



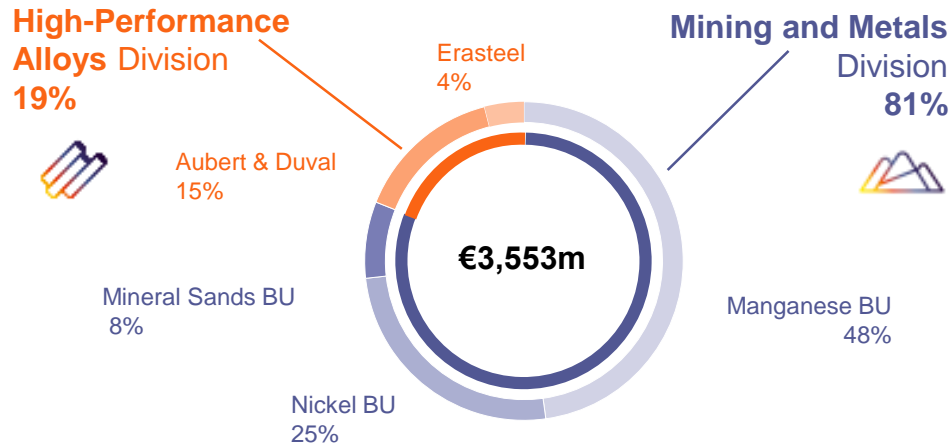
Eramet Group detailed Presentation

**2021 BofA Global Metals, Mining & Steel
Conference**

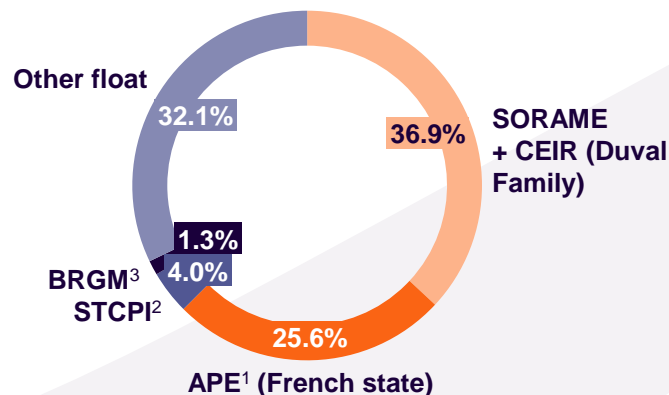
18-20 MAY 2021

A global leading mining and metallurgical Group

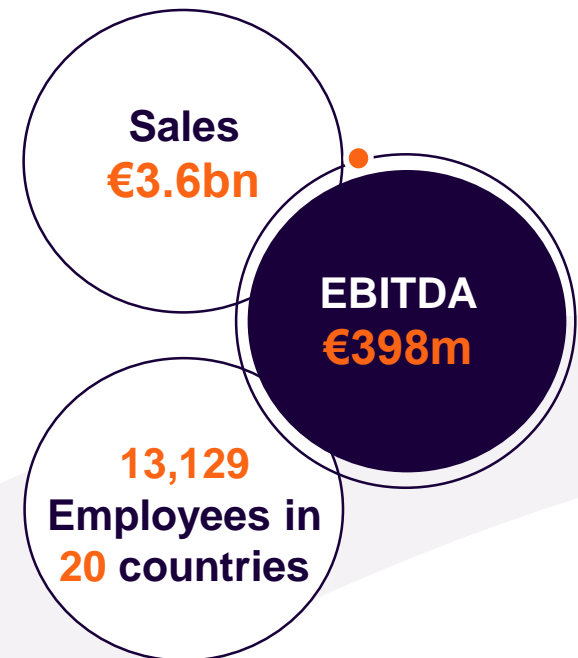
2 divisions with global leading positions



Long term and stable shareholders



2020 KPIs



€1.6bn

Market capitalisation end-April 2021

¹ APE (Agence des Participations de l'Etat)

² STCPI (Société Territoriale Calédonienne de Participation Industrielle): entity owned by the New Caledonian provinces

³ BRGM (Bureau de Recherches Géologiques et Minières): the French Geological Survey Office

A committed, contributive and recognized corporate citizen

1 Societal engagement aligned with strategic vision

- A 2018-2023 CSR roadmap to structure and set the pace for our action plans
- **Aligned with the United Nations' Sustainable Development Goals**

2 Contributing to the communities in which sites are located

- First risk of the Mining and Metals sector: **license to operate**. Eramet's DNA has always been to partner with the main countries and territories where it operates
- Beyond mining operation, the Group **contributes to the local development and preserve the environment**

2 Reducing energy/climate footprint

- **On-track** to achieve our **2023** reduction target in products CO₂ intensity¹ (**-26%** vs 2018 ref)
- New **climate targets** set in 2020
 - > **-40%** Reduction target in absolute CO₂ emissions **2035** (vs 2019)
 - > **Carbon neutrality** (scopes 1 and 2) **2050**

3 Continued improvement in extra-financial rating

2021 MSCI
Overall score

A

among the top 30% of
the mining and
metals² panel

2020 ISS ESG
Overall score

B-

« Prime » status

First decile of the mining
and metals panel

2020 CDP³
Overall score⁴

B

among the leading
companies in the
mining and metals
sector

¹ CO₂ tonnes per tonne of outgoing product

² Non-precious metals

³ Climate Disclosure Project (CDP)

⁴ Ranking in the Climate Change survey



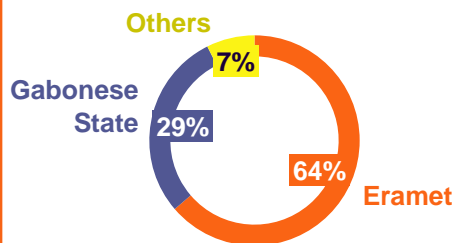
Eramet group's overview

Key partnerships with host countries and territories

Eramet associates the main countries and territories where it operates

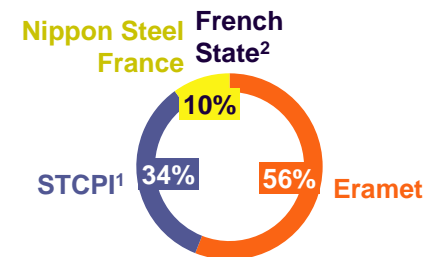
Gabon

- Around **29%** of Comilog's share capital is owned by the Gabonese Republic



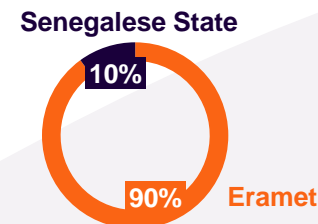
New-Caledonia

- STCPI holds **34%** of SLN's share capital
- STCPI holds around **4%** of Eramet's share capital



