

# Welcome to your CDP Climate Change Questionnaire 2022

## C0. Introduction

### C0.1

**(C0.1) Give a general description and introduction to your organization.**

Eramet, a global mining and metallurgical group, is a key player in the extraction and valorisation of metals (manganese, nickel, mineral sands) and the elaboration and processing of alloys with a high added value (high-speed steels, high-performance steels, superalloys, aluminium and titanium alloys).

The Group supports the energy transition by developing metal production activities supplying the metals needed such as nickel, cobalt and lithium. We also support general global economic development producing manganese ore and alloys for the steel industry, mineral sands for industrial products and ferro nickel for the stainless steel industry.

Eramet positions itself as the privileged partner of its customers in sectors that include carbon and stainless steel, aerospace, pigments, energy, and new battery generations.

Building on its operating excellence, the quality of its investments, and its employees' expertise, the Group leverages an industrial, managerial and societal model intended to operate at the highest international standards within extractive industries. Eramet strives for a sustainable and responsible industry as a contributory corporate citizen.

Eramet employs more than 13,000 people in 20 countries, with a turnover of more than €3.6 billion in 2021.

### C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2021	December 31, 2021	Yes	1 year

### C0.3

**(C0.3) Select the countries/areas in which you operate.**

China  
France

- Gabon
- India
- New Caledonia
- Norway
- Senegal
- Sweden
- United Kingdom of Great Britain and Northern Ireland
- United States of America

## C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

EUR

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Operational control

## C-MM0.7

**(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?**

Row 1

### Mining

- Nickel
- Other non-ferrous metal mining, please specify  
Manganese, Mineral sands

### Processing metals

- Nickel
- Other ferrous metals, please specify
- Other non-ferrous metals, please specify  
Manganese, Titanium dioxide, Superalloys, Titanium alloys, Aluminium alloys

## C0.8

**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	FR0000131757

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	<p>The climate strategy is annually reviewed and managed by the CEO and the Executive Committee. In 2021, a detailed review of the progress of the decarbonization roadmap was presented to the CEO.</p> <p>In 2020, the new climate roadmap and SBT objectives have been approved by Eramet's CEO.</p> <p>In 2021, a detailed review of the progress of the decarbonisation roadmap was presented. This technical note summarises the group's agenda and actions to implement to reach the various milestones (including key technico-economic decisions required) that underpin Eramet's decarbonisation trajectory.</p> <p>At the beginning of 2022, we presented the results of the first phase of the physical risks study linked to climate change (mapping).</p>
Other, please specify CSR and Strategy Committee	<p>This board-level committee is composed of 10 Directors. One of the main subjects managed in 2020 was the definition of the renewed climate roadmap and SBT objectives. It has been reviewed by the Committee and approved by Eramet's CEO and the board. The progress of the "decarbonization" roadmap and its decision-making milestones were presented in 2021 to the CSR and Strategy Committee. The CSR and Strategy Committee also contributed to defining the key technico-economic decisions and the mapping of climate-related physical risks.</p>
Other, please specify Audit, Risks and Ethics Committee	<p>This board-level committee is composed of 6 Directors. The climate issue is integrated into Eramet's risk long-term mapping and therefore in risk management. In early 2022, the mapping of physical risks related to climate change was presented to the Audit, Risks and Ethics Committee. The Risk division is currently working to develop a mitigation plan. The climate-related risks have also been integrated into the risk mapping of Eramet's Divisions.</p>

### C1.1b

**(C1.1b) Provide further details on the board's oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Setting performance objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The climate strategy is regularly reviewed and managed by the CEO. Eramet's climate targets and trajectory defined in the framework of SBT were approved by the CEO and the Board in 2020.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Setting performance objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The CSR and Strategy Committee gathered 3 times in 2021. It has defined the new roadmap and objectives associated. The Committee is also in charge of the follow up and the review of Eramet's KPIs. The committee met several times to review and validate the roadmap. The explanation of the roadmap and the follow-up of the action plan is reported annually in Eramet's annual report in the CSR Engagement section.
Scheduled – some meetings	Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans	The Audit, Risks and Ethics Committee ensures that climate topics are integrated into Eramet's risk mapping and therefore in the management of risks. The Audit, Risks and Ethics Committee is composed of 6 members. The Committee gathered 9 times in 2021 to review and follow the strategy to manage and mitigate the risks. The follow-up of the action plan and

