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From the oil era to the one of critical minerals Positioning of ERAMET

Philippe Gundermann Executive VP Strategy, Innovation, Exploration

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Eramet at a glance

Our purpose, our reason for acting



Our purpose sets a course. Conveying both our DNA and our collective ambition, it fuels our vision and the daily actions of all employees and stakeholders.



A global leading mining and metallurgical Group

Operations in manganese, nickel, titanium ore and zircon Development in lithium, nickel, cobalt, recycling



Applications

Strong operational and financial results in 2021



Economic Fundamentals restored

- ¹ including 100% of Weda Bay mining production
- ² reflecting new Eramet scope, excl. discontinued operations
 ³ Net debt / EBITDA



Significant resources and highly competitive mines (1/3) Manganese BU







Significant resources and highly competitive mines (2/3) Nickel BU





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¹ Eramet holds a 43% stake in Strand Minerals Pte. Ltd, (the holding company which owns 90% of PT Weda Bay Nickel), in partnership with Tsingshan, the leading global producer of stainless steel

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Significant resources and highly competitive mines (3/3) Mineral Sands BU







Eramet new strategic roadmap: Right timing to become a leading player in the new age of metals

Pure player in Mining and Metals contributing to a sustainable future



ATTRACTIVE POSITIONING, RESPONSIBLE AND

CASH-GENERATING BUSINESS



Our CSR strategy is to be a reference in our industry for sustainability



Committed to our planet



Reduce our air emissions



Preserve the **water** resource and accelerate the rehabilitation of our mining sites promoting **biodiversity**

Reduce our energy and climate footprint

CSR performance recognized by non-financial agencies





Continued high CSR performance in 2021

Index 104 (target 100) confirming the positive trend of our CSR Roadmap 2018-2023



ESG performance recognised by leading agencies



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From the oil era to the age of critical battery metals



The future is electric

Half of the cars sold globally in 2030 should be fully or partially electric



Electric cars = BEV (Battery Electric Vehicles) + PHEV (Plug-in Hybrid Electric Vehicles) + HEV (Hybrid Electric Vehicles)



Nickel, cobalt and lithium are the critical metals used in batteries for e-mobility





New battery chemistries will see even greater use of nickel





Lithium for batteries is leading global booming lithium demand

Strong growth momentum for lithium demand ...

Forecasted lithium market demand¹ (in kt LCE)



...reflected in current prices



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¹ Sources : Eramet analysis ² LCE: Lithium Carbonate Equivalent

The global demand for battery metals will boom over the next two decades



The electric vehicles' value chain completely disrupts the old production route





The European battery industry is emerging with numerous gigafactories announced...



But Europe depends heavily on other geographies for its supply of nickel, cobalt and lithium



Eramet is perfectly positioned to address these markets in the right timing



Providing metals for the energy transition is the core of Eramet's strategy

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





Eramet has the best technical skills and assets to supply the battery value chain



Centenario: Tier 1 lithium project in Argentina





Eramet to become the first European company to operate a large-scale and sustainable lithium industrial complex leveraging on its own process

¹ Lithium Carbonate Equivalent

- ² On a 100% basis
- ³ Assuming a long-term consensus price of 12,900 US\$ CIF per tonne LCE
- ⁴ EBITDA inclusive of royalties and logistics costs
- ⁵ Excluding Capex already spent until project's mothballing
 ⁶ Direct Lithium Extraction



The direct lithium extraction: an innovative process developed by Eramet

- Use of an active solid to extract and concentrate the lithium
- ~90% yield, much higher than the traditional evaporation process, and confirmed by the pilot plant operating in real conditions since the late 2019
- Optimized water consumption thanks to recycling







* LCE = Lithium Carbonate Equivalent

Nickel/Cobalt project co-developed with BASF in Indonesia

- Refined nickel-cobalt production for the manufacturing for Li-ion batteries
- Partnership since 2020 with BASF to evaluate the development of a hydro-metallurgical plant, using ore from the Weda Bay deposit, which would include a high-pressure acid leaching unit and in a second step a base metal refinery
- Start-up of the installations foreseen in the middle of the 2020 decade for the production of nickel and cobalt







To secure and sustainably value the European resources needed to manufacture Li-ion batteries







- An innovative technology based on a direct lithium extraction process developed for the Lithium Project in Argentina, adapted to the European geothermal resources
- Large scale pilot plant in 2021 with the first battery grade lithium produced out of geothermal brine
- **Economic studies** to be conducted in 2022



A roadmap towards carbon neutrality



Eramet has a strong commitment to climate

Validation of the Group's CO_2 emissions reduction target "well below 2°C" by the **SBTi**





CO₂ emission reduction targets in absolute value (vs. 2019)





Decarbonation projects ongoing on mining operations

Use of renewables energy: solar plant at Grande Côte in Senegal

 \sim CO₂ reduction target ~20%





New mobility solutions

- Electric trucks
- Use of electric conveyors







Sourcing of CO₂ free power for pyrometallurgy operations

In Norway

- Historical existing long-term hydro supply
- PPA signed for long term wind power supply allowing large wind mills farms to develop





Breakthrough innovation is key for decarbonation

Use of bio reductant: a must for pyrometallurgy

Industrial scale testing in 2022



- CCS : capture and deep underground storage of CO₂:
 - Capture CO₂ produced by metallurgical furnaces
 - Increase the CO₂ concentration of the gases
 - Liquefy and purify the CO₂ before underground injections for storage

Ongoing partnership for a pilot process on one of our manganese alloys furnaces in Norway









Working towards a more sustainable world

The challenge of our century is to make the necessary energy and ecological transition while meeting the growing demand for metals.

Eramet is the only European mining player with world-class deposits in metals that are critical to the **energy transition**.



In both the energy transition and corporate social responsibility, Eramet has been able to anticipate change and is well equipped to support the transition from the oil era to the metal age."

Christel Bories, Chair & CEO

Increasingly strong needs in the metals of the energy transition (2040 vs 2020, worldwide)



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