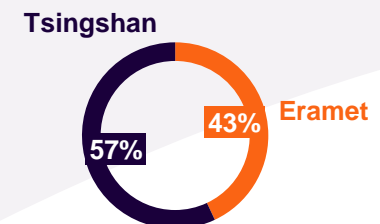
Senegal

- 10%** of Grande Côte Opérations's³ share capital is owned by the Republic of Senegal



Indonesia

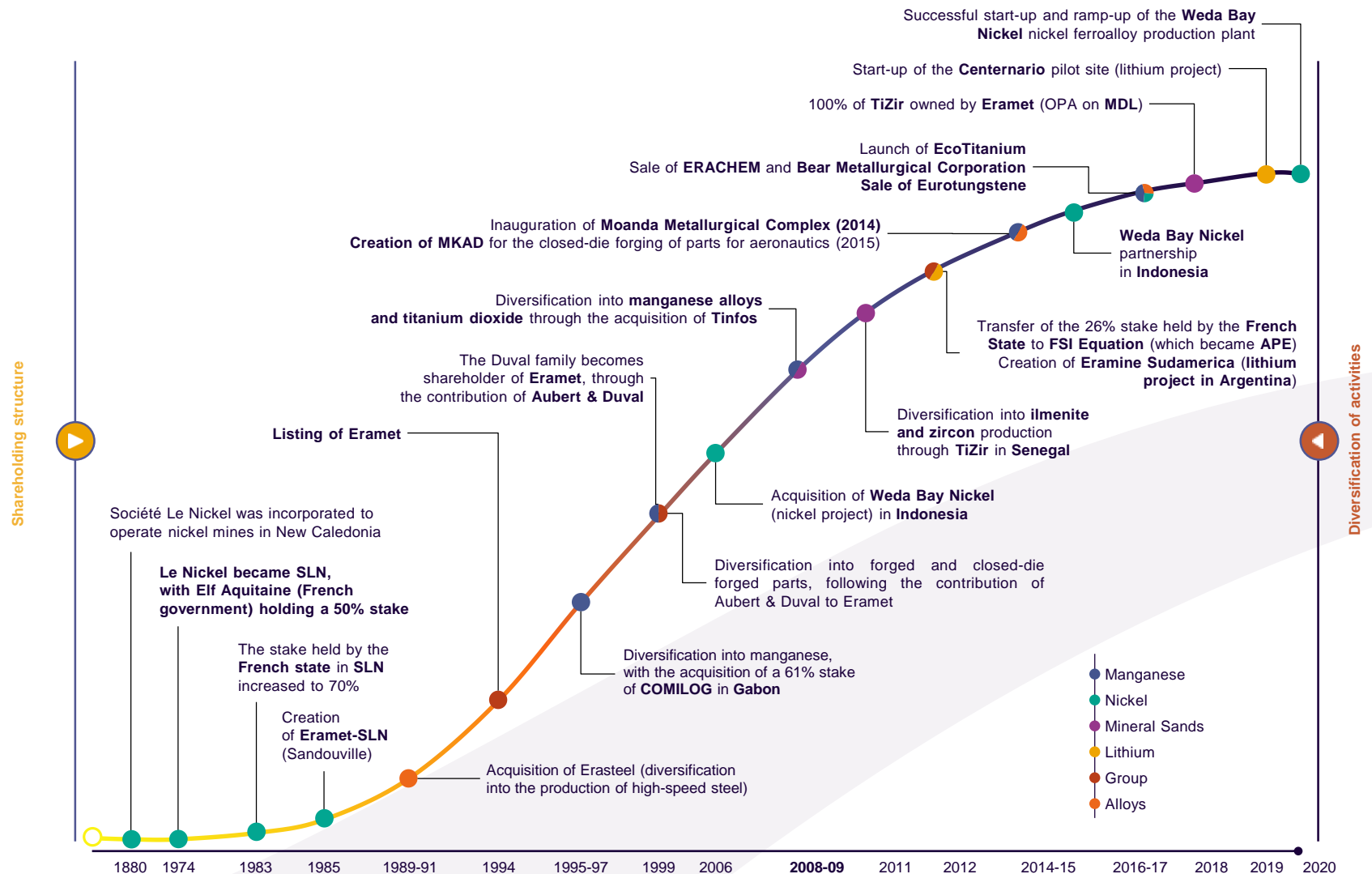
- Eramet holds a **43%** stake in in Strand Minerals Pte. Ltd, the holding company which owns 90% of PT Weda Bay Nickel



