

# A New ERA

**Eramet Group presentation – May 2023** 





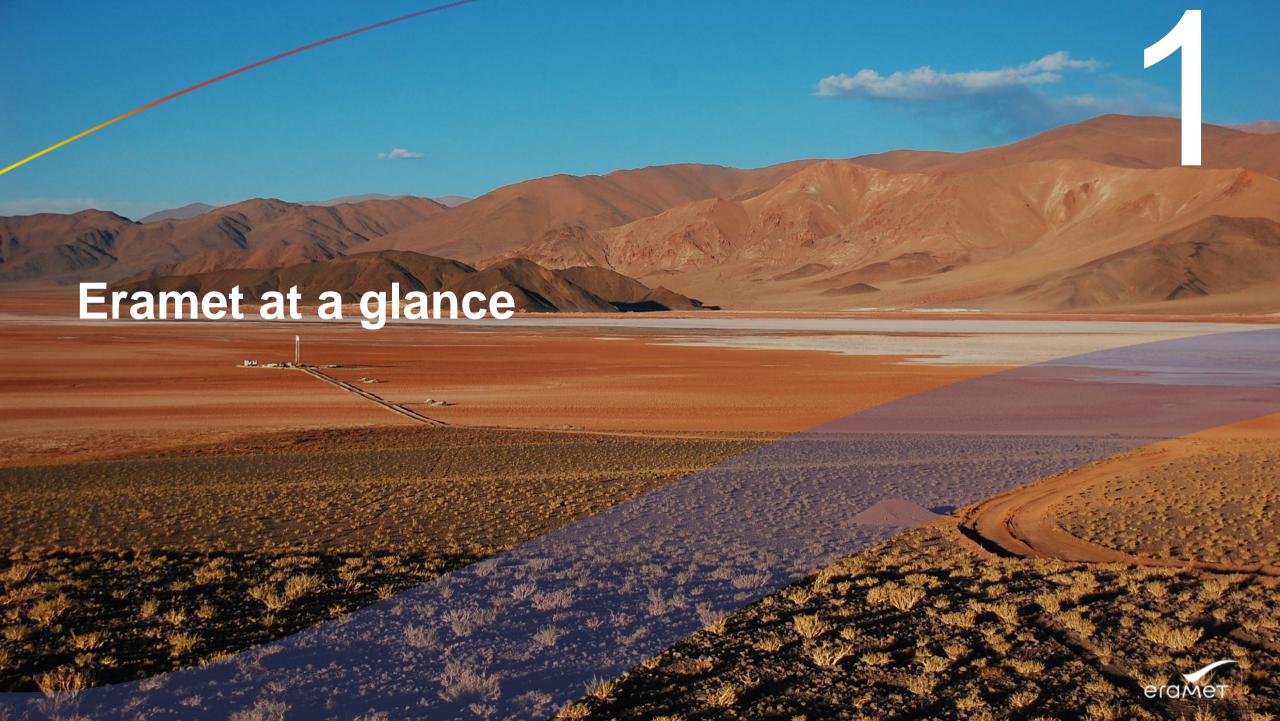
# **Disclaimer**

Certain information contained in this presentation including any information on Eramet's plans or future financial or operating performance and any other statements that express management's expectations or estimates of future performance, constitute forward-looking statements. Such statements are based on a number of estimates and assumptions that, while considered reasonable by management at the time, are subject to significant business, economic and competitive uncertainties. Eramet cautions that such statements involve known and unknown risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of Eramet to be materially different from the company's estimated future results, performance or achievements expressed or implied by those forward-looking statements.

Past performance information given in this presentation is solely provided for illustrative purposes and is not necessarily a guide to future performance. No representation or warranty is made by any person as to the likelihood of achievement or reasonableness of any forward-looking statements, forecast financial information or other forecast. Nothing contained in this presentation is, or shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or future performance of Eramet.

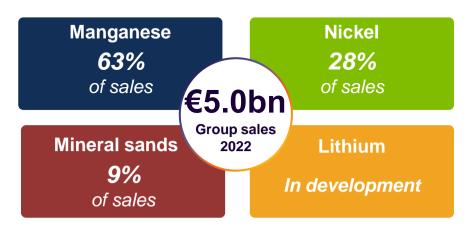
Nothing in this presentation should be construed as either an offer to sell or a solicitation to buy or sell securities nor shall there be any offer or sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful under the securities laws of any such jurisdiction.



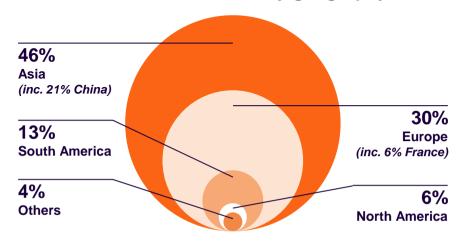


# A global pure player in Mining & Metals

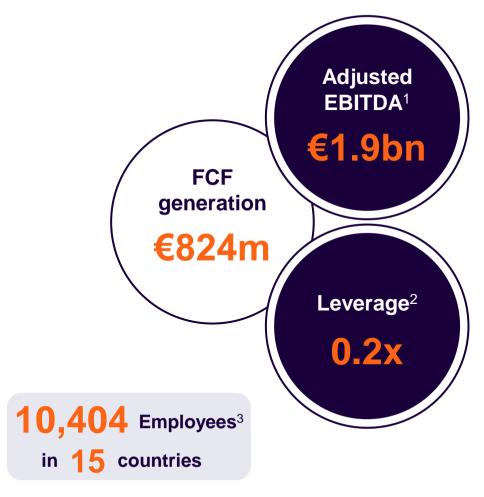
#### Refocused on 4 activities<sup>1</sup>



#### Breakdown of sales by geography



#### **Record financial results in 2022**



<sup>&</sup>lt;sup>1</sup> EBITDA including Eramet's share in Weda Bay's EBITDA of €344m



<sup>&</sup>lt;sup>2</sup> Net debt / EBITDA

<sup>&</sup>lt;sup>3</sup> Including 1,314 employees of Weda Bay Nickel

# Operating in manganese, nickel, mineral sands Developing battery-grade lithium



<sup>2</sup> incl. Weda Bay contribution of €344m

егамет

<sup>&</sup>lt;sup>1</sup> 9,090 total headcount based on Eramet's new perimeter, incl. 782 at EMAS & holding level but excl. Weda Bay Nickel's 1,314 employees

# Eramet biggest strength: its first-class deposit portfolio

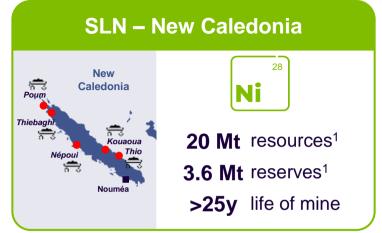
Long-life world-class deposits positioned on the first quartile of the mining industry cost curve





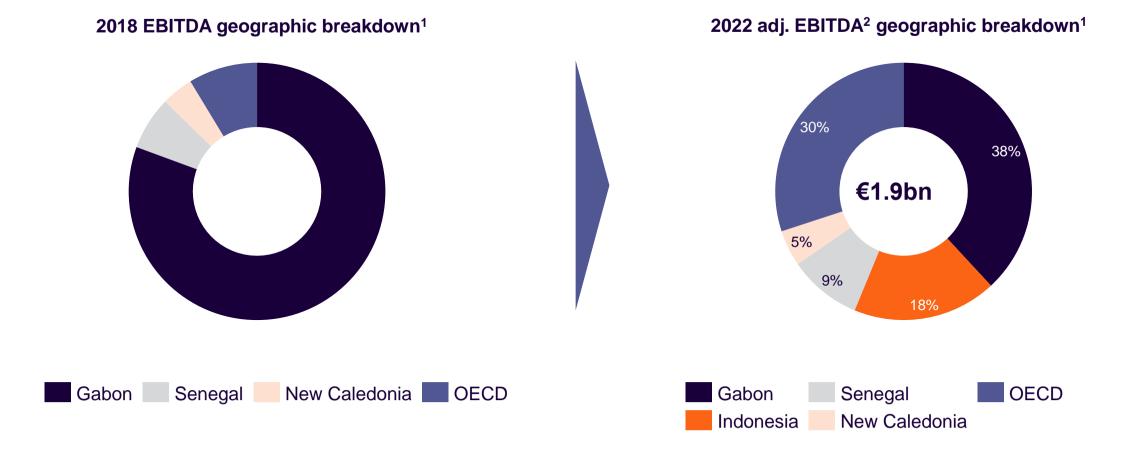








# An increased diversification by country strengthening the business profile



<sup>&</sup>lt;sup>1</sup> Excluding discontinued activities, for illustrative purposes in 2018



