 1/1/09				10,000	
Georges Duval	6000	6000	600	-	600
Of which remaining on 1/1/09	0	6000	0		600
Bertrand Medelin	2500	2000	250	-	150
Of which remaining on 1/1/09	0	0	0		150
Philippe Vecten	4000	3000	150	-	1,000
Of which remaining on 1/1/09	0	3000	O		1000
Edouard Duval	2500	2000	100	-	200
Of which remaining on 1/1/09	_0	2000	0		200
Cyritle Duval	2500	2000	100	-	200
Of which remaining on 1/1/09	0	2000	0		200
- by top ten employee beneficiaries	30,000	27,000	3,700	0	6,265
Start of option exercise period/final acquisition of shares	12/12/2003	15/12/2006	13/12/2007	25/04/2009	23/07/2009
Expiry date	11/12/2009	15/12/2012	-	-	-
Subscription or purchase price	32.6	64.83	-	-	-
Terms and conditions of exercise	_	•	_	-	•
Number of shares subscribed/granted as on 31/12/2008	142,250	66,631	14,000	0	0
Subscription and purchase options and bonus shares cancelled	3,000	3,700	0	0	170
Outstanding subscription and purchase options and bonus shares	7,750	59,669	0	10,000	15,830

# INFORMATION ON SHARE SUBSCRIPTION OPTIONS/PURCHASE OPTIONS/BONUS SHARES (EXCLUDING CORPORATE OFFICERS)

Share subscription and purchase options and bonus shares granted to top ten employee beneficiaries (excluding corporate officers) and options exercised by them	Number of options/ shares acquired or granted	Average weighted price (in euros)	Related Plan
Bonus shares or share subscription or purchase options granted in 2008 by the issuer and any company within the option grant scope to the ten employees of the issuer and any company within this scope, who received the most options or bonus shares (aggregate information)	o		
	9,300	32.60	D
Options vis-à-vis the issuer and companies referred to above, exercised in 2008 by the ten employees of the issuer and these companies, who	34,000	64.63	
exercised the most options (aggregate information)	Total <b>43,300</b>	57.7 <b>5</b>	G

## SUMMARY TABLE FOR EACH EXECUTIVE CORPORATE OFFICER

Corporate officers	Employment contract	Supplementary pension plan (see details in Chapter 15.5)	Payments or benefits due or liable to be due upon severance or change of employment (see details in Chapter 15.5)	Payments related to non-competition clauses (see details in Chapter 15.5)
Pablick Buffet Chairman and CEO Start of term of office: 25/04/07 Expiry date of term of office as Director: GSM on 2010 accounts	No	Yea	Yes	No
Georges Duval Doputy CEO Vice Chairman of the Board of Directors Start of term of office: 23/05/02 Expiry date of term of office as Director: GSM on 2010 accounts	Yes - suspendad	Yes	Yes (limited to suspended employment contract)	No.
Bertrand Madelin Deputy CEO Start of term of office: 01/01/08 Expiry date of term of office: undefined	Yes - suspended	Yes	Yes (limited to suspended employment contract)	No.
Philippe Vector Deputy CEO Start of term of office: 23/05/07 Expiry date of term of office: undefined	Yes – suspend <b>ed</b>	Yes	Yes (limited to suspended employment contract)	NoNo
Édouard Duvel Chairman ERAMET International Director Start of term of office: 21/07/99 Expiry date of term of office as Director: GSM on 2010 accounts	Yes	Yes	Yes (limited to suspended employment contract)	No
Cyrille Duval General Secretary Alloys division Director Start of term of office: 21/07/99 Expiry date of term of office as Director: GSM on 2010 accounts	Yea	No	No	Yes (limited to employment contract)

# 15.3. REMUNERATION OF COMEX MEMBERS

Remuneration of corporate officer Comex members is set annually by the Board of Directors based on the recommendation of the Compensation Committee. For non-corporate officer members of the Comex, remuneration is set by general management.

Remuneration of each Comex member is broken down into a fixed portion and a variable portion. The variable portion is based on a certain number of specific goals and conditions. The goals of the corporate officers are determined by the Compensation Committee and submitted to the Board of Directors for approval.

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: (i) actual economic

performance (ROC, ROCE, etc.), (ii) financial performance (debt, working capital requirement, etc.), (iii) the completion vis-a-vis the budget and schedule of major capital expenditure programmes, industrial projects or acquisition and development activities, (iv) "managerial" results in terms of team motivation and leadership, project and strategy proposals and goals in the field of health, safety, environmental and industrial risks. As from 2008, the variable portion may not exceed 50% of the gross annual fixed remuneration (100% for the Chairman and CEO).

The members of the "COMEX" who are not corporate officers also benefited from a collective discretionary profit-sharing scheme. The sums paid under the scheme in 2008, with respect to 2007, individually amounted to €16,092, in line with the legally prescribed ceiling.

# 15.4. RETIREMENT COMMITMENTS

Several years ago, ERAMET set up a collective defined benefit supplementary pension plan for a group of executives who met the required restrictive eligibility criteria. The plan is managed by an outside insurance сотралу,

Corporate officers are eligible for the existing defined benefit supplementary pension plan for ERAMET executives, a plan for which new regulations, bringing it into line with the new legal and regulatory provisions, came into effect on 1 July 2008, following a decision by ERAMET's Board of Directors on 30 July 2008, made on the basis of a recommendation from the Compensation Committee. 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 cailing.

Based on the latest actuarial calculation, the present value of the estimated portion of the five corporate officers in question and still working as at 31 December 2008 out of the total commitments in respect of the past service of all beneficiaries of this supplementary pension plan amounted to £12.6 million at the end of December 2008, with the total amount of commitments being measured under IFRS at €25.6 million.

# → 15.5. OTHER COMMITMENTS

Under his corporate officer contract of 26 April 2007, Patrick Buffet is entitled to a severance payment, the settlement terms of which were brought into line with France's Labour, Employment and Purchasing Power Act of 21 August 2007 by the meeting of the Board of Directors of 20 February 2008, resulting in a new corporate officer contract being adopted by the Board of Directors and signed on 20 February 2008. Consequently, as from 1 January 2009, should the Chairman and CEO leave the Company, entitlement to the severance payment is subject to meeting 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 (or if the term is less than three years, during the full financial year(s) of the term of office) must be 20% or more of the total gross fixed annual remuneration received during said financial years. As a result, 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/Medel 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 amployees. 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. Edouard 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 for 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.

It is hereby noted that in respect of the departure of Jacques Bacardats, the previous Chairman and CEO of the ERAMET Group, the latter notably benefited from a non-competition clause providing entitlement to an indemnity of €0.8 million (fully provided for in the financial statements

as at 31 December 2007 and 31 December 2008). This indemnity was implemented for the period from 1 May 2008 to 30 April 2009.