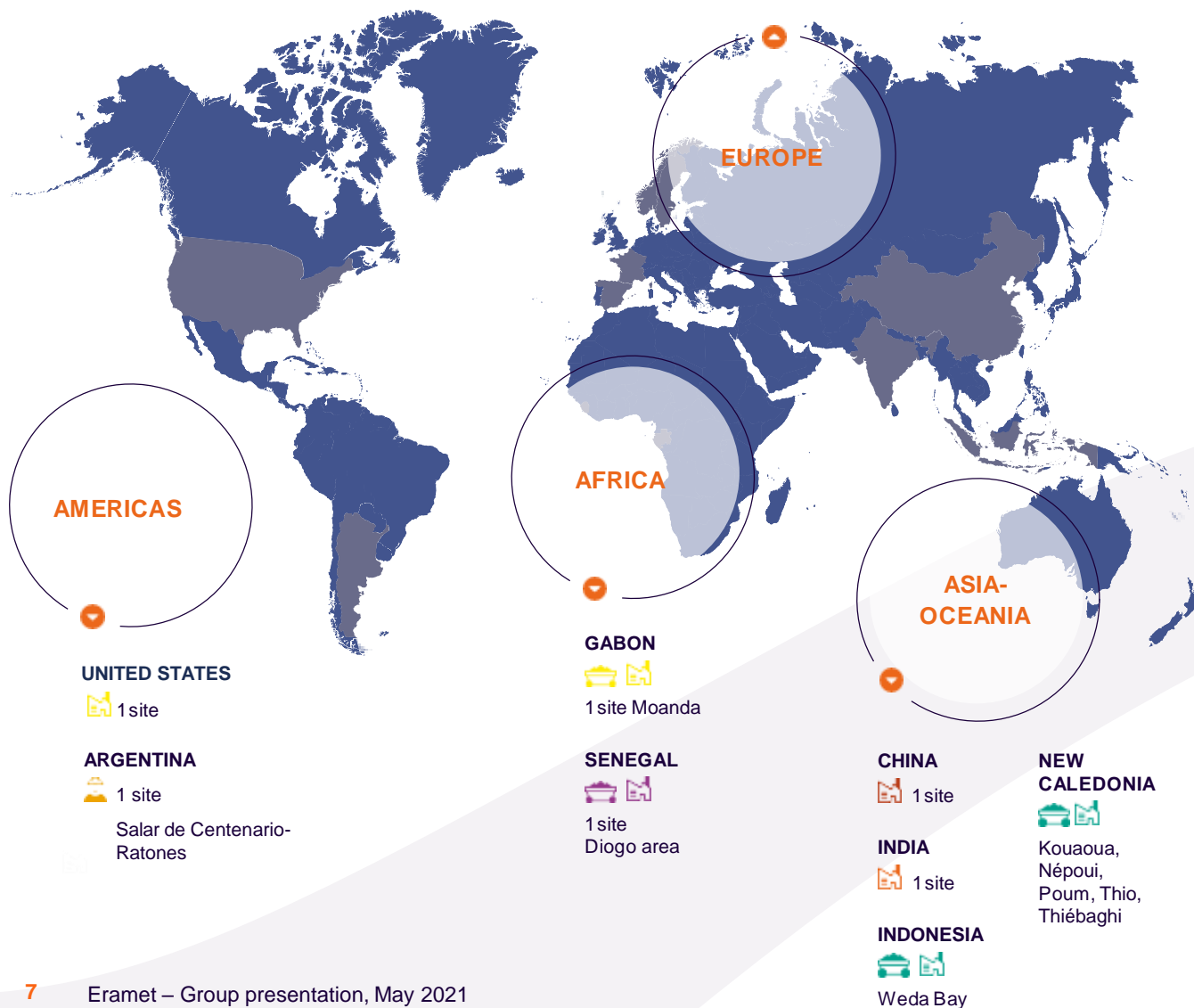
Long-term relationship reinforced by the significant contribution to the local economies

- #2** private employer in Gabon and main private employer in New Caledonia
- Sensitive & responsible** for social and environmental related matters