<sup>&</sup>lt;sup>2</sup> Adjusted EBITDA is defined in Appendix 8 – Financial Glossary of the FY 2022 results press release

# A committed, contributive and recognized corporate citizen

# OUR PURPOSE, OUR REASON FOR ACTING

"

Become a reference for the responsible transformation of the Earth's mineral resources for 'living well' together 1

Committed to people



Ensuring the Health & Safety of our employees & subcontractors and contributing to communities' lives

**2** 

Committed to economic responsibility



Contributing to energy transition in a responsible way, being an ethical partner of choice

3

Committed to the planet



Reducing energy / climate footprint and fostering biodiversity

An **ambitious 2018-2023 CSR roadmap** contributing to **the UN's Sustainable Development Goals, aligning** with the **highest standard for responsible mining** developed by **IRMA** 



# A 2018-2023 CSR roadmap combining operational performance and corporate commitment...

## ...answering our ESG issues and the UN Sustainable development goals



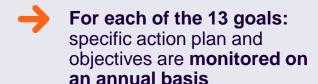
### **Commitment to people**

- 1 Ensure the **Health** and **Safety** of our employees and subcontractors
- Enhance skills, promote talent, and career development
- 3 Strengthen employee engagement
- Integrate and foster the richness of diversity
- Be a valued and contributing partner to our **host communities**



# Commitment to economic responsibility

- Be an **energy transition leader** in the metals sector
- Actively contribute to the development of the circular economy
- Be a reference company in terms of respect for **human rights** in our field of activity
- 9 Be an ethical partner of choice
- Be a responsible company of reference in the M&M sector





Target 100% = achievement of annual objectives

2022 CSR performance

115%

Outperforming roadmap objectives for the year 2022

Global CSR performance weighting on managers' compensations



## **Commitment to the planet**

Reduce our atmospheric emissions

(12)

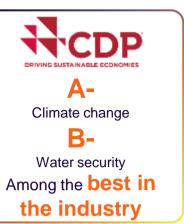
Protect water resources and accelerate the rehabilitation of our mining sites by fostering biodiversity

13

Reduce our energy and climate footprint



# A CSR commitment and performance recognized by rating agencies





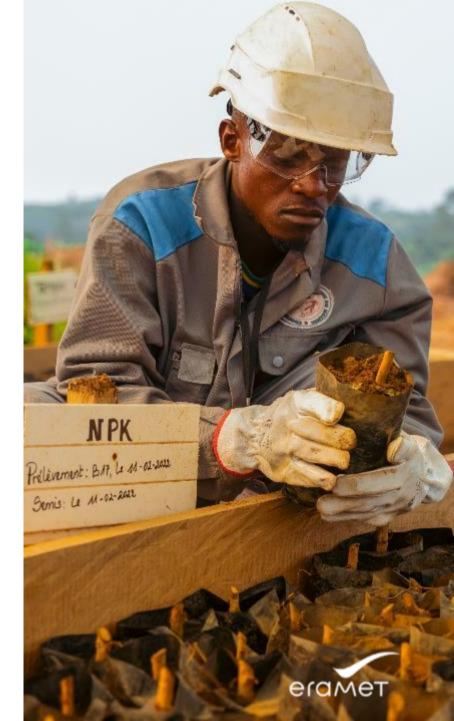








<sup>1</sup> Lower is better



# Aligning with the highest standard in responsible mining



A standard encompassing best practices



Promoted by our stakeholders







of our mining sites engaged in an independent audit process by 2027

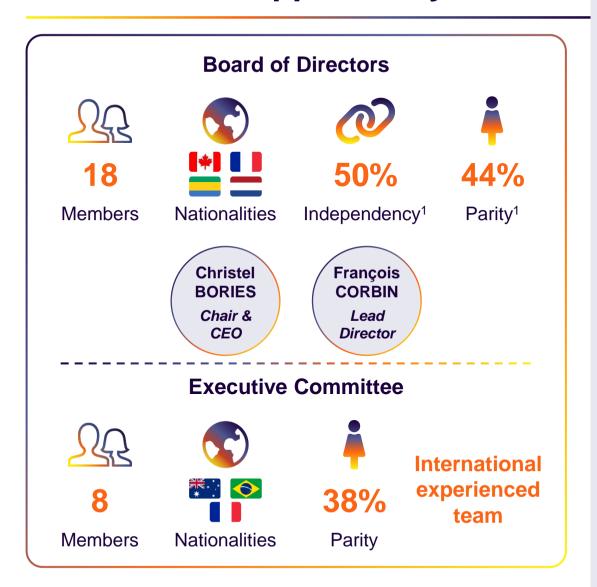
 2021-22: 4 sites completed selfassessments

Thio & Tiébaghi (New Caledonia) in 2021, Centenario (Argentina) & GCO (Senegal) in 2022

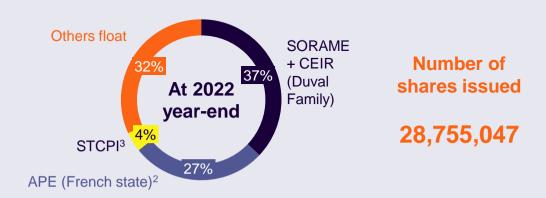
2023: 1st external audit planned at GCO



# Governance supported by stable shareholding



### Long-term reference shareholding



## Management's & employees' compensations linked to CSR

	<ul><li>Safety - FR2<sup>6</sup></li><li>&amp; fatalities</li></ul>	Progress on CSR roadmap
Short-term variable <sup>4</sup>	10%	10%
Long-term variable <sup>5</sup>	n/a	20%

<sup>&</sup>lt;sup>1</sup> Does not include directors representing employees

<sup>&</sup>lt;sup>6</sup> FR2 = number of lost-time and recordable injury accidents for 1m hours worked **ECMET** 



<sup>&</sup>lt;sup>2</sup> APE (Agence des Participations de l'Etat)

<sup>&</sup>lt;sup>3</sup> STCPI (Société Territoriale Calédonienne de Participation Industrielle): entity owned by the New Caledonian provinces

<sup>&</sup>lt;sup>4</sup> ~1,900 managers concerned (inc. ExCom), representing ~20% of Group employees

<sup>&</sup>lt;sup>5</sup> >250 managers concerned (inc. ExCom)



# Successful strategic repositioning: Eramet becomes a player focused on the upstream of the metals value chain

1 Achieved

### **FIX / REPOSITION**

our least performing assets

→ **A&D** divested



→ Sandouville divested



→ Erasteel divestment to be closed by H1



→ SLN



Future of nickel in New Caledonia under review

2

Overachived

### **GROW**

in our attractive businesses

→ Ore production organic growth

+215% since 2018<sup>1,2</sup>

Manganedse ore

+74% since 2018

Nickel ore

From **5Mt** in 2019 to >25Mt<sup>1,2</sup> in 2022

3

Accelerating

### **EXPAND**

our portfolio in metals for energy transition

- → Lithium
  - Argentina
  - Alsace
- → Nickel/Cobalt for batteries
- → Battery recycling project



<sup>&</sup>lt;sup>1</sup> Including Weda Bay marketable production (high-grade ore)

<sup>&</sup>lt;sup>2</sup> On a 100% marketable basis for Weda Bay

# Our purpose, our reason for acting

"

Become a reference for the responsible transformation of the Earth's mineral resources for 'living well' together

1

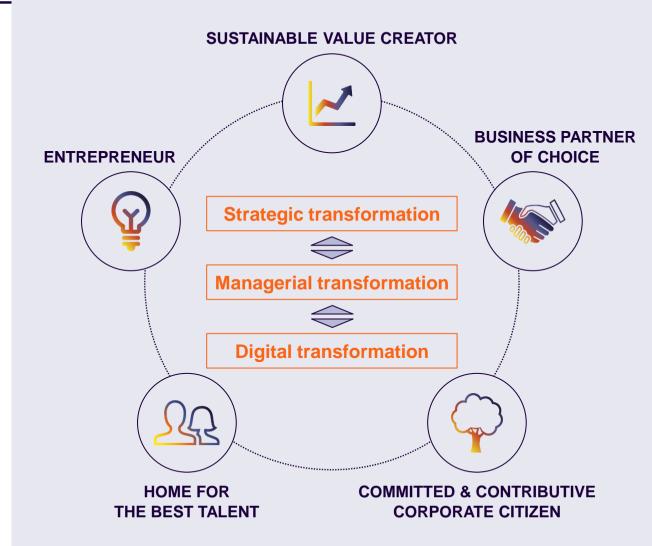
Develop a selective portfolio of valueaccretive mining and metallurgical activities