		the actions that have been settled are reported annually in Eramet's annual report in the Risks section.
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## C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	The Board is composed of 17 members. In those 17 board members, 10 are part of the CSR & Strategy Committee including the President of the Board. These 10 persons are in charge of the climate-related issues in the company. Two board members have, through their professional practice, in-depth skills on climate-related issues.

## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other, please specify CSR and Strategy Committee	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Executive Vice-President of Strategy, Innovation & Business Development member of the Group's Executive Committee	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other, please specify Director of Communication and Sustainable Development	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

Eramet's climate strategy is managed and reviewed at a strategic and operational level.

- The strategy is defined by the CSR & Strategy Committee composed of 10 Directors and validated by the CEO and the Board. The follow-up of the strategy and progress toward the targets that have been defined is made quarterly by the CSR Committee. The climate topic is also raised by the CEO and the Board when needed during the year (follow-up, approval, etc.).
- Operationally, the Energy and Climate Director is in charge of the implementation of the climate strategy. He reports to the Executive Vice-President of the Strategy, Innovation and Business Development who is a member of the Group's Executive Committee.

The 2 Group Energy & Climate coordinators, whose main tasks are to implement the initiative to reduce the energy footprint, the methodological contribution (one of the Group's coordinators is an AFNOR-certified ISO 50001 auditor and a member of the ISO 50001 expert committee), expertise on several of the Group's businesses, and regulatory and technological monitoring; Site energy & climate correspondents, who are representatives of site management within the meaning of ISO 50001 and whose missions are to locally support the process of continuous improvement around energy, to reduce the energy footprint of the scope in question. Site management, whose main role is to manage an energy management system based on the principles of the ISO 50001 standard and to allocate resources that are suited to the challenges of each site, Division management is also involved to support site management.

## C1.3

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Approximately 10% of the Executive Vice-President Strategy, Innovation and Business Development bonus. He is a member of the Group's Executive Committee. Moreover, 20% of the Energy and Climate Director Bonus is linked to climate-related targets.

## C1.3a

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	30% of the Chief Executive Officer bonus (which accounts for half of the overall remuneration) is linked to Group's CSR performance which includes climate-related targets.
Other C-Suite Officer	Monetary reward	Emissions reduction target	Approximately 10% of the Executive Vice-President Strategy, Innovation and Business Development

			bonus is linked to climate-related targets. He is a member of the Group's Executive Committee.
Other, please specify Energy and Climate Director	Monetary reward	Emissions reduction target	20% of the Energy and Climate Director Bonus is linked to climate-related targets.

## C2. Risks and opportunities

### C2.1

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

#### C2.1a

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	2	Given the nature of the Group's main activities (mining and metal processing), Eramet considers horizons to be "short term" if below 2 years, "medium-term" if between 2 and 8 years, and "long term" when beyond 8 years.
Medium-term	2	8	Given the nature of the Group's main activities (mining and metal processing), Eramet considers horizons to be "short term" if below 2 years, "medium-term" if between 2 and 8 years, and "long term" when beyond 8 years.
Long-term	8	15	Given the nature of the Group's main activities (mining and metal processing), Eramet considers horizons to be "short term" if below 2 years, "medium-term" if between 2 and 8 years, and "long term" when beyond 8 years.

#### C2.1b

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

- **Substantive financial impact definition**

A substantive financial impact on our business is defined in our risk management process as an event whose potential financial impact on the company can reach 3% of EBITDA which approximately corresponds to a value of €30m or more. A climate-related significant risk

such as the physical impacts of climate change has been added to the group risk analysis. The main risk factors to which the Group is exposed due to its business model and the activities it performs are identified in the Group's 2021 risk map, which was presented to the Audit, Risks and Ethics Committee in December 2021 and is available on the Group 2021 Universal Registered Document (see Eramet Group website).