In the event of a change in control at ERAMET and the termination of an employment contract that is considered as being attributable to the employer, a special quarantee, which is not cumulative with the other applicable contractual or customary guarantees, was decided on in 2005 and put in place in favour of 19 Group executives (Messrs Madelin and Vecten, the only corporate officer beneficiaries, primarily non-corporate officer members of the Group Executive Committee and divisional Comex). This guarantee, which represents an indemnity of three years' remuneration (fixed plus variable) for each beneficiary manager, was estimated at a total of €6.4 million on 31 December 2008. Patrick Buffet does not benefit from

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.

# → 15.6. SPECIAL REPORTS ON SUBSCRIPTION OPTION AND BONUS SHARE GRANTS

The Board Meeting of 23 July 2007 updated the regulations governing the bonus share plans requiring corporate officers to retain 20% of their shares for the term of their appointments.

# 15.6.1. Special report on share subscription and purchase options (Article L. 225-184 of the French Commercial Code)

## 2008 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.

# A. Options granted

No share purchase or subscription options were granted during the 2008 financial year.

# B. 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.

xercices 2008 Plan D 12/12/01 - No of shares		108 Plan D 12/12/01 - No of shares Exercice price - in euros Plan G 15/12/04 - No of		Exercice price - in euros				
Corporate officers								
Bertrand Madelin	-	-	2000	64.63				
10 employees who are not corpo	rate offices and who su	bscribed for or purchased the	largest number of shares					
J. Bacardate	300	32,6	10,000	64.63				
D. Franchot	6,000	32.6	3,000	64.63				
JD. Dujardin	-	-	6,000	64.63				
A. Pradoura	-	+	4,000	54.63				
J. Koeleman	3,000	32.6	-	•				
X. Chastel	-	-	3,000	64.63				
B. Demay	-	-	2,500	64.63				
M. Granget	-	-	2.000	64.63				
A. Zambetti	-	•	2,000	64.63				
B. Bied Charreton	-		1,500	64.63				

The Board of Directors

# 15.6.2. Special report on bonus share grants (Article L. 225-197-4 of the French Commercial Code)

2008 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.

# A. Grants to corporate officers

No bonus shares were granted during the 2008 financial year.

# B. Grants to non-corporate officer employees

No bonus shares were granted during the 2008 financial year,

The Board of Directors

# Board practices

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## → 16.1. REPORT OF THE CHAIRMAN OF THE BOARD

(Article L 225-37 of the French Commercial Code, as amended by Act 2008-649 of 3 July 2008)

Dear Shareholders,

As Chairman of the Company's Board of Directors, I hereby 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 18 February 2009.

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.

## 16.1.1. Conditions for the preparation and organisation of the work of the Board of Directors

In line with the decision of the Board of Directors on 9 December 2008, ERAMET uses as its reference framework the December 2008 Afep/ Medef corporate governance code for listed companies, resulting from the consolidation of the October 2003 Afep/Medel report and their recommendations of January 2007 and October 2008 on the remuneration of the corporate officers of listed companies. A copy of this code is available from the Legal Department at head office.

#### General Management (See Section 14.1 of the 2007 Document)

#### **COMPANY MANAGEMENT METHOD**

At its meeting of 28 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 15 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 17 of the Articles of Association, the Board may, on 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 19 of the Articles of Association, appoint up to four non-voting observers. The observers may be chosen from among the Company's employees.

#### **MEMBERSHIP**

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. The Board also granted, on the same terms, the power to substitute and delegate, under his responsibility, to such persons as he sees fil, 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 14, Subsection 2 of the Articles of Association, the Chairman 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 14, Subsection 4 of the Articles of Association, "decisions affecting the Company must be 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), Alloys Division;
- → Bertrand Madelin (with effect from 1 January 2008), Nickel Division;
- → Philippe Vecter (with effect from 23 May 2007), Manganese Division.

The three Deputy CEOs are also Division Managers and Georges Duval is also responsible for purchasing. The employment contracts of the three Deputy CEOs were suspended when they were appointed corporate officers. The Administration and Finance, Human Resources - Health & Safety Departments, the Development Department, the Strategy and Financial Communications Department, and ERAMET International and the China Department report to the Chairman. The Chief Financial Officer, Jean-Didier Dujardin, also supervises IT systems, internal audit, management control 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 general 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 & Safety Manager, the Chief Financial Officer and the Communications and Sustainable Development Manager. The fact that the "Corporate" Managers of the support departments (Human Resources - Health & Safety Department, Administration and Finance Department and Communications and Sustainable Development Department) are COMEX members increases

the effectiveness and coherence of their efforts. 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 quarterly and is comprised 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 La Nickel-SLN, the CEO of Comilog, the Managers of the Nickel and Manganese Division business units, the Weda Bay project manager and the Manager of ERAMET in China.

#### **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 in principle been comprised of fifteen members, as follows. not including the Chairman;

- → five Directors put forward by the SORAME-CEIR concert party;
- 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 Vienot report" (under the terms of the shareholders' agreement).

The Board currently has fourteen members:

- → Honorary Chairman: Yves Rambaud
- → 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:

- Georges Duval, on behalf of SORAME, since 13 September 2000;
- Gilbert Lehmann, on behalf of AREVA, since 13 December 2005.
- → Directors:
- Rémy Autobert;
- Cyrille Duval;
- Edouard Duval;
- Georges Duval;
- Patrick Duval:
- Pierre-Noël Giraud (independent director);
- Gilbert Lehmann:

- Louis Manou:
- Harold Martin;
- Jacques Rossignol (independent director);
- Michel Somnolet (independent director);
- Antoine Treuille (independent director);
- AREVA, represented by Frédéric Tona.

The Afep/Medef report 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 the basis of an analysis of these criteria by the Board, it currently has four independent directors out of a total of 14 members. In this respect, during the 2008 financial year, the Company did not fully comply with the recommendations of the Afep/Medet corporate governance code for listed companies which recommends that one third of the members of a Board at Directors should be independent. This is due to both the specific rules governing the membership of its Board of Directors under the shareholders' agreement (to wit, besides the Chairman, ten members representing the SORAME/CEIR, AREVA and STCPI shareholders and four members, two put forward by AREVA and two put forward by SORAME/CEIR on the basis of their independence) and the current vacancy. As a result, the appointment of a 15th member, having the status of independent director, will be put to the next General Shareholders' Meeting, thus increasing the number of independent directors on the Board to five (i.e. one third independent directors on the Board).

Under Article 11 of the Articles of Association, directors may not be over seventy years of age when they are appointed and are so 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. All directors must own at least one share,

#### 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 19 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 Javeller and Daniel Signoret as observers for a further four years.

Company Works Council Delegates: Christian Detreille, Claudine Grossin, Didier Jacq, Yann Perrigault.