**2** 

Be among the best in each of our businesses, in terms of **performance**, **profitability and innovation** 

3

**Be admired** for our strategic model, our management system and our societal commitment





# The world will need new metals and more metals



## A pivotal mission for metal companies



GLOBAL ECONOMIC development needs metals



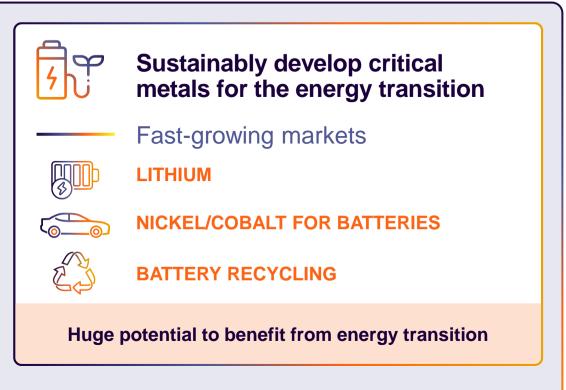
GREEN TECHNOLOGIES will need more metals





# A strategic roadmap based on 2 pillars supported by strong CSR commitments







Responsible transformation of mineral resources

COMMITMENT TO PEOPLE

COMMITMENT TO RESPONSIBLE ECONOMY

COMMITMENT TO THE PLANET

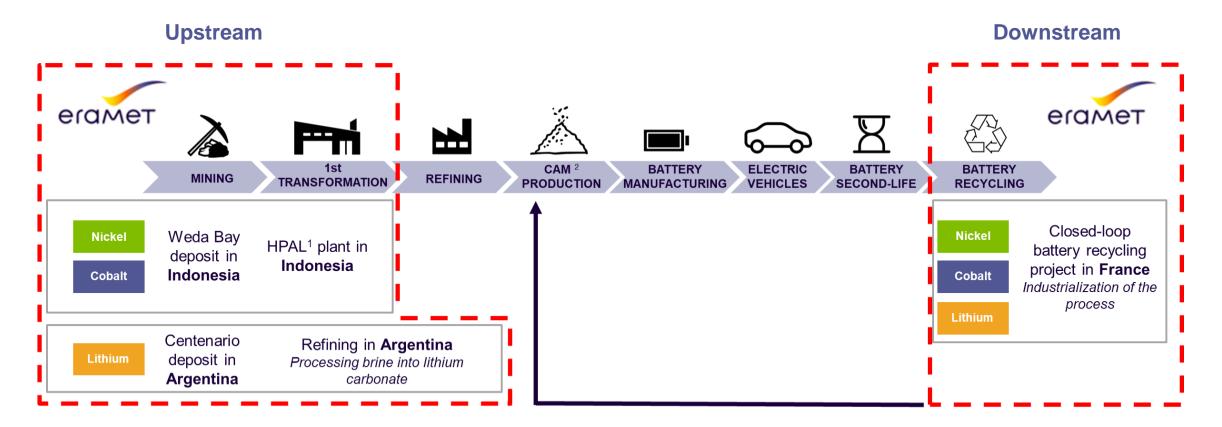
Growth enablers: Exploration, Innovation and Digital transformation



# Eramet positioned to be a key player of the battery value chain



Eramet offers a unique solution to sustainably secure the metal supply for the battery industry





<sup>&</sup>lt;sup>2</sup> CAM: Cathode Active Material

# Eramet is accelerating in the energy transition



Solid fundamentals to speed up the Group's ambitious, promising projects in metals for the energy transition





Study of lithium production from geothermal brines





Partnership with
SUEZ to produce
blackmass from Li-lon
battery recycling

**Eramet's project** to produce battery grade metals from blackmass



Lithium

project in

Alsace

(France)

<sup>&</sup>lt;sup>1</sup> FID = Final Investment Decision

<sup>&</sup>lt;sup>2</sup> MoU = Memorandum of Understanding

<sup>&</sup>lt;sup>3</sup> ÉS = Électricité de Strasbourg

<sup>4</sup> PFS = Prefeasibility Study

# Clear capital allocation policy: sustainable financial structure to support the Group's long-term strategy



## **Deleveraging**

- Significant deleveraging achieved in 2021 and 2022
- → Target leverage¹ of < 1x on average through the cycle</p>
- Maintain strong balance sheet to secure financial sustainability and maintain flexibility to seize attractive investment opportunities



# **Growth capex**

- Disciplined investment policy
- Primary focus on organic growth and "brownfield" projects with very quick payback and attractive returns
- Strategic greenfield projects, through potential partnerships with limited risk



### **Dividends**

Rewarding our shareholders for their long-term commitment with proven historical ability to adapt pay-out distribution policy to preserve balance sheet

Maintaining cash reserves of min. €300m on average over the cycle excluding back-up facilities



<sup>&</sup>lt;sup>1</sup> Net debt / EBITDA

<sup>&</sup>lt;sup>2</sup> To be proposed at AGM (dividend in respect of 2022 financial year)

# Credit rating awarded in April by two leading agencies, enhances the Group in securing and diversifying its financing plan

Moody's

**Fitch**Ratings

Ba<sub>2</sub>

BB+

**Outlook stable** 

**Outlook stable** 





- Reflecting the quality of Eramet's asset portfolio, refocused on the mining and metallurgical activities
- → Validating the Group's capital allocation policy, which prioritises a robust financial structure, and to support the Group's financial flexibility

## Rating agencies' highlights

## Moody's

"Strong market positions"

"Best in class cost position in all mining activities and large reserve base"

"Positive long-term demand fundamentals"

"Currently solid credit metrics"

"Prudent financial policy"

#### **Fitch**

"Reflects its conservative and transparent capital allocation priorities"

"Favourable cost positions, long reserve lives and integrated business model combining mining and processing"

"The investment phase will allow for further business growth over the coming years"







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





Average content of Mn per tonne of ore

- "Low-grade local" ore < 30% Mn content
- "Medium-grade" ore > 30% but < 40%
- "Rich"/"High-grade" ore > 40% егамет



**Average content of Mn** ore per tonne of allov

- Standard eggmet
  - High-Carbon FeMn (6 to 8% carbon)
  - Standard SiMn (< 2 to 3.5% carbon)
- Refined eramet
  - o/w Medium Carbon FeMn (< 1 to 1.5% carbon)



**Average content of Mn** 

allov per tonne of steel (7 kg of Mn content per tonne of steel)

#### Carbon steel 90%

Properties of Mn: makes steel harder. more elastic. wear-resistant

Uses of Mn: Construction. automotive sectors

Others 10% chemistry batteries, fertiliser and paint pigments and other metallurgical applications

### **Key Features**



No future market: OTC negotiation

- CRU index: bi-weekly
- **Fastmarkets Metal** Bulletin index: weekly



South Africa

of seaborne 40% production in 2022



**c.60%** of global Mn alloys production in 2022

of global carbon steel production in 2022



# **Eramet's industrial set-up in Manganese business**



### **Manganese ore activity**



Gabon

Moanda mine

7.5 Mt

2022 Mn ore production

>20 years

Life of mine

- World's leading manganese ore mine
- Operated by Comilog (63.7% Eramet) for 50 years
- Highly competitive cash cost (1st quartile of the industry)
- Ore transportation to Libreville port (600 km of track), operated by Setrag, a 51% subsidiary of Comilog



## Manganese alloys activity

6 pyrometallurgical plants

c.680 kt

2022 Mn alloys production

1 site: Dunkirk



1 site: Moanda



3 sites: Kvinesdal, Porsgrunn, Sauda



1 site: Marietta

Production of standard and refined alloys

**Lowest carbon** footprint in the industry



# Manganese BU market environment

#### **Market Share**

- 1st global producer of high-grade Mn ore
- 1st global producer of refined Mn alloys
- Main market for Mn Alloys: **Europe** and **North America**





# Nickel main growth drivers: stainless steel and batteries booming demand





#### Sulfide-type ore

Canada, Russia

26% of global production

- Nickel combined with several other valuable metals
- Nickel to be transformed in nickel concentrate

#### Laterite-type ore

New Caledonia, Indonesia

74% of global production

Nickel to be transformed into ferronickel, NPI ("Nickel Pig Iron") or nickel metal