A longtime player



A global geographic footprint



FRANCE

- 12 sites
- 2 sites
- 1 site
- 1 site

NORWAY

- 3 sites
- 1 site

SWEDEN

- 3 sites

SPAIN

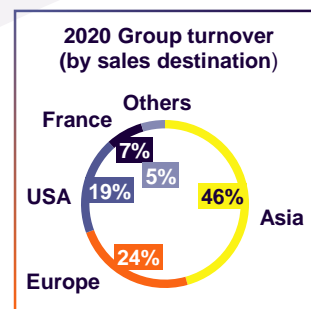
- 1 site

PROJECT

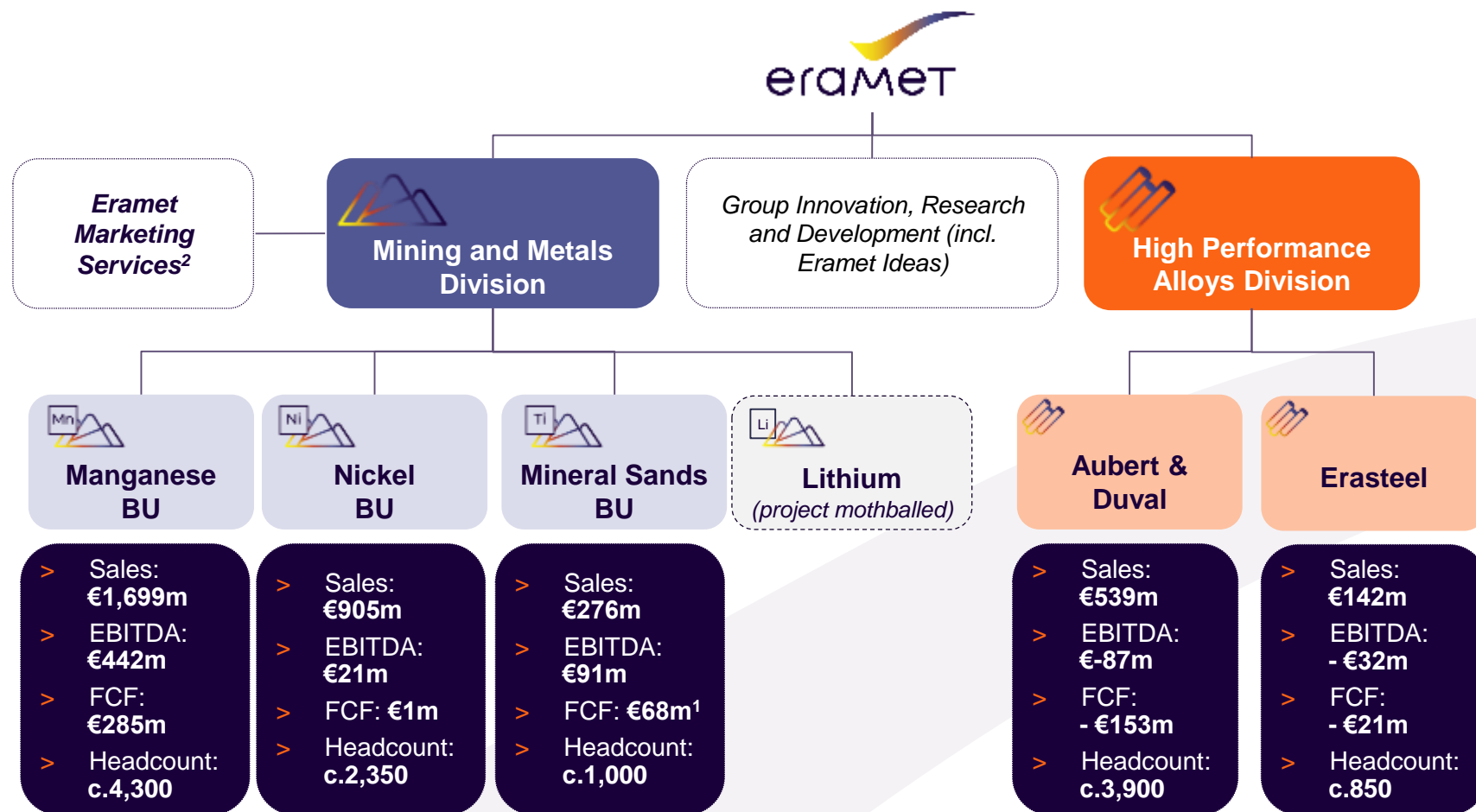
MINING SITE

PROCESSING

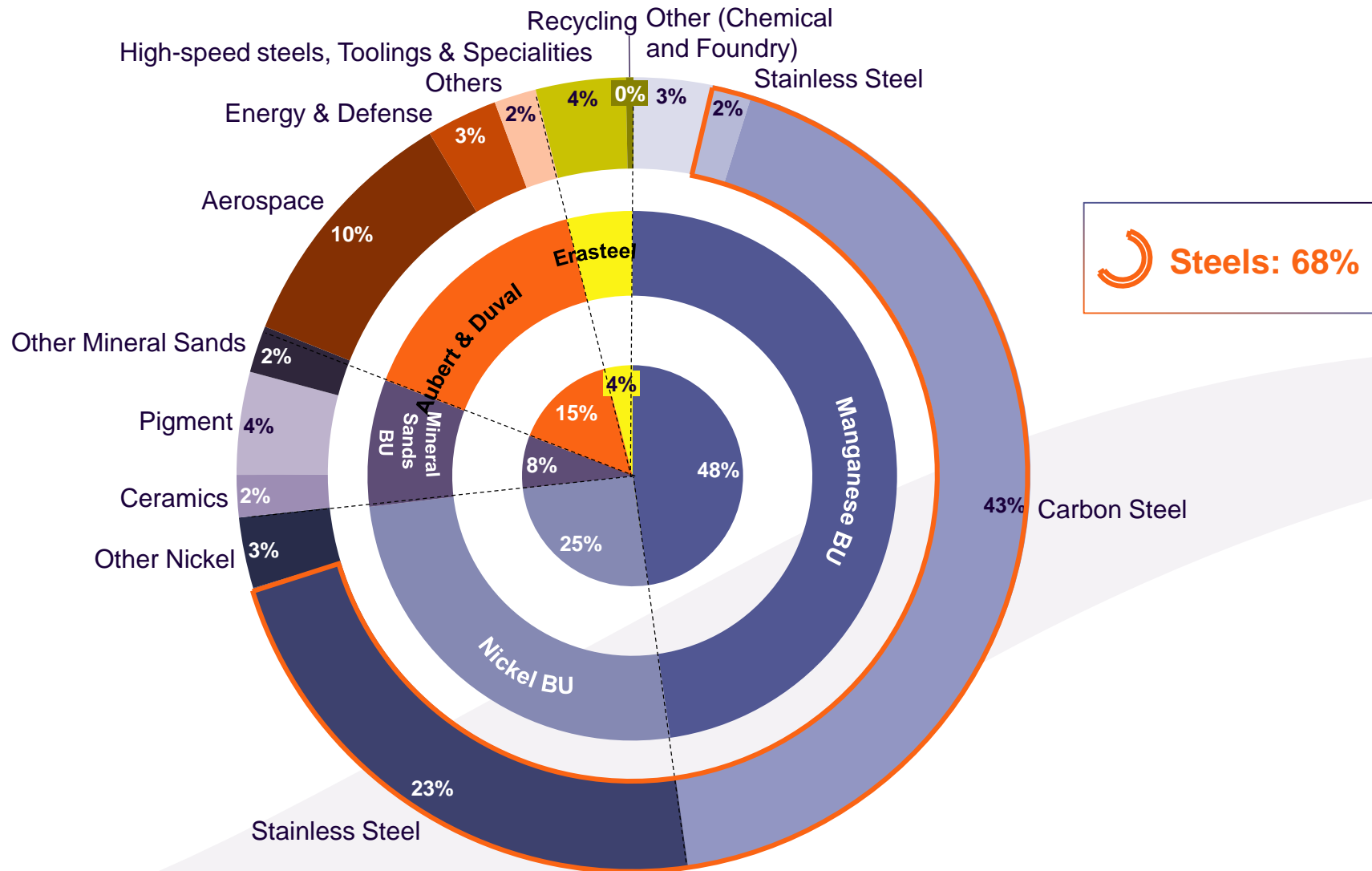
- Manganese
- Nickel
- Mineral sands
- Lithium
- Erasteel
- Aubert & Duval



Two main divisions; five business units



Steels represent c.70% of Eramet sales





Mining & Metals Division

Key Features

A diversified Mining and Metals Division with significant resources and highly competitive mines