#### CHARTER

The duties and obligations of the directors are set out in the directors' charter, provided for under Article 12-4 of the Articles of Association. Paragraph 6 of Article 13 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). The duty of confidentiality and of refraining from dealing in the Company's shares when in possession of unpublished material information is also reiterated. 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.

#### **BY-LAWS**

The Board adopted By-laws on 6 September 2006 which specify its organisation. The By-laws are available from the Secretary of the Board of Directors at the Company's head office. In particular, the By-laws specify the membership, organisation and operation of the Committees.

#### ASSESSMENT OF THE BOARD'S WORK

A process for assessing the operation of the Board of Directors, in particular, by means of a questionnaire given to Board members and interviews by the Secretary of the Board of each Board member, and an analysis of the conclusions of these interviews will be undertaken over the coming months.

#### MEETINGS

#### Calling:

Meetings are called as often as necessary by the Chairman sending an invitation to its 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-Montpamasse).

#### Process for Board Meetings:

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

The Meeting usually begins with a preliminary report by the Chairman on the main events having occurred since the last Meeting, followed by an update on business in 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 Group General Counsel 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 2008**

The Board of Directors met 7 times in 2008. The attendance rate of its members was 84%.

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

- → the approval of the 2007 financial statements of the Company and the Group and the calling of the General Shareholders' Meeting;
- the review of the 2008 interim financial statements;
- The review of the key events affecting the Company and its Divisions during the previous quarter;
- → the review of the 2009-2013 Strategic Plan;
- planned investment in or development of existing facilities.

This year, the Board also focussed on the following issues:

- → the long-term strategic partnership project with UKTMP and EADS for the supply of titanium (Alloys Division's "UKAD" project;
- the planned acquisition of the majority of the share capital of the Norwegian company, Tinfos, remunerated partly in cash and partly by issuing new Company shares in July 2008, via a capital increase carried out by the contribution of Tinfos shares to the Company;
- the development of the Otjozondu manganese project in Namibia and the acquisition of a corresponding purchase option;

- consideration of the request from STCPI relating to the capital structure of Nicket-SLN, which concluded that there was no need to change the current capital structure;
- the review of the Company's corporate governance policy, pursuant to the Act of 3 July 2008.

Finally, during the second half of 2008 and in the light of the global economic slowdown, the Board also reviewed:

- the plans to adapt the ERAMET Group's business activities, the aim of which is to adjust production to match demand, to cut costs and to review investment priorities;
- the assessment of the Group's financial risks and, in particular, its financial investment security policy.

in order to carry out its work, the Board is also aided by the work of three Committees which it appoints from amongst its members.

#### AUDIT COMMITTEE

A charter specifying its membership (three members), its operation and its responsibilities was adopted by the Board on 10 December 2003, it was last updated on 9 December 2008, to take account of the Act of 3 July

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) and examining the Group's change-management, raw materials, hedging and investment policies. Since December 2008, the Committee has also been responsible for reviewing the Chairman's report on the preparation and organisation of the work of the Board and internal control procedures.

In particular, the Chief Financial Officer, the Statutory Auditors and the Group's Internal Audit Manager attend Committee meetings.

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

The Audit Committee met four times during 2008 and the attendance rate of its members was 100%.

In addition to presenting the financial statements in February and examining the interim financial statements in July, in December of each year the Committee reviews the report on the audits conducted during the year and the audit programme for the following year.

In particular, during the year, the Committee reviewed the following points:

- → in view of the worsening aconomic climate, an examination of the Group's investment policy and the financial investment security policy; changes to the valuation of the Group's pension fund assets and the solvency of customers in the various countries in which the Group operates:
- → the conclusions of the audit carried out on the Group's Purchasing Department and post-investment audits;
- the proposed terms for the reappointment of the two Statutory Auditors, the terms of office of which expire at the end of the General Shareholders' Meeting called to approve the financial statements for the year ended 31 December 2008;
- the programme for drawing up a Group code of conduct.

#### 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 as regards the remuneration of the corporate officers of the ERAMET Group appointed by the Board of Directors.

The Committee is assisted in its work by the Group Human Resources - Health and Safety Manager, Dominique Franchot, who also holds the position of Committee secretary.

The Compensation Committee is currently comprised of three members: Frédéric Tona, Jacques Rossignol (independent director) and Michel Somnolet (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 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: (i) actual economic performance (ROC, ROCE, etc.), (ii) financial performance (debt, working capital requirement, etc.), (iii) the completion vis-a-visthe budget and schedule of major capital expenditure programmes, industrial projects or acquisition and development activities, (iv) "managerial" results in terms of team motivation and leadership, project and strategy proposals and goals in the field of health, safety, environmental and industrial risks. As from 2008, the variable portion may not exceed 50% of the gross annual fixed remuneration (100% for the Chairman and CEO);
- → in addition, in respect of share incentures, corporate officers may benefit from bonus 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 plans for the term of their appointments. In 2008, there were no share subscription or purchase options or bonus share grants;
- → corporate officers are eligible for the existing defined benefit supplementary pension plan for ERAMET executives, a plan for which the new arrangements 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 twentyfive times the annual social security ceiling.

The Compensation Committee met eight times during 2008 and the attendance rate of its members was 100%.

During the financial year, besides the 2007 bonuses, the updating of fixed compensation and the 2008 goals for corporate officers, which were approved by the Board of Directors, the Committee:

→ proposed to the Board of Directors, in February 2008, the updating of the corporate officer contract of the Chairman and CEO, mainly in order to make it compliant with Article 17 of the French Labour, Employment and Purchasing Power Act of 21 August 2007. This

update was authorised by the Board of Directors on 20 February 2008. Consequently, as from 1 January 2009, should the Chairman and CEO leave the Company, entitlement to the severance payment is subject to meeting 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 (or if the term is less than three years, during the full financial year(s) of the term of office) must be 20% or more of the total gross annual fixed remuneration received during said financial years. As a result, 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 the related-party agreements:

- reviewed the changes to be made to ERAMET's defined benefit supplementary pension plan, to take account of recent regulatory changes applying to collective defined benefit supplementary pension plans. These changes were approved by the Board of Directors on 30 July 2008 and, as regards the application of this plan to three corporate officers who were not previously entitled to it, will be submitted, pursuant to the regulations applicable to related-party agreements, to the 2009 General Shareholders' Meeting for approval;
- \* examined the Afep/Medef recommendations on compensation for corporate officers of listed companies which were published on 6 October 2008. It was concluded that the arrangements for the Chairman and CEO's severance payment, which are perfectly in-line with these recommendations with the sole exception of the number of annuities taken into account in order to calculate the amount of the payment (three years), should be revised when his term of office is renewed, while preserving the general balance of the corporate officer's contract drawn-up when he joined the ERAMET Group. In order to

make its conclusions, the Compensation Committee looked at all the components of the Chairman and CEO's compensation (including the severance payment) versus the Chairman's overall reference compensation, itself assessed on the basis of the compensation of the managers of companies of comparable size and having similar business activities. Moreover, in line with the recommendations of the Alep/ Medel corporate governance code for listed companies, the Chairman and CEO does not have an employment contract with the Company;

The Committee also proposed, and this was approved by the General Shareholders' Meeting of 16 April 2008, a new global directors' fee allowance, keeping the same allocation and calculation methods as before. Finally, the Committee was kept informed of the negotiations which took place concerning the arrangements for profit-sharing within the Group and announced that it was in favour of starting negotiations for the introduction of a collective pensions savings plan.