#### Nickel Class I<sup>2</sup>

егамет (project)

Class I production: Nickel salt and Nickel metal. through hydrometallurgical process

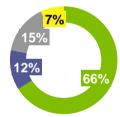
#### Nickel Class II<sup>2</sup>

Class II production: Ferronickel (15-50% Ni) and NPI (<15% Ni) through pyrometallurgical process



#### Nickel base allovs

Others **Batteries** (o/w c.70% for EV)



#### Stainless steel 66%

#### Properties of Ni:

Mass & surface resistance to oxidation; ductility; high melting point: electrical resistance: catalytic properties

#### Uses of Ni:

transport, construction, hygiene, health



<sup>&</sup>lt;sup>2</sup> Class I: product with nickel content of 99% or more; Class II: product with nickel content of less than 99%

## **Kev Features**



### **Nickel prices**

#### Ore index:

- SLN: Ni ore CIF China 1.8%
- Weda Bay: HPM nickel 1.8%/35%

Class I: traded on the I MF and SHFE indices

#### Class II:

- NPI (Weda Bay): SMM NPI 8-12% index
- Ferronickel (SLN): FeNi market spot price



Nickel global demand mainly driven by battery metals growth

**x3.5**<sup>3</sup> by 2040 (vs. 2020)



China

of global stainless-steel production in 2022



<sup>&</sup>lt;sup>3</sup> Source: Market studies, Eramet

# **Eramet's industrial set-up in Nickel business**

### Weda Bay Nickel<sup>1</sup> - Indonesia

### 21.1 Mwmt<sup>2</sup>

2022 Ni ore sales

#### **37 kt-Ni**<sup>2</sup>

2022 Ni ferroalloys production

#### >22 years

Life of mine

- → World class deposit, operated since 2019
- World's largest nickel mine
- Partnership with Tsingshan, the world's largest stainless-steel producer
- Pyrometallurgical plant producing lowgrade nickel ferroalloys (NPI – Nickel Pig Iron)

### Société Le Nickel (SLN) - New Caledonia

#### **5.4 Mwmt**<sup>3</sup>

2022 Ni ore production

#### 41 kt-Ni

2022 ferronickel production

## >25 years

Life of mine

- World class deposit, operated for more than 140 years
- 5 mining sites across the island: Kouaoua, Népoui, Poum, Thiébaghi, Thio
- Pyrometallurgical plant (Doniambo) producing high-grade ferronickel (23% Ni)
- Temporary offshore power plant in operation to supply the Doniambo plant with electricity

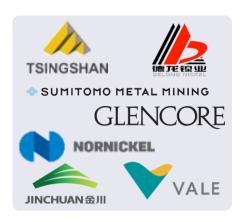


# Nickel BU market environment

#### **Market Share**

- 2<sup>nd</sup> ferronickel producer worldwide
- 1st source of high-grade seaborne ore (exports from New-Caledonia)

## **Key Players**



# **Key Consumers**

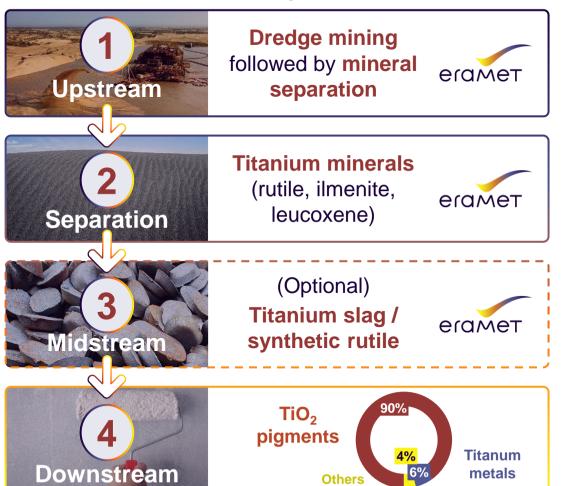




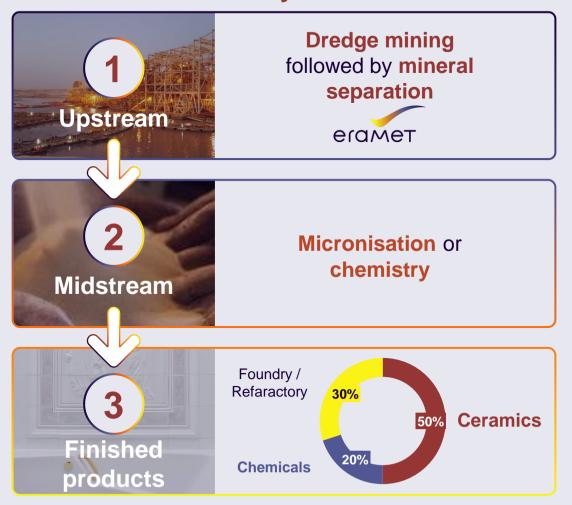
# Mineral sands main growth drivers: ceramics and pigments market



# **Titanium key features**



# **Zircon key features**



Main markets driven by GDP



# **Eramet's industrial set-up in Mineral sands business**



### **Grande Côte Opérations (GCO)**

**742 kt** 2022 HMC<sup>1</sup> prod.

**57 kt** 2022 zircon prod.

>24 years
Life of mine

Operated since 2014

- World's largest single dredge mineral sands operation
- Ore rail transportation from mine to Dakar port operated by GCO



# **Eramet Titanium & Iron (ETI)**

188 kt 2022 TiO2 slag production

Transformation of ilmenite (metallurgical valorization) into titanium slag and pig iron



## Akonolinga project

→ Launch of pre-feasibility study for rutiliferous block in 2022



<sup>&</sup>lt;sup>2</sup> Zircon & titanium (rutile, ilmenite, leucoxene) ore



# Mineral Sands BU market environment

#### **Market Share**

- 4th global producer of zircon
- 4th global producer of titanium feedstock

## **Key Players**

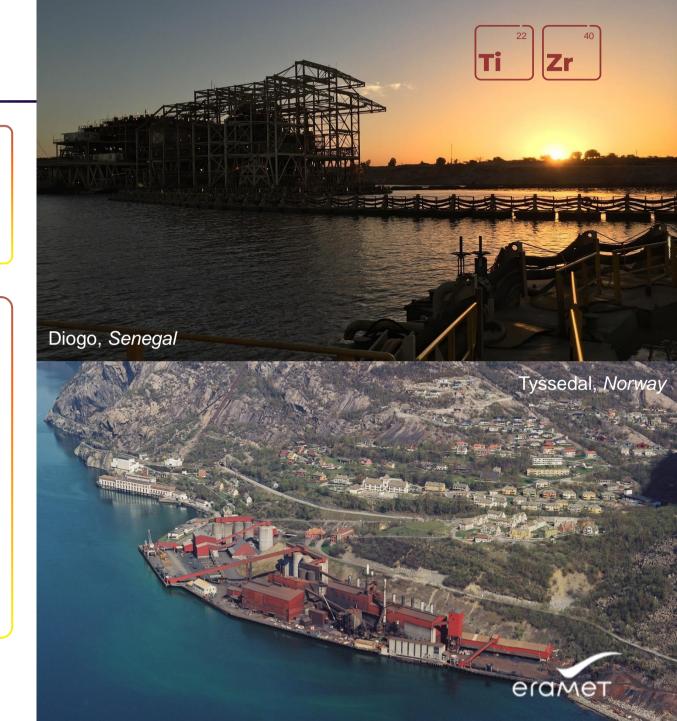








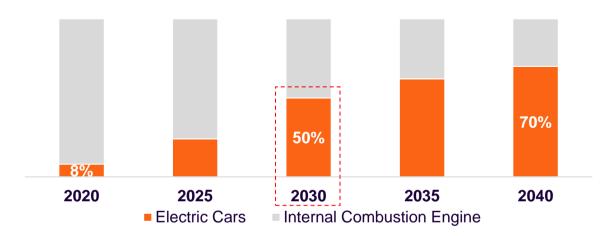






# Lithium, cobalt and nickel are the critical metals used in batteries for e-mobility

Half of the cars sold globally in 2030 should be fully or partially electric<sup>1</sup>...