	Manganese BU	Nickel BU	Mineral Sands BU
Resources	<ul style="list-style-type: none"> ➤ Gabon: 107 Mt resources of manganese content ➤ Resources' lifetime > 40 years ➤ Operated for 50 years 	<ul style="list-style-type: none"> ➤ New Caledonia: 19.4 Mt resources of nickel content ➤ Indonesia: 9.3 Mt resources of nickel content ➤ Resources' lifetime ~ 50 years ➤ Operated for ~130 years (NC) 	<ul style="list-style-type: none"> ➤ Senegal (Zircon & Ilmenite): 32.1 Mt resources (HMC) ➤ Resources' lifetime > 30 years ➤ Operated since 2014
	Lithium BU (project in Argentina): 10 Mt drainable resources (LCE ¹) – currently mothballed		
Industrial set-up	<ul style="list-style-type: none"> ➤ Gabon: highly competitive manganese mine with very high-grade ore (44%) ➤ Europe, USA, Gabon: 6 pyro-metallurgical plants 	<ul style="list-style-type: none"> ➤ New Caledonia: highly competitive mines and 1 pyro metallurgical plant: ➤ Indonesia: a world-class deposit and 1 low-grade nickel ferroalloys² plant ➤ Normandy (France): high purity nickel refinery 	<ul style="list-style-type: none"> ➤ Senegal: world's largest single dredge mineral sands operation ➤ Norway: 1 metallurgical plant
2020 Key figures	<ul style="list-style-type: none"> ➤ 5.8 Mt manganese ore produced ➤ c.700 kt manganese alloys produced 	<ul style="list-style-type: none"> ➤ New-Caledonia: 5.4 Mwmt of nickel ore produced o/w 2.5 Mwmt exported; 48 kt of ferronickel produced ➤ Indonesia: 3.4 Mwmt of nickel ore produced ; c.24 kt-Ni of low-grade nickel ferroalloys produced 	<ul style="list-style-type: none"> ➤ c.760 kt of HMC³ produced ➤ c.200 kt of titanium dioxide slag produced

¹ Lithium Carbonate Equivalent

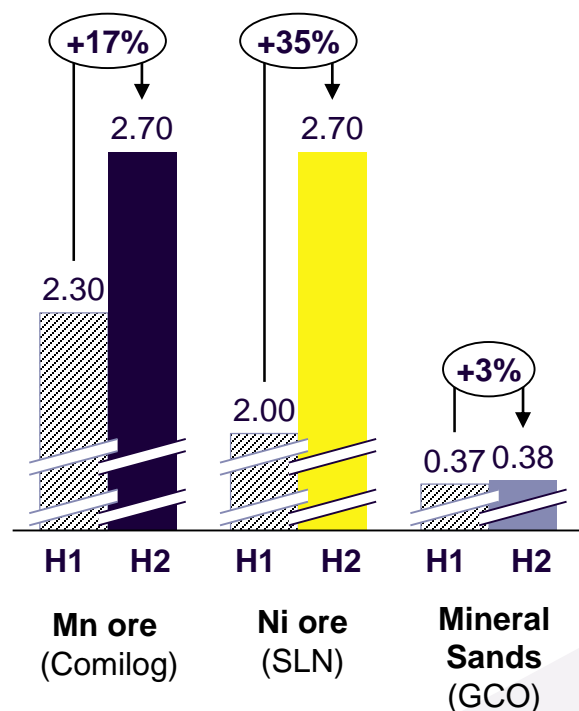
² 43% owned by Eramet in a joint-venture with Tsingshan, the leading global producer of stainless steel

³ Heavy Minerals Concentrate (HM sands content)

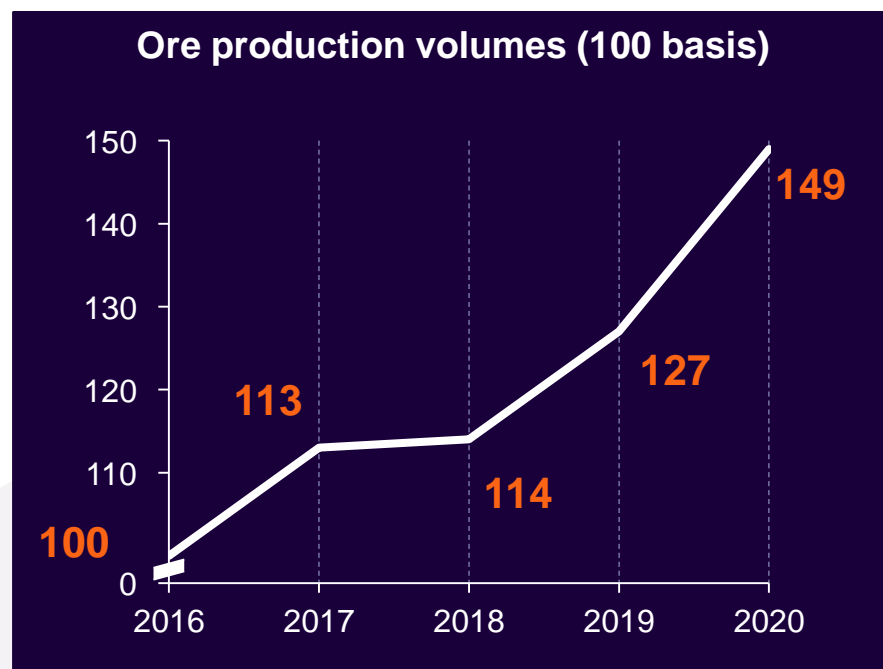
High seasonality in mining operations, strengthened by organic growth

High seasonality of key mining operations...