#### 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.

The Committee is currently comprised of Patrick Builfet, Cyrillia Duval, Edouard Duval and Gilbert Lehmann. Contrary to the recommendations of the Afep/Medef corporate governance code for listed companies, none of the members of this Committee are independent directors. This is due to the specific rules of the shareholders' agreement designed to structure the relations between the various Company shareholders. The Secretary of the Committee is the Group Human Resources - Health and Safety Manager, Dominique Franchot.

The Selection Committee did not meet in 2008.

## 16.1.2. Internal control procedures

In early 2004, the ERAMET Group (comprised of ERAMET SA and its fully consolidated subsidiaries) undertook a progressive review of its internal control system, with the first stage of this programme consisting of mapping risks. The project was carried out through interviews with the main managers of the Company's various processes, to measure their exposure to risks and the effectiveness of the related internal controls. The mapping made it possible to draw up an improvement action plan for implementation in 2004 and beyond. Audit Plans are drawn up on the basis of that mapping. The latter was partially updated during Q4 2006. In order to enable more people to be involved in its drafting, its full updating was partly postponed to 2009 and partly to 2010. In addition, the various audits carried out allow the Company to improve this mapping. Finally, the systems needed to draw up the multi-annual audit plans were implemented during 2008.

The work carried out in 2008 did not reveal any serious failings or weaknesses in the way in which internal control is organised.

#### 16.1.2.1. The Company's internal control goals

In accordance with the AMFs 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 assets are protected against the various risks of losses resulting from theft, fire, improper or illegal actions and natural risks.

One of the goals of the internal control system is to prevent and control the risks resulting from the Company's business activities and risks of error or fraud, particularly in the accounting and financial areas. However, as with any control system, it cannot provide an absolute guarantee that these risks have been totally eliminated.

### 16.1.2.2. Overview of the audit procedures in place

#### A) INTERNAL CONTROL PLAYERS

Owing to the diversity of its business activities, ERAMET is organised into three independent Divisions, each with all the functions required for its operations (management, production, sales, purchasing, finance, etc.) In addition to its general management function, the head office provides support and carries out the control work required for the Group's cohesion. The following are the main 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 Cornex, the department carries out in the various Group units the activities defined in the Plan and ordered by the Chairman. It reports quarterly to the Comex and annually to the Audit Committee on the results of its work and progress on 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 controls and monitors the Division's management systems 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
- → the Finance, Treasury and insurance Department reports to the CFO. As a service centre, it looks after on behalf of the whole Group the hedging of foreign exchange and commodity risk, particularly nickel and fuel, manages financial resources (investments and borrowings), and also sets up and monitors all the insurance contracts taken out by the Group, it supervises the commodity hedging contracts taken out directly by its subsidiary, Aubert & Duval, for its own purposes;
- 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 Environment and Industrial Risks Department is part of 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.

#### **B) RISK MANAGEMENT**

The analysis process introduced by ERAMET should enable it to anticipate the main risks the Group faces, to examine the suitability of the existing internal controls, and to implement the appropriate action plans to improve the effectiveness of these audits.

First and foremost, risk analysis is based on the mapping carried out in 2004 and updated in 2006. It is supplemented by an annual review, together with the main operational managers of the Group's various Divisions, of processes requiring special analysis. These various initiatives enable annual internal audit plans to be drawn up, which are followed by action plans, the progress of which is examined every quarter by ERAMET's Executive Committee and by its Audit Committee.

The main risks faced by the Group are described in the notes to the Group's 2008 consolidated financial statements.

The operational risks are mainly managed at Division level, in a manner adapted to the specific business activities.

The financial liquidity, interest rate and foreign exchange risks for the whole Group are managed by the Finance, Treasury and Insurance Department. Together with the Legal Department, this Department monitors the insurable risk coverage policy for all the Group's companies. The main insurance programmes are themselves described in the Group's 2007 Reference Document.

#### **SUMMARY OF INTERNAL CONTROL PROCEDURES** IMPLEMENTED BY THE COMPANY

#### → Existing charters:

The Audit Committee, Internal Audit, the Legal Department, Management Control, the Tax Department, the IT Department and the Environment and Industrial Risks Department have all 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.

### 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 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. The Manager of the ERAMET Sandouville plant has the power granted by the Chairman and CEO to carry out any transaction necessary to run the plant, as well as powers with respect to health and safety. Signing authority has been given to a limited number of Company employees to operate bank accounts, with two signatories required for any payment and specified ceilings (one million euros, ten million euros and one hundred million euros) for each group of signatories.

#### → 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 are ongoing in the Divisions, including the implementation of integrated procurement applications for better control of liabilities and separation of tasks throughout the supply chain.

#### → 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

- 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, to which s/ he reports, acts as Secretary to the Board for the main companies (Le Nickel-SLN, Comitog SA) and participates in Board Meetings on major transactions undertaken by the subsidiaries:
- in 2008, the Board of Directors of Comillog SA set up an Audit Committee and a Compensation Committee. At the meeting of the Board of Directors of Le Nickel (SLN), held in November 2008, the directors representing ERAMET also proposed establishing three committees: a Strategy Committee, an Audit Committee and a Compensation Committee, as part of a modernised corporate governance structure;
- 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 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;
- systematic disclosure in the event of strategic decisions: Under the Capital Expenditure Procedure, all projects exceeding 64 million are submitted for approval at Division meetings on the basis of 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 & Financial Department. Strategic projects are presented to the Board of Directors of ERAMET;
- disclosure of commitments given and received; Independently of the above procedure, quarterly consolidation reporting includes disclosure of any such commitments. Moreover, the Legal Department provides support for major contract negotiations or in the event of disputes.

#### D) INTERNAL CONTROL OF THE PRODUCTION OF THE PARENT COMPANY'S FINANCIAL AND ACCOUNTING INFORMATION

#### → Organisation of the accounting department within the Group:

The Accounting, Tax & Consolidation Department is part of the Administration and Financial Department and is organised into five units: General Accounting, Third Party & Management Accounting, Bank Accounting, Tax and Consolidation, It updates the Company's financial records, issues its tax returns and all those relating to tax consolidation and publishes ERAMET's separate 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.