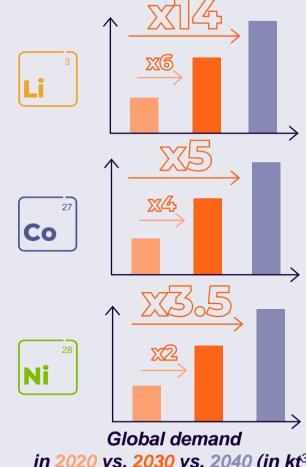
### ...with batteries requiring significant amount of metals



<sup>&</sup>lt;sup>1</sup> Electric cars = BEV + PHEV + HEV



## **Energy Transition metals** demand booming



vs. 2030 vs. 2040 (in kt<sup>3</sup>)



<sup>&</sup>lt;sup>2</sup> NMC: Nickel Manganese Cobalt

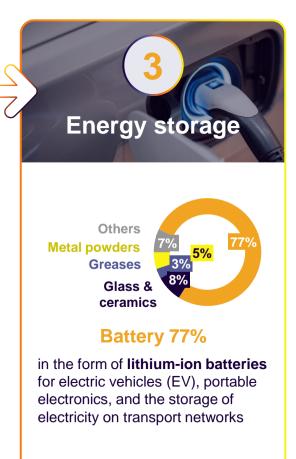
<sup>&</sup>lt;sup>3</sup> For lithium: in LCE (Lithium Carbonate Equivalent)

# Lithium main growth drivers: energy storage, including Li-ion EV battery









# **Key Features**



### **Energy storage market**

Mainly driven by environmental regulations, EV sales and mobility development



#### Li-ion batteries' cathodes

Composition includes lithium carbonate or lithium hydroxide



# Global lithium demand for battery metals

**x14**<sup>1</sup> by 2040 vs. 2020



### Lithium carbonate price

x6 since beginning of 2021

\$16.6k/t long-term consensus LCE<sup>2</sup> price<sup>3</sup>



<sup>&</sup>lt;sup>1</sup> Source: Market studies. Eramet

<sup>&</sup>lt;sup>2</sup> LCE: Lithium Carbonate Equivalent

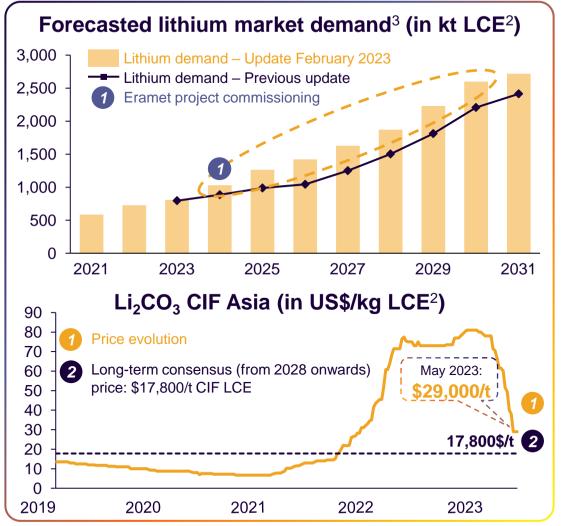
<sup>&</sup>lt;sup>3</sup> Consensus long-term (from 2028 onwards) price: \$16,600/t CIF LCE

# Centenario: a world-class asset poised to enter the market at the right time



eramet





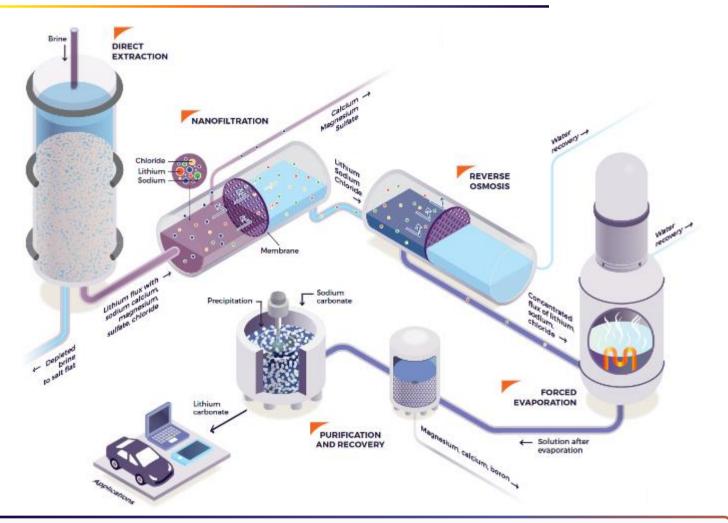
<sup>&</sup>lt;sup>1</sup> Based on proven and probable reserves at the Ratones deposit (1.1Mt LCE), and on a project designed for 24kt per yr LCE

<sup>&</sup>lt;sup>2</sup> Lithium Carbonate Equivalent

<sup>&</sup>lt;sup>3</sup> Sources: Eramet analysis

# Developed in-house, Eramet's Direct Lithium Extraction technology combines strong competitiveness...





# Much higher performances than conventional process

## **Direct lithium Extraction (DLE)**

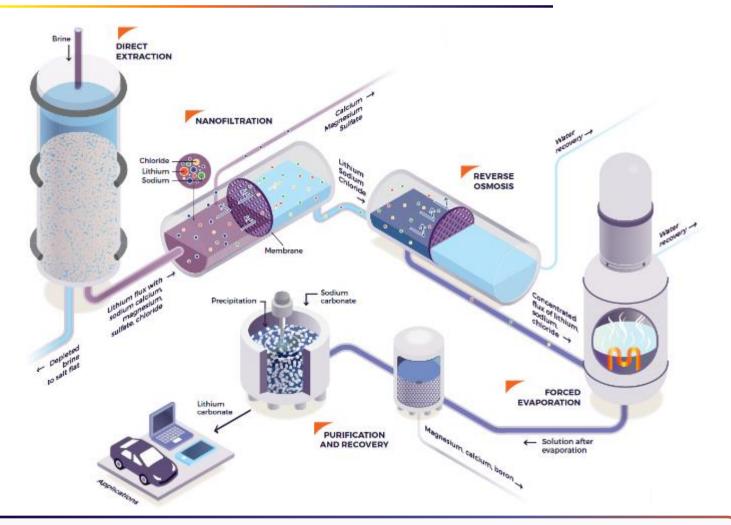
- **Proven** industrial process over the past 20-years (aluminum-based lithium sorbent)
- Proprietary lithium sorbent working at **native temperature** of the brine (20°C)
- 90%¹ lithium recovery yield of the **DLE unit**
- Industry leading yield much higher than traditional evaporation process (c. 40-50%)
- > Almost **twice less** brine pumped<sup>2</sup>
- Thus, optimized management of the deposit's hydric balance



<sup>&</sup>lt;sup>1</sup> 87% process yield overall

Eramet – Group presentation, May 2023

### ... as well as high sustainability standards



Aligned with the Group's strategy to create sustainable value



#### Water recycling

- Regeneration of the lithium sorbent only by water (DLE based on titanium or manganese sorbents use acid) and at 20°C
- Water recycling by reverse osmosis & forced evaporation
- 60% process water recycling rate

#### **Efficient purification**

- High selectivity of the DLE unit
- Nanofiltration and ion exchange for solid waste minimization

#### **Swift production**

1 week lead time vs. 12-18 months on evaporation process



## **Key metrics of a Tier 1 project**



#### **Key financial metrics – Phase 1**

**c.\$300m EBITDA**at 100%

At full ramp-up<sup>1</sup>

Based on a \$17,800/t LCE LT consensus CIF price

c.\$550m

Project capex<sup>2</sup>
Estimated at restart
of project

Initial

\$400m

o/w \$375m to be financed by Tsingshan Additional<sup>3</sup>

\$150m

to be financed on a prorata basis

Cash cost

1st quartile

Very high IRR

#### **Key operational metrics – Phase 2**

Feasibility study
Ongoing for Phase 2

In 2 development stages

FID expected by 2023 year-end for next stage

c.50kt/yr Battery-grade LCE<sup>4</sup>

c.75kt/yr Battery-grade LCE<sup>4</sup>

#### Phase 2

in 2 development stages

Expansion under study

Total Centenario annual production capacity

Phase 1 + 2



<sup>&</sup>lt;sup>1</sup> Assuming a cash cost (ex-works) of \$3,500/t

<sup>&</sup>lt;sup>2</sup> Excl. \$185m invested by Eramet in the project until April 2020

<sup>&</sup>lt;sup>3</sup> Due to continuing rise in the price of materials and freight