3-yrs average ore production (Mwmt)



...and increasing share of mining business in Eramet's portfolio



Steel (carbon and stainless) accounts for c. 70% of Eramet's end-markets



Manganese BU

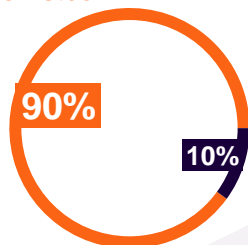


2nd global producer of high-grade Mn ore

1st source of Mn seaborne (Moanda mine)

1st global producer of refined Mn alloys

Carbon steel



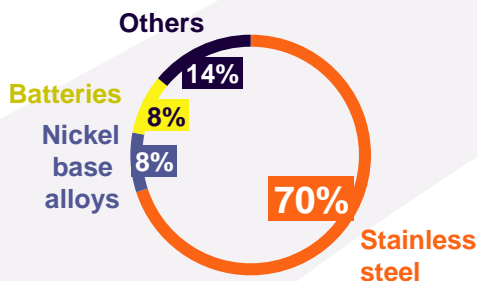
Chemistry and other application

Nickel BU



1st high grade ferronickel producer worldwide

1st source of quality ore (exports from New-Caledonia)



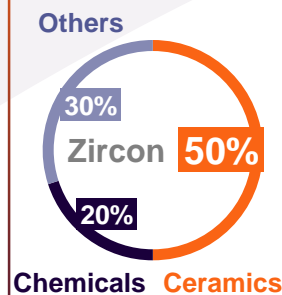
Stainless steel

Mineral Sands BU



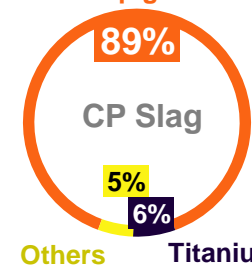
4th global producer of zircon

4th global producer of titanium feedstock



Chemicals Ceramics

TiO2 pigment



Others Titanium metal

Market share

Main applications

Manganese main growth drivers: carbon steel (90% of global production) and China



Manganese key features

3 types of manganese ore

- > “Low-grade local” ore: < 30% of manganese content
- > “Medium-grade” ore: > 30% but < 43%
- > “Rich” / “High-grade” ore: > 43%

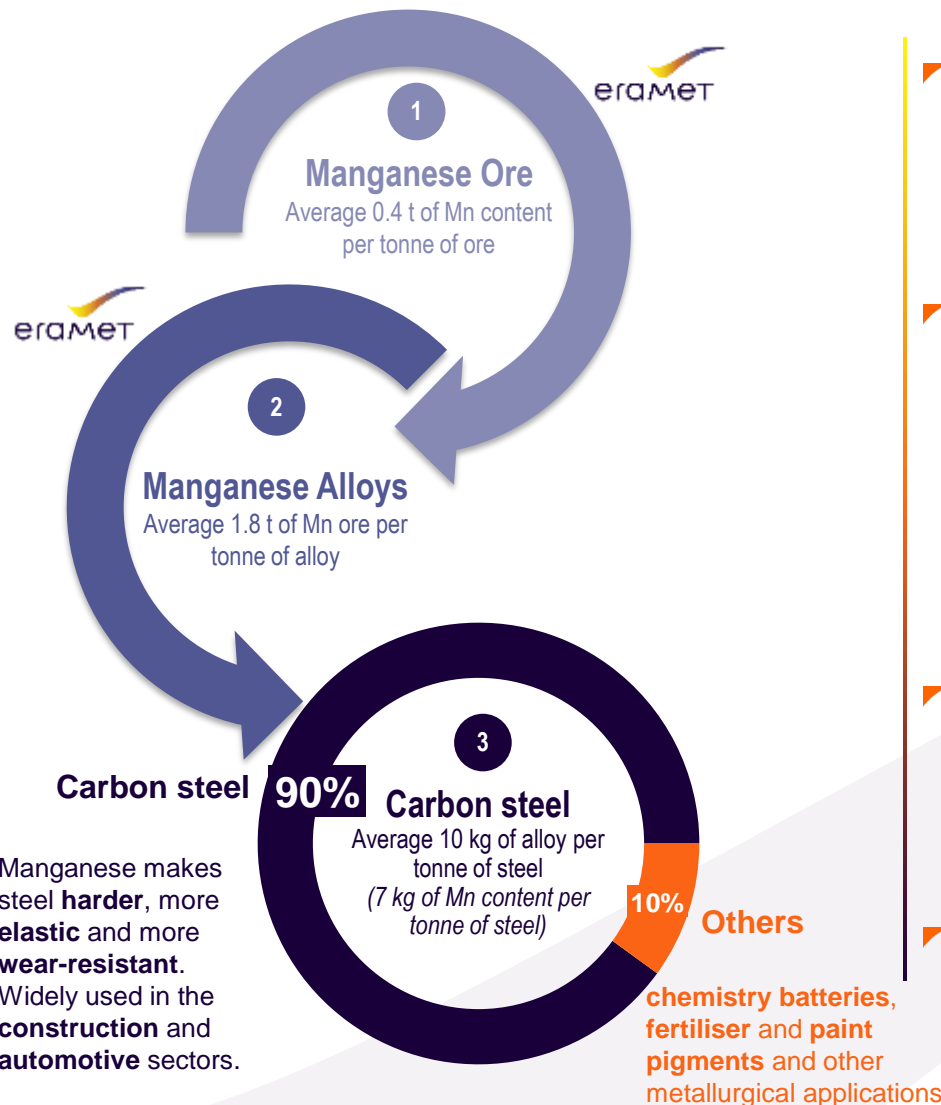
Two manganese alloys families

- > Standard
 - High carbon ferromanganese (6 to 8% carbon)
 - Standard silicomanganese (< 1.5 to 2% carbon)
- > Refined
 - Of which medium carbon ferromanganese (< 1.5 to 2% carbon)