### Accounting IT systems:

The financial records are kept in the Baan integrated software package. This includes a Sales module that is interfaced with the Accounting module. Other transactions (procurement/payroll) are not interfaced because of their low number. Treasury software is partly interfaced. The Group uses BusinessObjects Finance (formerly Magnitude) consolidation software, published by BusinessObjects (formerly Cartesis).

#### → Main internal control players involved in checking this information:

- the Accounting Department approves the Company's monthly sales figures. It receives payroll entries from the HR Department, Finally, procurement invoices must be approved by authorised signatories, a list of whom is kept by the Accounting Department. Payments are made by the Treasury Department and must be counter-signed;
- the Group Treasury Department centralises and hedges the foreign currency and commodity risk for all companies. It supervises the commodity hedging contracts taken out directly by its subsidiary, Aubert & Duval, for its own purposes;
- the Management Control Department provides the relevant managers with budget control information. It organises the budget cycle and forecast updates (3 times a year). The Department compares budgeted and actual figures and analyses over/under-runs;
- the Consolidation Department coordinates and controls the Divisions' consolidations and provides technical support as required. It carries out the Group's final consolidation;

- the Management/Accounting Committee takes care of the necessary coordination between the Company and its subsidiaries;
- the Audit Committee, as mentioned above, analyses the interim and annual financial statements, monitors major disputes, the foreign currency and commodity management policy as well as hedging policies. It reviews the internal audit plans and the actions decided upon based on the audits carried out.

#### General reference materials:

The consolidation manual includes common accounting rules for the whole Group and a single consolidation return. It sets out the measurement methods used by the Group and specifies the rules to be followed for consolidation milestones. The accounts are closed out monthly, except in January and July. Financial statements are consolidated quarterly.

#### → Cash and Financing control:

The Group Treasury Department, in addition to its role in centralising the management of the foreign currency and commodity risk, sets up financing for the Group's main subsidiaries and carries out financial investments. It centralises the cash forecasting of the main companies and essists them to determine 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 cantralise foreign exchange transactions, which had in the past been recognised in the financial statements of each Group entity.

#### Budget and management control:

The Company's budgetary control is published monthly. Budget/Actual reporting is monthly and includes management consolidation. The Company's and the Group's budgets are determined at the end of each year for the following year and three forecast updates are carried out during the year. These budgets and forecast updates, as well as the

related action plans, are formally approved by Division management and the Chairman and CEO at special Division meetings. The Group's budgets and forecast updates are approved by the Executive Committee and the Chairman and CEO.

#### → Financial statement consolidation preparation procedure:

As indicated above, the consolidation manual is distributed to all subsidiaries and includes common accounting rules and the consolidation return. 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 quarterly with annual items (taxes, provisions, etc.) estimated at various times during the year.

#### → Liaison with the Statutory Auditors:

The auditors carry out six-monthly reviews of the financial statements, for which approval meetings are organised with the auditors of the main subsidiaries.

#### E) OTHER MECHANISMS CONTRIBUTING TO THE GROUP'S INTERNAL CONTROL

- The Environment and Industrial Risk Department was set up in 2003 and organises prevention plans and safety actions in these areas within the Group. A position of environment manager has been created at all Group sites.
- In December 2006, a "Nickel Committee" was created, it is comprised of representatives appointed by AREVA, SORAME and CEIR, on one hand, and by the Group's General Management, on the other hand. It is responsible for advising the latter as regards the definition and implementation of policies to control the risks relating to Nickel price fluctuations.

#### 16.1.3. Other disclosures

#### 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, 21, 22 and 23 of the 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 Management Report and Reference Document.

Paris, 18 February 2009

The Chairman of the Board of Directors

## 🛶 16.2. 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 -2008 FINANCIAL YEAR

#### Dear 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 to you on the report prepared by the Chairman of your Company in accordance with Article L. 225-37 of the French Commercial Code for the year ended 31 December 2008.

It is the Chairman's responsibility to prepare, and submit to the Board of Directors for approval, a report on the internal control and risk management procedures implemented by the Company and containing the other disclosures required by Article L. 225-37 of the French Commercial Code, particularly in terms of corporate governance.

#### It is our responsibility:

- ◆ to report to you on the information contained in the Chairman's report in respect of the internal control procedures relating to the preparation and processing of accounting and financial information; and
- → to attest that this report contains the other disclosures required by Article L. 225-37 of the French Commercial Code, it being specified that we are not responsible for verifying the fairness of these disclosures.

We conducted our work in accordance with professional standards applicable in France.

## Information on the internal control 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 procedures relating to the preparation and processing of the accounting and financial information. These procedures mainly consisted in:

- Obtaining an understanding of the internal control 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 the existing documentation;
- obtaining an understanding of the work involved in the preparation of this information and the existing documentation;
- determining if any significant weeknesses 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 engagement are properly disclosed in the Chairman's report.

On the basis of our work, we have nothing to report on the information in respect of the Company's internal control 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.

#### Other disclosures

We hereby attest that the Chairman's report includes the other disclosures required by Article L. 225-37 of the French Commercial Code.

Paris-La Défense and Neuilly-sur-Seine, 3 March 2009

The Statutory Auditors

Ernst & Young Audit François CARREGA Deloitte & Associes Nicholas LE. ROLT Table of contents

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## → 17.1. EMPLOYEE POLICY

The ERAMET Group consists of companies, the activities of which must fit into specific local environments. The ERAMET Group's business activities have a marked international dimension (over 65% of the Group's employees work outside mainland France) both in terms of marketing and management and industrial production. The Group's human resource management is thus decentralised, based on strong principles and shared tools for all Group companies and sites, key for the implementation of a long-term employee policy, with the necessary mobility and development.

ERAMET Group's employee policy is based on joint action frameworks, decentralised implementation with the corresponding reporting and the clearly demonstrated desire for:

→ dialogue with social partners, both formally (remuneration policy, training, welfare and employment management) and on a day-to-day and informal basis on sites:

- strong Group management involvement (information and discussion) seminars, meetings with Group and company managers, intra and interdivisional career development and mobility);
- involving all employees in the life of their Company and Group via regular, clear information (regularly distributed company and site newsletters, Group intranet, integration days for new hires).

The ERAMET Group feels that its employees genuinally 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 also responsible for future growth driven by enhanced technological leadership and on the most comprehensive possible demonstration of their managerial and technical capabilities. Lastly, they are responsible for controlling the management and operational excellence in each division.