In 2021, Eramet conducted a detailed study with a third party to analyse more precisely its physical risks linked to climate change. The Group used the OCARA methodology (Operational Climate Adaptation & Resilience Assessment) developed by the consulting firm Carbone 4. In 2022, Eramet continues and details this analysis on the perimeter of the sites identified as the most exposed. This review clarifies the existing means of mitigation and identifies the complementary action plans to be considered.

Regarding Transitional risks, the Group considers that a bad reputational event can also have a substantial impact on its business and its license to operate. At the Group level, climate change will lead to higher taxes on energy, and greater difficulty to access financing for certain investments. Attracting young talents within the Group could be more difficult, the younger generations being more concerned by climate-related issues and wishing to invest in companies that are strongly committed to the subject. At present, it is difficult to assess the consequences more accurately. We are developing our transition risks analysis to include quantitative indicators (such as impacts on our reputation, access to finances and lack of attractiveness) and hope to have this process finalised within the next 2 years.

- **Quantifiable indicator used**

From a financial perspective, Eramet calculates a financial reporting materiality threshold. This threshold is fixed at 3 % of EBITDA. Based on the 2021 EBITDA, a risk is considered as such if the potential financial impact on the company can reach €30m (= 3 % x 1051 (EBITDA 2021)) or more. Regarding extra-financial criteria, Eramet calculates and reviews specific indicators such as the FR2 (Frequency rate) for safety. All of our indicators are disclosed in our annual report in the declaration of extra-financial performance section.

## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

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**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term

Medium-term

### **Description of process**

(i) Identification : A global risk mapping is performed at Eramet group level every year. The main risk factors to which the Group is exposed due to its business model and the activities it performs are identified in the Group's 2021 risk map, which was presented to the Audit, Risks and Ethics Committee in December 2021 and is available on the Group 2021 Universal Registered Document (see Eramet Group website). Eramet also follows the emerging regulation especially when related to carbon as our activities are carbon intensive.

(ii) Assessment : A dedicated Climate-related risk section has been added to the Group Risk map. Impacts of climate change in terms of physical risks, regulatory risks, and energy costs, are studied. Eramet reviews the transition risks for each branch and each category of product. The Group also reviews the physical risks for each plant in all the countries where Eramet has activities. Physical risks review consists of characterizing sensitivity of existing processes and infrastructures to 8 selected climatic hazards. Then these sensitivities are crossed with predictable variation by 2050 of a list of physical consequences of climatic hazards. We consider to do so RCP8.5 scenario.

(iii) Response : Following this assessment, a mitigation action plan is developed in 2022 for sites and physical consequences leading to highest levels of risks. More broadly, we ensure that the internal price of carbon, which makes it possible to opt for the least-emitting technological solutions, is correctly applied in the company's various activities. Eramet has chosen in its new projects to opt for the least-emitting technology when an alternative presents itself (hydrometallurgical rather than pyrometallurgical way, for example).

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### **Value chain stage(s) covered**

Direct operations

Upstream

Downstream

### **Risk management process**

A specific climate-related risk management process

### **Frequency of assessment**

Annually

### **Time horizon(s) covered**

Short-term

Medium-term

Long-term

### **Description of process**

(i) Identification & (ii) assessment : Eramet performs a yearly review on climate issues with its business managers in order to identify potential climate-related risks that arise from day-to-day activities. For instance, as part of addressing unseasonal and severe wet weather from the La Nina weather cycle in New Caledonia, we had to understand the potential impacts of increasing frequency and duration of intense rains and what measures should be taken to adapt. We are currently working with our insurance companies to better estimate the impact of potential future extreme weathers on our activities.

(iii) Response : Our infrastructures are nevertheless hurricane proof and we modified our ore supply chain to make sure the continuity of operation of our furnaces is granted.