No futures market: OTC (over-the-counter) negotiation

- > CRU index: bi-weekly
- > Metal Bulletin index: weekly

China: 57 % of global carbon steel production in 2020



Manganese BU: a first class competitiveness thanks to excellent mining operation

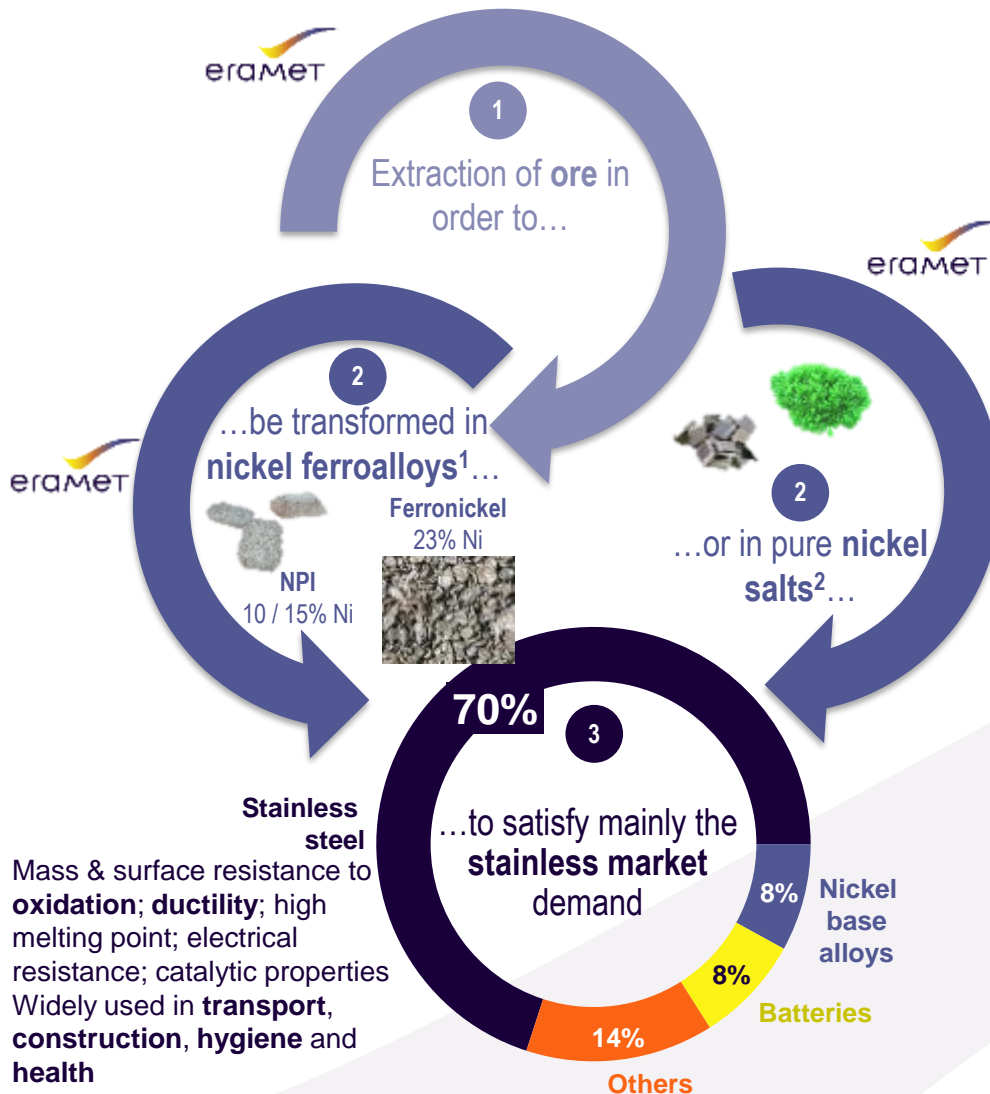


Manganese BU key features

- **A highly competitive manganese mine in Gabon** (Moanda), operated by Comilog
 - > High-grade oxide ore 44%
 - > First quartile cash cost
- **Two units of local transformation** in Gabon, CIM and CMM, for high grade manganese production and manganese alloys
- **5 pyrometallurgical industrial plants** in the **USA** and in Europe (1 in **France**, 3 in **Norway**)
- Ore transportation in Gabon operated by a **100% owned railway company** (600 km of track)



Nickel main growth drivers: stainless steel and batteries



Nickel key features

- **Two main types of nickel ore**
 - > **Sulfide-type ore** (nickel combined with several other valuable metals) as in Canada, Russia to be transformed in nickel concentrate
 - > **Laterite-type ore** as in New-Caledonia and Indonesia to be transformed into ferronickel, NPI ("Nickel Pig Iron") or nickel metal
- **1 tonne of 300 series (stainless steel) contains 80 kg of nickel**
- **Nickel is traded on the LME index (pure metal)**
- **China : 61 % of global stainless steel production in 2020**

Nickel BU: a key transformation underway



Nickel BU key features

- **Successful implementation of new business model in New Caledonia**
 - > 5 main operated mines and one pyrometallurgical plant
 - > High-grade ferronickel (23% Ni) and nickel ore exported (1.7 to 1.9 % Ni)
- **Weda Bay nickel mine and low-grade ferroalloys plant already achieved great successes**
 - > 3.4 Mwmt of nickel ore produced in 2020, already at a pace of 6 Mwmt/year
 - > 23.5 kt-Ni of nickel ferroalloys produced in 2020 thanks to quick ramp-up
- ⇒ **First-tier mine and low-grade ferroalloys production position**
- **Ramp-up of the high purity nickel refinery in Sandouville, France**
 - > Production of nickel salts and high-purity nickel (total capacity of 15 kt)