## → 17.2. HUMAN RESOURCE POLICY PRIORITIES IN 2008

The Group's human resource management operates on two levels. A shared Group level involving the management of executives and their mobility and the implementation of a certain number of employee guidelines (employee coverage against unforeseen events, health and safety, training, evaluation, etc.). A management level that is as close as possible to the field, employee concerns and the culture of the country and the company.

Human resource management at the ERAMET Group is thus driven at these two levels.

In 2008, several HR initiatives, begun in 2007, continued to be implemented. They included the following:

- → the introduction of a harmonised system of policies and support measures for national and international mobility;
- for recruitment, the revitalisation of relations with higher education. institutions and of institutional communication via a promotion

campaign to raise the Group's profile and appeal and visibility among young graduates;

- ⇒ the introduction of the ERAMET Leaders Program for management. training, which is still enjoying tremendous success;
- → the continuation of the Leadership technique policy, with the aim, in particular, of defining the succession plans by domain for the Group's key professions.

New projects were also implemented during 2008 with, on the one hand, the launch of a discussion process on the worldwide rollout of dynamic and modern tools for managing the personal data of managers and, on the other hand, the implementation of tangible initiatives aimed at guaranteeing the safety and security of our employees; in-depth health checks for frequent travellers, expatriates and their families, training sessions on personal safety when travelling.

# → 17.3. WORKFORCE

The workforce managed at the year-end amounted to 15,741 people (14,922 on 31 December 2007).

## 17.3.1. Changes in headcount by geographic region

Over the past three years (2006, 2007 and 2008), the Group's headcount has risen by 1,302. In 2008 alone, the workforce expanded by 5.5%. All Divisions have increased their staff numbers in the past three years. Accordingly, the Nickel Division (+355 people) saw a 13% rise in three years, the Manganese Division (+680 people) 11% growth, notably due to the integration of Tinfos in 2008 while the Allays Division (+176 people) was up 3.6%.

In the Nickel Division, employee numbers rose 6.1% in 2008, almost the same as in 2007. The Weda Bay workforce in Indonesia has been included in the figures since 2007.

The Manganese Division's headcount has been increasing since 2007. This increase was 6.9% in 2008, in particular with the integration of Tinfos.

Meanwhile, in the Alloys Division there was, like in 2007, a slight increase in the workforce in 2008 (+99 peopls).

		FF	RANCE		EURO	OTHER EUROPEAN COUNTRIES NORTH AMERICA						ASIA	TOTAL					
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	200B	2006	2007	2008
Holding Company	23 <b>2</b>	244	278	0	0	19	11	11	12	18	18	34	0	1	8	261	274	3 <b>52</b>
Nickel Division	34 <b>9</b>	360	3 <b>66</b> :	0	0	σ	0	0	.; O	157	197	259	2,265	2,389	2,502	2,771	2,946	3,1 <b>26</b> /
Alioys Division	4,165	4,242	4,298	643	629	619	45	34	37	43	68	1 <b>28</b> .	10	10	0	4,906	4,983	5.062
Manganese Division	135	133	142	559	558	1088	871	915	78 <b>6</b> :	2,155	2,287	2226	2,781	2,826	2944	6,501	6,719	7.181
Total	4,881	4,970	5,084	1,202	. 1,187	1,721	927	980	838	2,373	2,570	2,848	5,050	5,220	5,454	14,438	14,922	16,741

## 17.3.2. Headcount by type of employment contract

The technical nature of mining and metallurgical jobs calls for a long period of professional training. Use of short-term employment contracts is thus relatively rare and involves some 3% of employees outside China, where

short contracts are more common in line with the specific management policies in that country.

	0	pen-ende	d co	ntracts		Fixed-ter	m contracts		TOTAL		
	2006	2007		2008	2006	2007	2008	2006	2007	200	
Holding Company	249	26 <b>2</b>	, Č	319	12	12	<b>33</b>	261	274	36	
Nickel Division	2,537	2,681	1 25	3,018	234	265	1 (0)	2,771	2,946	3,12	
Alloys Division	4,747	4,815		4.838	159	168	244	4,906	4.983	5,00	
Manganese Division	5,100	5,324		5,715	1,401	1,395	1,466	6,501	6,719	7,19	
Total	12,633	13,002		13,886	1,800	1,840	1,862	14,430	14,922	15,74	

## 17.3.3. Headcount by gender

Female employment in the mining and metallurgical sectors has traditionally been low, as can be seen from the table below, with women representing some 17% of all employees. It is Europe (outside France) that has the highest proportion of women, accounting for close to one quarter of the workforce.

****			MALE			FEMALE		TOTA		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	
Holding Company	167	176	216	94	98	134	261	274	362	
Nickel Division	2,526	2,654	2,796	245	292	326	2,771	2,946	3,126	
Alloys Division	4,264	4,311	4,406	642	672	87 <b>0</b>	4,908	4,983	5,0 <b>83</b>	
Manganese Division	5,428	5,62B	6,855	1.073	1,091	1,326	6,501	6,719	7.181	
Total	12,385	12.708	12,377	7.054	2,153	2,400	14,430	14,022	15,741	

## 17.3.4. 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 every 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 70% of the headcount, it seems relevant to use the following definitions:

Management	executives, managers, post-graduate staff, civil engineers (white collars).
	(employés, Techniciens, Agents de Maîtrise): clerks, technicians, foremen
Supervisory staff	(white collars).
Workers	workers (blue collars).

The staff breakdown by category has been relatively stable over the past three years, although with a significant upward trend in the level of qualifications. Accordingly, blue collar workers represented 63% in 2005 compared to 60.2% in 2008, supervisory level employees made up 28.3% in 2005 compared to the current 29% and, lastly, management accounted for 9.8% of headcount in 2005 but represents 10.9% today. This stemmed both from the rapid increase in management and technical requirements and the progression of Group plans.

	WORKERS			SUP	ERVISOR	RY STAFF		MANA	GEMENT		TOTAL		
	2006	2007	2008	2006	2007	2008	2006	2007	200B	2006	2007	2008	
Holding Company	0	0	3	99	106	138	182	168	211	261	274	352	
Nickel Division	1,627	1,717	1,782	944	998	1,099	200	231	252	2,771	2,946	3,126	
Alloys Division	2,884	2,961	3,081	1,581	1,570	1,543	441	452	468	4,906	4,983	5,082	
Manganese Division	4,391	4,394	4,62 <b>2</b> §	1,479	1,657	1,751	631	566	909	6,501	6,719	7,1 <b>81</b> 1	
Total	8,902	9,072	9,480	4,1030	4,331	4,924	1,434	1,519	1,728	14,438	14,922	16,741	

## 17.3.5. Average age

The average age, as can be seen from the table below, is relatively constant across professional categories and Divisions, with the exception of Nickel Division workers (primarily in New Caledonia), where the average age is some four years younger than for the other Divisions and professional categories.