<sup>&</sup>lt;sup>4</sup> Lithium Carbonate Equivalent

# Sonic Bay: partnering with BASF to consolidate our position on the battery value chain



#### **FID** pending

Expected in H2 2023

2026

Expected start of production<sup>1</sup>

c.60 kt/year<sup>2</sup>

**Battery-grade** nickel production

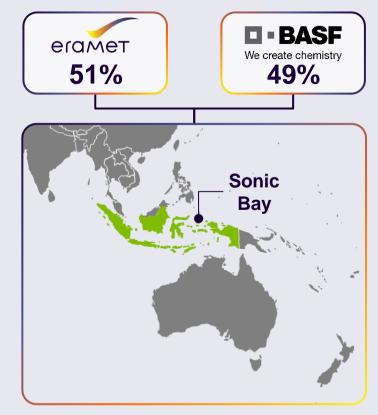
c.6 kt/year<sup>2</sup>
Battery-grade

cobalt production

- Project to produce nickel & cobalt MHP<sup>3</sup> for batteries capitalising on the Weda Bay deposit's extensive mining resources
- Ore from **Weda Bay deposit** (Indonesia)
- Partnership with **BASF**: Hydro-metallurgical complex with a High-Pressure Acid Leach ("**HPAL**") unit, to produce MHP<sup>3</sup>
- Best-in-class CSR standards:
  - Implementation of Eramet's global environmental & social standards and policies (IRMA based)
  - → Dry stacking instead of tailings dams

In line with Eramet's ambitions to position itself as a key European player in the EV BATTERY VALUE CHAIN

# Project bound on a large limonitic deposit in Halmahera island (Indonesia)





<sup>&</sup>lt;sup>1</sup> Subject to FID

<sup>&</sup>lt;sup>2</sup> On a 100% basis, kt contained in MHP

<sup>&</sup>lt;sup>3</sup> Mix Hydroxide Precipitate

# Lithium project in Alsace: partnering with Électricité de Strasbourg to sustainably develop lithium in Alsace



PFS starting

#### **End-of-decade**

Expected start of production



### Partnership with Électricité de Strasbourg (ÉS)



- Exclusive Memorandum of Understanding (MoU) signed to jointly study the development of lithium production in Alsace using geothermal brines
- Partnership:
  - > Eramet will deploy its innovative Direct Lithium Extraction (DLE) process previously developed for the Centenario project in Argentina
  - > **ÉS** will provide its knowledge of the geology in Alsace and its expertise in the sustainable production of high-temperature geothermal energy
- Experiments on ÉS' two operating geothermal power plants in Alsace
- Production could start before end-of-decade if FID made within 4 years

## Two geothermal power plants of ÉS in Alsace





<sup>&</sup>lt;sup>1</sup> Lithium Carbonate Equivalent

<sup>&</sup>lt;sup>2</sup> By 2030

# ReLieVe: partnering with SUEZ to become a player in the battery recycling value chain in Europe



Ongoing PFS

#### c.€80m

Subsidies awarded to Eramet<sup>1</sup>

### Up to 50k/year

of battery modules recycled

Innovative closed-loop process fully piloted in 2020-2021 within Eramet Research & Innovation Centre

#### Partnership with SUE2

- Production of "blackmass" (a metal concentrate of nickel, cobalt, manganese, lithium and graphite) from lithium-ion battery recycling (end-of-life or scraps)
  - 2022-2024 pre-industrial phase, based on maturity achieved over several years of R&D



- Industrialisation studies to produce battery-grade metals from blackmass in France
  - → 2022-2026 construction and operation of a preindustrial demo-plant at Eramet Research & Innovation Center, finalisation of feasibility studies
- By 2027 estimated target date to start operations in France, subject to Final Investment Decision (FID)

STRATEGIC METAL RECYCLING: a virtuous circular economy approach, key for European sovereignty and responsible supply

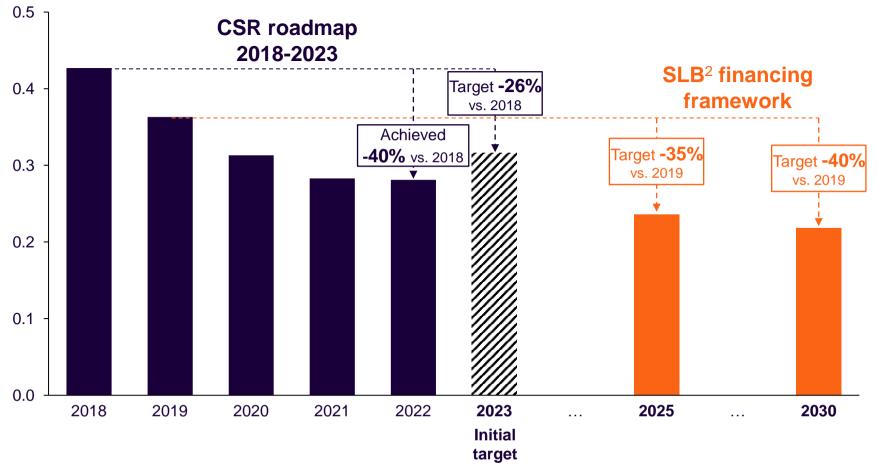




# The Group has significantly reduced the carbon intensity of its products since 2018

#### **Carbon intensity<sup>1</sup> of Eramet's products**

(tCO<sub>2</sub>/t outgoing product)

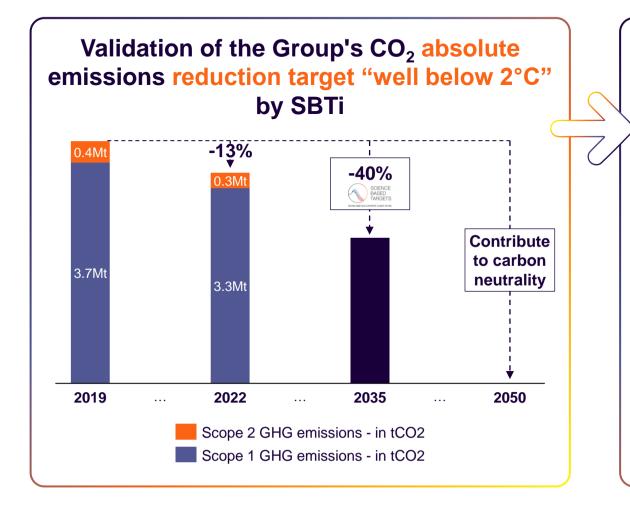


<sup>&</sup>lt;sup>1</sup> Scopes 1 & 2



<sup>&</sup>lt;sup>2</sup> Sustainability-Linked Bonds

## Eramet has a strong commitment to fight climate change



2023-2035 decarbonation capex

€500m Eramet's direct investments



Additional substantial investments

from 3<sup>rd</sup> parties

in GHG emissions reduction projects & innovations



## Decarbonation projects on pyrometallurgical operations

### **C.90%** of Eramet's energy consumption & GHG emissions<sup>1</sup>

## Sourcing of CO<sub>2</sub> free power

- ✓ Dunkirk (France)
  CO₂ free power sourced
  from nuclear grid
- Norway
  Long-term hydro power
  supply & PPAs in place
  with two wind farms
- Marietta (USA)
  Call of expression of
  interest launched in 2022
  for a solar power plant
  project

## Energy efficiency improvement

- SLN (New Caledonia)
  Temporary Offshore
  Power Plant enabling
  c.25% improvement in
  energy efficiency
- Pilot facility to generate heat and electricity from the gases produced by furnace activities Industrialisation in 2023

## Replacement of carbon reductants

- Mn alloys production
  Bio reductants from
  biomass to replace carbon
  reductants in pyrometallurgical furnaces
  Industrial scale testing in
  2023
- Titanium ore processing (Norway)
  Hydrogen to substitute coal in production process
  Pilot test planned in 2024



Capture, liquefaction & deep underground storage of CO<sub>2</sub>

Partnership and feasibility study conducted in 2022 for a pilot capture plant in Sauda (Mn alloys, *Norway*)

Commissioning expected in 2028

#### Requirement:

- High-enough CO<sub>2</sub> price
- Strong partnerships



Implementation / industrialisation ongoing



Proiect / under study





<sup>&</sup>lt;sup>2</sup> Carbon Capture and Storage (CCS)



## **Decarbonation of mining** operations

c.10% of Eramet's energy consumption & GHG emissions<sup>1</sup>



#### Solar farm project at GCO (Senegal)

Off-grid solar plant to be commissioned in 2024

CO<sub>2</sub> emissions reduction target of ~20%



#### **Electrification** of mining trucks

With solutions already available on the market

Energy recovery during the descent from the mines



#### Solar farm project at Centenario (Argentina)

Target: 25% of electricity supplied from solar farm



#### Use of electric conveyors

(Gabon)