Main customers



Main competitors

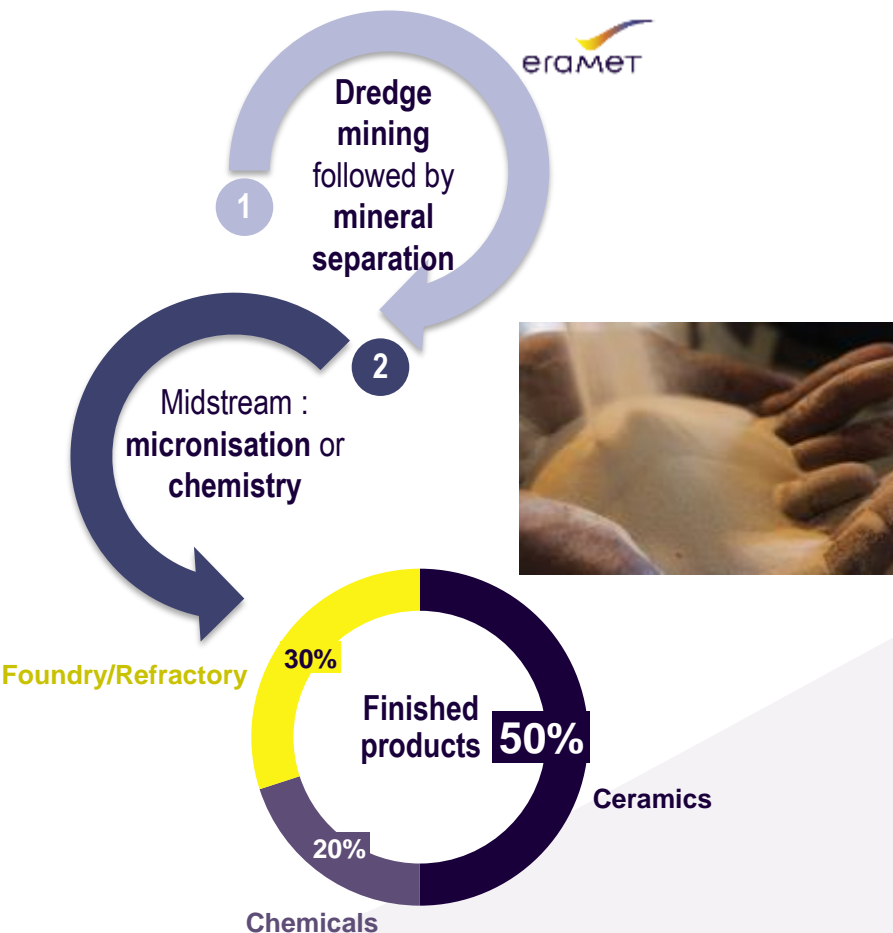


Mineral Sands growth drivers: ceramics and pigments market



Zircon key features

- Long Term pricing agreement¹ (spot prices in China only)



Titanium dioxide key features



Mineral Sands BU: operations integrated from the mine in Senegal to the beneficiation plant in Norway



Mineral Sands BU key features

- ▶ **TiZir Senegal (GCO):**
 - > Extraction of heavy mineral (mineral raw materials which contain heavy minerals concentrated).
 - > Production of ilmenite (titanium-iron oxide), leucoxene, rutile and zircon
- ▶ **Ore rail transportation from the mine to the port of Dakar** operated by TiZir
- ▶ **TiZir Norway (TTI):** Transformation of ilmenite (metallurgical valorization) into titanium slag and pig iron



Main competitors

TRONOX

KENMARE

**BASE
RESOURCES**

RioTinto

ILUKA

Major projects able to deliver long-term sustainable supply of key battery materials: Nickel, Cobalt and Lithium

Nickel-cobalt : Joint development with BASF

- **Nickel & Cobalt sulphates** dedicated to cathode-active-material production for li-ion batteries.
- **BASF and Eramet study the feasibility of nickel-cobalt production** for electric batteries from the Weda Bay mine in Indonesia.
- The project targets a start-up of a hydrometallurgical plant and refinery in the mid-2020s.
- Target production volumes : **42 kt of Nickel and 5 kt of Cobalt per year.**



Lithium: A world class deposit in Argentina

- **10 Mt LCE*** of drainable resources (> 50 years) located in the Salta region.
- **Battery grade lithium carbonate**, with a 1st quartile cash-cost position among the best in the industry
- Project mothballed in April 2020 in the context of the global economic crisis.



An innovative process developed by Eramet

- Technology based on an **active solid to extract and concentrate** the lithium from brine resources
- **Yield of 90%, superior to the traditional evaporation process**, and confirmed by the pilot operations on site in real conditions since end 2019
- **Optimized water consumption** thanks to recycling

European projects dedicated to the battery value chain

ReLiVeVe **An innovative closed-loop process for li-ion batteries recycling**

▶ A European partnership



▶ 2 phases

- 2020-2021: R&D, pilot tests and initial studies
- 2022-2024: 1st industrial development (continuous piloting phase)

▶ **Objective:** 15% market-share by 2030

EuGeLi **CO2-free lithium from European natural geothermal resources**

▶ A European consortium



- ▶ An innovative technology based on a **direct lithium extraction process** developed by Eramet for its Centenario Project in Argentina
- ▶ A process adapted to the **specificities of the geothermal European resources**
- ▶ **Successful piloting tests end 2020 in real conditions** in Alsace, France
- ▶ **Studies and larger scale pilots continuing in 2021** to demonstrate project feasibility



High Performance Alloys Division

Key Features



A High Performance Alloys Division with unique know-how dedicated to strategic industries



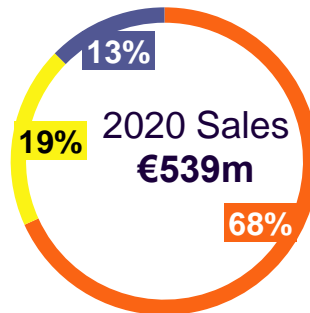
Market share

Aubert & Duval

- **2nd** high-power closed-die forged parts producer worldwide
- A world leader in:
 - > high performance steels, superalloys and titanium
 - > large closed-die forgings

Main applications

- Aerospace
- Energy & Defence
- Others



Long products

Forged products

Closed-die forged parts

Erasteel

- **1st** in powder metallurgy high speed steel (cutting and cold tools)
- A world player in conventional high speed steels

- High-speed steels, Tooling & Specialities
- Recycling



High-speed steels

Recycling¹

A comprehensive industrial set up with unique tools



16 industrial sites located in:

- Europe (France, Sweden, Spain)
- Asia (China, India)
- US



11 industrial sites in France



Main competitors



Main customers





R&D Innovation

Eramet Ideas*, centre of excellence in mining, extractive metallurgy, alloys processing and recycling

Open innovation approach

- **Leadership / partnership** in European projects
- **Collaboration** with universities, industrials, start-ups on new technologies
- Creation of a **shared laboratory with CNRS**, « LILAB », to research metals of the energy transition

High-level R&D infrastructure in Trappes, near Paris

- More than 60 years of experience
- Laboratories, piloting halls
- High performance observation tools

Our main collaborative projects

- **ReLieve** : developement of an innovative process to recycle lithium batteries used in electric vehicles
- **SOLSA** : improvement of the efficiency of mining exploration by combining technologies (sonic drilling, analytical equipment, IT)
- **GO-4-0** : recovery of by-products from the steel and manganese metallurgy industries

Our partners



150

experts,
engineers and
technicians

1st

microscope in Europe
equipped with QEMSCAN
mineralogy software

Director of Investor Relations

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