Furthermore, over the past three years it can be noted that the workforce has become significantly younger, particularly amongst supervisory staff and management.

Employees over 50 account for 21% of the total workforce and those 30 or younger a little over 19% of the total, slightly up on previous years.

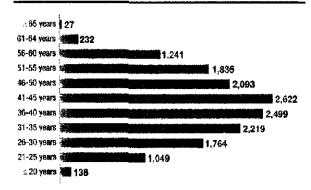
Future Employment and Expertise Management is an HR tool undergoing progressive and significant development.

	and a new marks reserved and are both Heiserhills	· · · · · · · · · · · · · · · · · · ·	WORKERS	S		MANAGEMENT			
****	2006	2007	2008	2006	2007	2008	2006	2007	2008
Holding Company	0.00	0.00	26.3	44.30	43.46	41.24	44.59	45.44	43.99
Nickel Division	37.23	36.48	98.16	42.48	34.49	39.59	42.27	39.43	41,48
Allays Division	40.59	41.10	37.98	42.95	43.58	42.91	45.61	44.72	43.80
Manganese Division	40.68	40.15	40.81	43.20	42.68	48.45	44.82	45.73	45,41%
Total	40.02	39.70	38.93	42.90	41,13	40.58	44.68	44.46	44.24

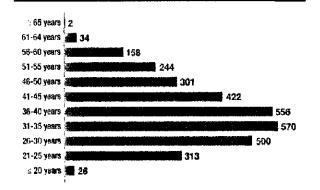
## 17.3.6. Length of service

			WORKERS		SUPERVIS		MANAGEMENT			
	2006	2007	2008	2006	2007	2008	2006	2007	2008	
Holding Company	0.00	0.00	1.00	15.14	13.94	11.38	10.22	10.73	8.94	
Nickel Division	11.56	10.45	9.92	15.74	13.77	12.58	9.65	8.36	7.80	
Alloys Division	16.58	16.35	16,13	17.96	18.03	17,39	12.84	11.20	10.58	
Manganese Division	15.90	15.33	15.02	18.06	16.95	17.00	16.22	15.29	14.10	
Totals # 18 - 13 April 4	15.35	1474	14.09	17.42	16.53	15.57	13.53	12.51	- 11.61°	

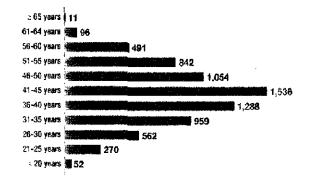
## 17.3.7. Group



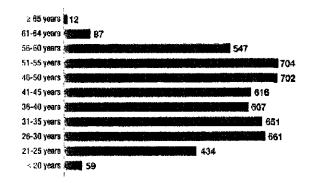
### 17.3.8. Nickel Division



## 17.3.9. Manganese Division



## 17.3.10. Alloys Division



#### 17.3.11. Workforce turnover and management

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 around 5.1% in 2006, 6.2% in 2007 and finally 6.7% in 2008.

The level of job creation (arrivals - departures) has remained positive over the past three years: 290 posts in 2006, 451 in 2007 and 322 in 2008.

		10	INING														LE	AVING
	(	Outside hiring and others			Retirement and Firings early retirement Resignations									Autres			Total	
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
Mainland France	527	656	573	37	59	57	141	156	121	89	105	94	207	230	91.	474	550	413
New Caledonia	173	276	245	77	76	69	12	36	16	12	10	21,	38	26	21	139	148	119
Europe ex. France	102	116	64	18	20	4	29	27	27	46	64	34	14	11	19	107	122	<b>96</b>
USA	81	130	144	12	20	27	16	28	18	35	43	58	10	27	20	73	118	123
Gabon	158	223	116	30	18	7	71	19	47	3	32	22	61	91	64	165	160	140
Asia	3 <b>86</b>	349	354	33	19	43	61	94	72	16	91	141	72	20	30	182	224	291
Other	95	91	86	1	0	7	0	O	2	0	6	4.	91	62	73	92	68	86
Total	1.522	1.141	1,580	208	212	267	330	300	357	281	281	37#	495	407	318	1.232	1,390	1.256

## 17.4. WORK ORGANISATION AND REMUNERATION

## 17.4.1. Working hours

The types of working-hour organisation vary by company, their type of business and locations and are defined to match business needs and employee preferences as much possible. Wherever it operates, the ERAMET Group complies with applicable legislation on working hours. For guidance, working hours are as follows:

- mainland France: 35 hours per week;
- Norway: 37 hours 30 minutes per week;
- New Caledonia: 37 hours 50 minutes per week;

#### China, Gabon, US, Sweden: 40 hours per 5-day week.

It should be noted that in China, the ERAMET Group applies the new regulation on mandatory paid leave, which took effect on 1 January 2008, and which now provides for 15 days paid leave in addition to national bank holidays. This regulation has had a major impact on work organisation in the Group's major plants in China, which operate 365 days a year, with both day and night shifts. It was only able to be applied by reconciling the level of overtime, manufacturing and safety constraints and costs.

### 17.4.2. 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. Steps to adapt to markets in line with HR management tools, such as variable pay for management, were achieved in 2008. To this end, several remuneration surveys were conducted in 2008. to analyse the competitiveness of the remuneration offered by the Group, not only in France for managers and non-managers but also for example in Sweden.

Specifically in China, as a continuation of the action plans launched 2 years ago, the HR teams continued with efforts to standardise remuneration policies and to make them consistent across all the Group's Chinese sites.

### Personnel - payroil charges

Salaries account for the main part of employee remuneration. The average rate of social security contributions on wages and salaries at Group level is around 38%.

These contributions represent between 40-50% of the payroll in mainland France but are lower in the other countries where the Group operates (38% in New Caledonia and in the United States, 30% in Norway, 28% in Belgium and 15% in Gabon).

#### Employee benefits

In line with Group agreements on staff provident schemes for major risks and unforeseen events, the ERAMET Group wants all meinland France employees to benefit from supplementary healthcare cover. On 9 July 2007, ERAMET and the five unions represented in the Group signed a Group healthcare agreement. The principles underpinning the negotiations are of greater coherence, responsibility and solidarity:

- \* coherence across ERAMET production sites, 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 the most precious gifts there is;
- solidarity of employees and sites.

Thus, as from 1 January 2008, all mainland France production site employees have 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.

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 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 2008 was €25.6 million.

#### Stock-option plans

There are two different types of plans:

- → on the one hand, there are plans that are open to a very large number of Group employees. One such plan, opened in September 1999, covered 5,646 employees. Under this plan, which expired in September 2007, 423,450 ERAMET Group shares were granted. It was created to support the merger of the ERAMET Group with the Sima group in 1999. The plan offered each beneficiary the possibility of acquiring 75 ERAMET shares at a predetermined price. The strong share price growth since the second half of 2004 has prompted many employees to exercise the right to sell their shares;
- → secondly, there are also special plans of which the beneficiaries are the Group's senior managers.