To replace mining engines using fuel

Commissioned in Q1 2023



✓ In execution



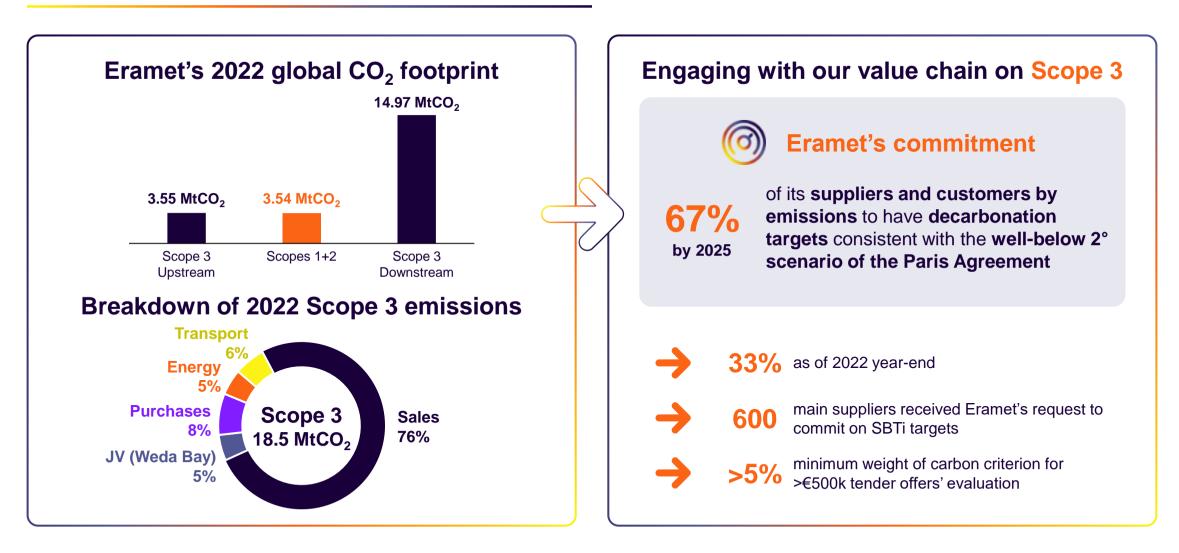
Implementation / industrialisation ongoing