## → 17.5. INDUSTRIAL DIALOGUE

Industrial relations in 2008 between management and social partners remained good, thanks to ongoing industrial dialogue both at local and Group level.

Negotiations were commenced on a range of issues (employee savings and retirement savings, forward jobs and skills planning) and a number of company-wide agreements were signed, in particular, on employment and remuneration.

At 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 sharing.

# → 17.6. TRAINING

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.

However, many training initiatives also relate to the use of computer tools and foreign languages.

In addition, capital investment programmes are always accompanied by very significant training in the use of new tools, as well as regarding work safety and organisation.

In line with previous years, the Group's training costs vary by unit but are generally between 3% and 5% of gross payroll.

In 2008, over 8,500 ERAMET Group employees worldwide were provided with training, representing in excess of 610,000 hours.

## 17.7. EMPLOYEE PROFIT-SHARING SCHEMES

## 17.7.1. Profit-sharing agreements

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 profitsharing from 12 to 15% of payroll.

Equivalent provisions in Sweden are based on the ratio of total payroll to profit.

in 2008, the total amount paid out with respect to discretionary and mandatory profit-sharing schemes was €22,100 thousand, which represents over 6% of the Group's salary bill, but almost 10% of salaries of the companies in question.

in 2007, the total amount paid was €26,400 thousand, namely close to 6% of the Group's salaries but a little over 9% of salaries at the companies in question.

In 2008, the total amount paid out was €29,967 thousand.

Reminder of amounts for ERAMET:

Year	Thousands of euros
2008	3,605
2007	2,620
20ns	2,031
2005	1,898
2004	2,080
2003	1,149
2002	515

#### 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 2008, several companies in mainland France paid in a one-off top-up to the amounts saved by employees.

Savings are invested in mutual funds managed by financial institutions independent of the Group and controlled by equal-representation supervisory boards.

On 31 December 2008, 4,428 employees in France were members of the Company Savings Plan, with assets totalling over €44 million, i.e. an average of €9,937 per saver. In New Caledonia, 2,148 employees are members of the Company Savings Plan, representing total assets of over €33 million on 31 December 2008, namely an average of €15,401 per SAVAL

## 17.8. HEALTH AND SAFETY

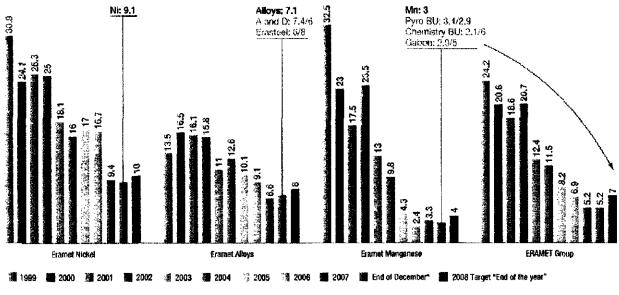
### 17.8.1. Safety

### Frequency rate trends

The frequency rate is defined as the number of lost-time accidents per million hours worked.

The graph below shows the accident frequency rate for the past eight years at a virtually constant scope (excluding Chinese plants for 2003 to 2006 and including Setrag for 2007, and Weda-Bay for 2008).

A steady improvement in the accident 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. This improvement is thanks mainly to initiatives in the Manganese Division (which accounts for close to half the hours worked in the Group), to a leaser extent the Alloys Division and, lastly, for 2007 and 2008, to the Nickel Division and more specifically Le Nickel-SLN in 2007 (2008 having witnessed the inclusion of the Weda-Bay site in the Group's scope of consolidation).



\* 12 Rolling months.

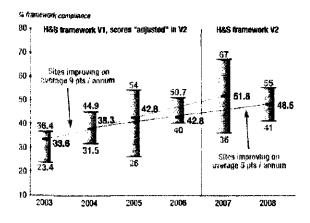
2008 was marked by an improvement in the frequency rate which levelled off (in spite of a low point of 4.8 during the year and on a rolling 12-month basis) and, particularly by the occurrence of 5 fatal accidents during the first six months whereas, on average over the last ten years, the Group had only seen one fatal accident per annum.

## 17.8.2. Safety audits

A site assessment policy is carried out through systematic audits at the 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 the V2 Safety Audit Framework:

In 2008, continuing on from 2007, the ERAMET Group performed all H&S audits using the V2 H&S Audit Framework (that includes, compared to V1, new requirements including those of the international OHSAS 18001-1999 standard).



The results of these audits partly serve as the basis for preparing the action plans of the Group and subsequently and particularly those of the sites for the following two years and, for example, in 2003, they enabled a major risk to be detected, with a specific initiative taken at Group level in 2004 in order to control it (planned and budgeted initiative carried out across a set of pilot sites, rollout to all sites scheduled for 2005 and 2006 and for the most part carried out).

### Safety audits in 2008

26 auditors (systematically accompanied by the Group H&S Manager and backed up by senior auditors such as the Group medical officer or the Environment Coordinators) carried out safety audits at 19 sites in 2008:

- → 11 sites already audited in 2006. Compared to the previous audit in 2006, these sites had improved, in terms of the percentage of compliance with the framework, by between zero to three points for the sites that had made the least progress and 8-13 points for the sites that made the most progress;
- → 3 sites (Tertre and Imphy for HSE (Health, Safety and the Environment) and Setrag for H&S (Health and Safety), were used as a test base for the V3 framework;
- ◆ 2 sites were audited for the first time (ERAMET Mexico and Setrag in Gabon), following a specific request from management at these sites;
- → a specific approach was adopted in New Caledonia: During 2 assignments, 7 auditors were trained, together with Mine Safety coordinators, and in that way 3 of the 4 mining sites were audited.

The results (in terms of percentage compliance with the framework)

- → an improvement of almost 6 points in the average value between 2006. and 2008 (compared to 9 points between 2004 and 2006);
- → respective increases of 1 and 4 points, in the minimum and maximum values between 2006 and 2008 (compared to 10 and 13 points respectively between 2005 and 2007).

More generally, a review of the past 6 years of results of this policy of H&S audits regularly carried out at sites every two years, shows two groups of sites that have, respectively, improved, on a straight-line basis, by 5 and 9 points per annum.

#### Training new auditors

11 new French-speaking auditors (7 of whom are based in New Caledonia) were trained in 2008. In addition, the attendance of foreign and English-speaking H&S coordinators at the International HSE Club meeting also enabled the following new auditors to be trained: 2 Mexicans, 2 Norwegians, 4 Americans and 2 Indonesians.

Investments in training have also reaped benefits for the audits of foreign and/or distant sites with the participation of local auditors who understand the culture of the country or continent in which the site is located.