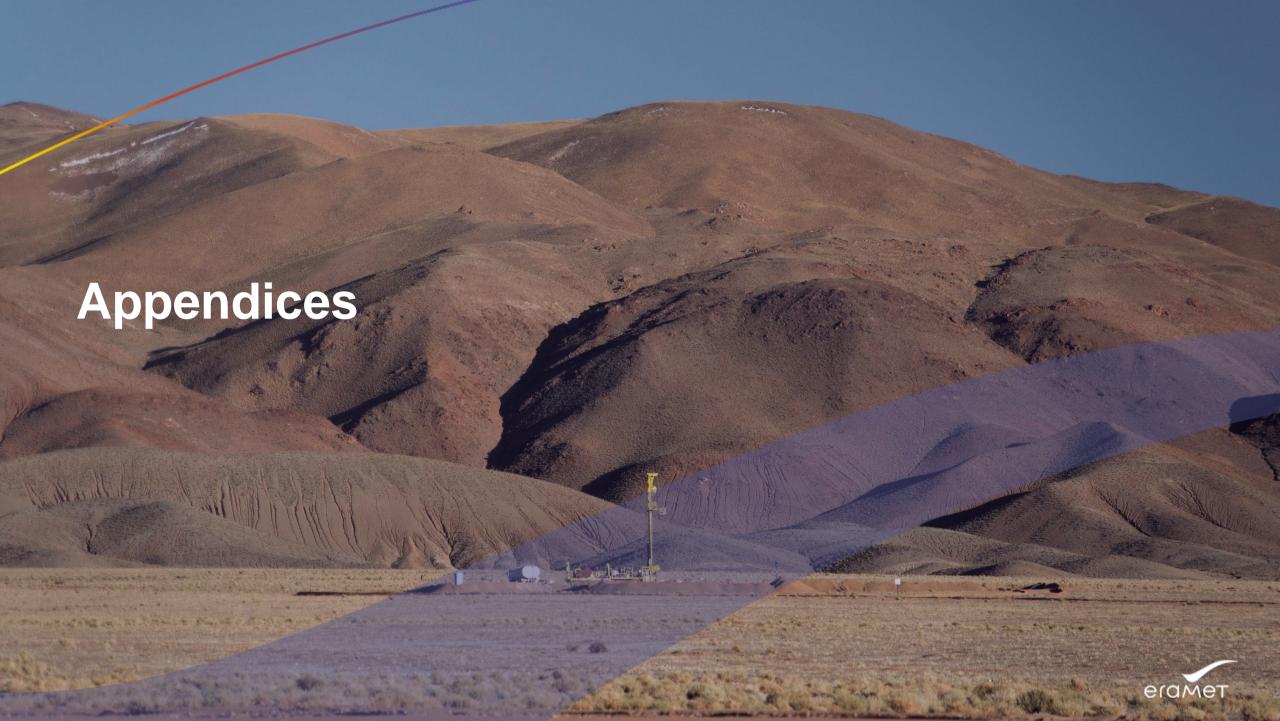
Project / under study



## Engaging with value chain is key to decarbonize our activities





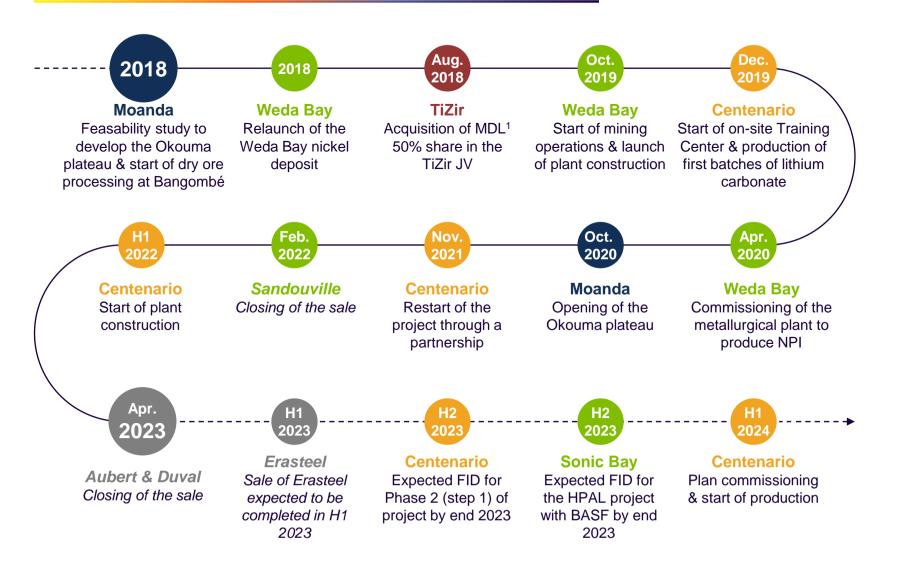


## A longtime player





## Group's repositioning over the past 5 years





Sale of poorly performing downstream assets completed

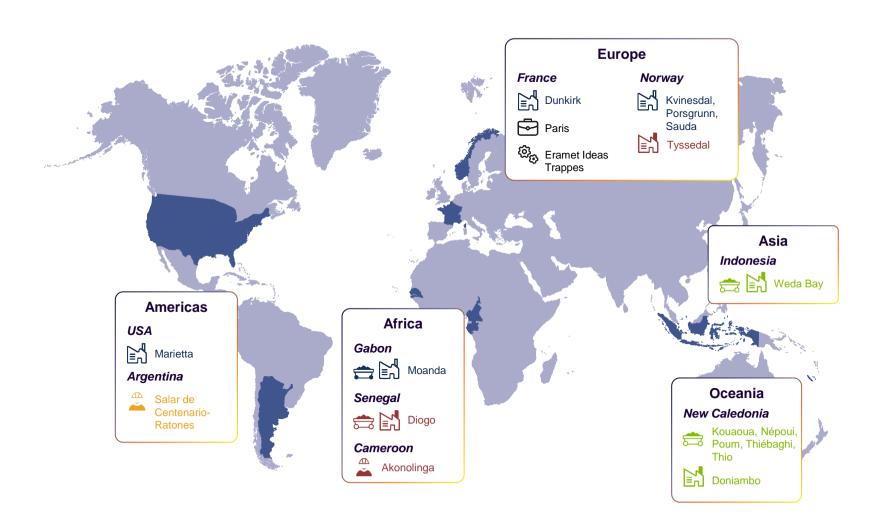


Growth in higher margin mining activities

- Manganese
- Nickel
- Mineral sands
- Lithium
- Higher performance alloys



## **Eramet industrial footprint**

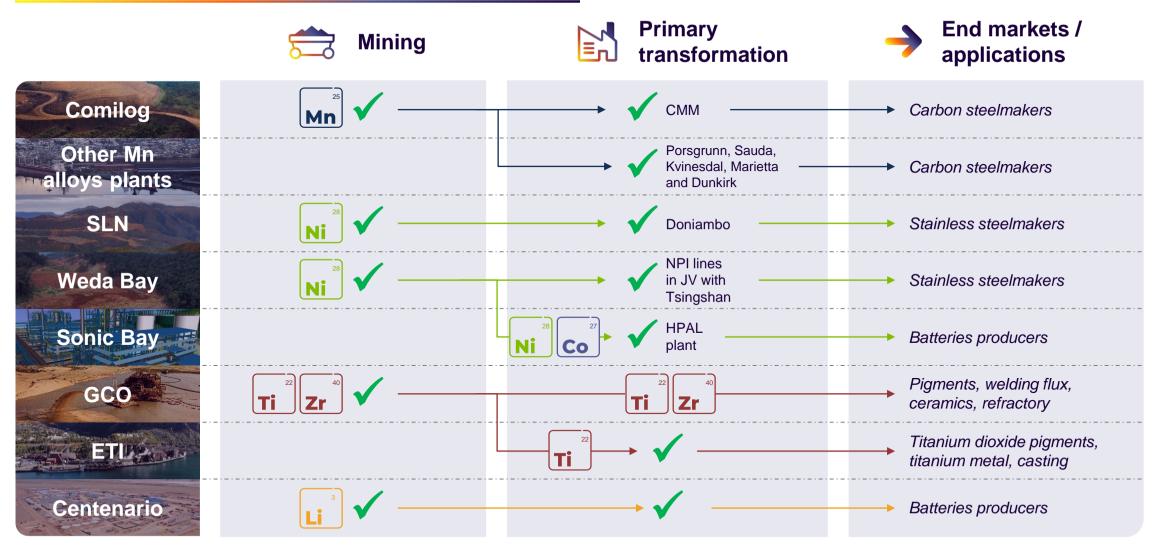


## 17 mining & industrial sites



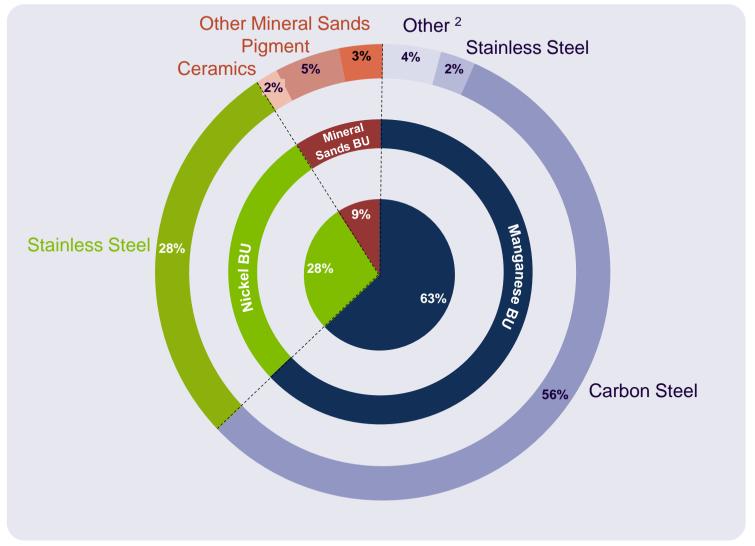


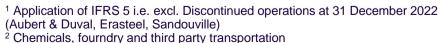
## Positioning of each Eramet entity in the value chain





## 2022 Group turnover<sup>1</sup> by end market







### **An experienced Executive Committee**



Christel BORIES
Chair & CEO

After graduating from the École des Hautes Études Commerciales (HEC), Christel Bories began her career in 1986 as a strategy consultant at Booz-Allen & Hamilton, and then at Corporate Value Associates. She then held various positions of responsibility at Umicore, followed by the Pechiney Group. After Pechiney was taken over by the Alcan Group, Christel Bories was appointed Chairwoman and Chief Executive Officer of Alcan Packaging and then Chairwoman and Chief Executive Officer of Alcan Engineered Products, and finally Chief Executive Officer of Constellium (formerly Alcan), from which she resigned in December 2011.

Christel Bories was appointed Deputy Chief Executive Officer of Ipsen (listed company) on 27 February 2013, a position she held until March 2016. She joined Eramet in February 2017 and, since May 2017, has been the Chairwoman and Chief Executive Officer of the Framet Group.



Nicolas CARRÉ CFO, in charge of procurement and IT

Nicolas has more than 20 years of experience in senior finance positions in various sectors (automotive, flooring) and countries (United States, Czech Republic, Germany).

He joined Eramet in 2019 as Chief Controlling Officer of the Group's Mining and Metals Division.



#### Virginie de CHASSEY Chief Sustainability and External Affairs Officer

Virginie joined the Group in 2018.

Previously, Virginie held various positions in the field of sustainable development, communication and public affairs within the Pechiney and PSA groups



#### Anne-Marie LE MAIGNAN

Executive Vice-President Human Resources, Health and Security

Anne-Marie has been in this position since 2019.

Before joining Eramet in 2003 where she held various HR positions in operations, Anne-Marie spent 15 years in the Saint-Gobain Group.



#### Kléber SILVA Chief Operating Officer

A Brazilian national, Kleber joined the Group in 2018 as Director of the Mining and Metals Division.

Previously, he spent more than 25 years in various mining and steel groups such as Arcelor Mittal and Vale.



#### **Geoff STREETON**

Chief Development Officer, in charge of Strategy, Innovation and Business Development

An Australian national, Geoff joined Eramet on 1<sup>st</sup> March 2022.

Previously, he held various operational and business development positions in the mining industry within major industrial groups such as BHP and Mitsubishi Corporation.

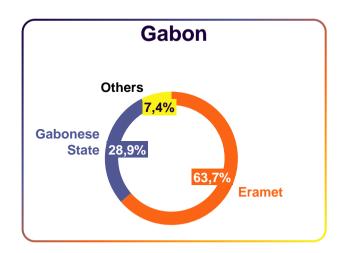


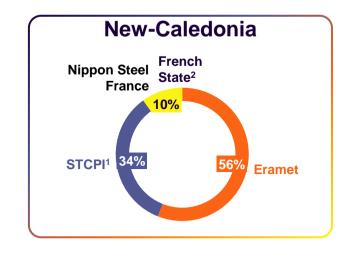
### Guillaume VERCAEMER Group General Counsel

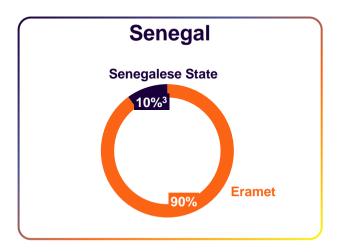
Guillaume began his career as a lawyer at Schlumberger followed by Usinor. He subsequently joined the Arcelor group and became successively M&A and Group Legal Director of ArcelorMittal. Since 2020, he was Legal Director and Director of Mergers & Acquisitions at Framatome.

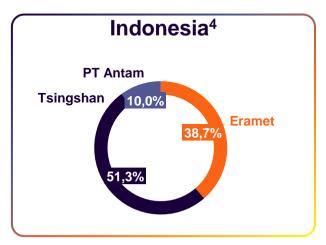


# Eramet associates the main countries and territories where it operates









<sup>&</sup>lt;sup>1</sup> STCPI (Société Territoriale Calédonienne de Participation Industrielle): entity owned by the New Caledonian provinces, holds around 4% of Eramet's share capital <sup>2</sup> 1 share

## Significant contribution to the local economies

- #1st private employer in Gabon
- → #1st private employer in New Caledonia

## Contribution to the development priorities of communities, drawing on UN SGDs























<sup>&</sup>lt;sup>3</sup> Eramet's operations in Senegal

<sup>&</sup>lt;sup>4</sup> Eramet holds a 43% stake in in Strand Minerals Pte. Ltd, holding company which owns 90% of PT WB Nickel

# **Growth enablers: Exploration, Innovation and Digital transformation**









#### **Director of Investor Relations**

Sandrine NOURRY-DABI sandrine.nourrydabi@eramet.com