**Value chain stage(s) covered**

Direct operations

**Risk management process**

A specific climate-related risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

(i) Identification : European and Norwegian plants, representing approximately 25% of the Group's scopes 1 & 2 emissions, are subject to the European Union Emissions Trading Scheme (EU ETS), which entails increased financial risk due to the uncertainties inherent in the long-term quotas market, as well as uncertainties related to legal mechanisms that may evolve and be adopted in the future. Eramet also follows the emerging regulation especially when related to carbon as our activities are carbon-intensive

(ii) Assessment : Eramet has an internal process to closely monitor the evolution of the carbon market.

(iii) Response :The Group is preparing for the potential emergence of a higher carbon tax by experimenting with an internal price for its investment projects, and for the evaluation of its strategic options, on the basis of an internal price. This price of €30 per tonne of CO<sub>2</sub> has been raised in 2021 to €100 per tonne of CO<sub>2</sub> for long-term investments to reflect the carbon tax and quotas market recent developments worldwide.

The provision is applicable to the investment projects developed in all the geographic areas where Eramet is present, including those where there is no carbon quota system.

The consequence of this choice is to prioritise lower-carbon emitting technological solutions and contribute to improving the awareness of climate change among all Eramet employees.

For instance, Eramet has implemented the internal price of CO2 for a solar farm and a battery project (21 MW) in Senegal to produce renewable electricity instead of utilising a fuel oil-fired power plant. The investment metrics of the project are improved due to the internal carbon price. This approach has been selected even though Senegal has not implemented a CO2 tax system.

**Value chain stage(s) covered**

Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term

Medium-term

**Description of process**

(i) Identification & (ii) assessment : Eramet performs a yearly review on climate issues with its business managers in order to identify potential climate opportunities that arise from day-to-day activities. This is especially the case when identifying our customers' growing demand for low-carbon products.

(ii) Assessment : Eramet needs to make sure its products may answer this new emerging concern. Our carbon intensity target allows us to work toward products with lower carbon content.

(iii) Response : Eramet's manganese activity through Norwegian and French manganese alloy smelting plants produces manganese alloys with very low emission factor, and for some of them, the lowest level of emission of the world. This was demonstrated by CRU's study carried out in 2021 for FFF.

**Value chain stage(s) covered**

Downstream

**Risk management process**

A specific climate-related risk management process

**Frequency of assessment**

Every three years or more

**Time horizon(s) covered**

- Medium-term
- Long-term

**Description of process**

(i) Identification : Scenario-based analyses are a powerful tool for managing this chapter of strategic thinking and design. It entails a forward-looking review, projecting Eramet’s current activity onto various possible worlds, in order to assess the consequences on our business. This approach is efficient for building a comprehensive model of the complex changes and the interactions between them, which helps define the transformations caused by climate change.

(ii) Assessment : The Group conducted this first analysis in 2018 in collaboration with a domain-specific expert consultant. The adopted approach (“by physical flows”) is founded, for each scenario, on the physical reality of the activity, which the Group ensures is compatible with the maximum limit of a 2°C increase in temperature. This analysis has been updated in 2020.

(iii) Response : The main outcome of this scenario is that Eramet metals, in particular nickel, lithium, manganese and alloys, are metals that are critical to the development of energy transition technologies and essential for climate change management. This translates into a favourable outlook for changes in demand between now and 2030. This growth is driven in particular by lithium-ion batteries (which use nickel) to store electricity. Indeed, the quantity of nickel required in 2030 should increase by a factor of more than 3 compared to 2020, illustrating the significant role played by batteries as a demand growth driver. Lithium is an essential metal in the production of lithium-ion batteries being used in electric mobility, among other things, and demand is expected to multiply approximately eightfold by 2030 (from what it was in 2020). These results underscore the resilience of demand for these metals in the IEA’s “2°C with CCS” transition scenario and the relevance of the Group’s current and future metals to address the requirements of the energy and low carbon transition.

**C2.2a**

**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	European and Norwegian plants, representing approximately 25% of the Group's scopes 1 & 2 emissions, are subject to the European Union Emissions Trading Scheme (EU ETS). At the Group level, climate change will lead to higher taxes on energy, and greater difficulty of access to financing for certain investments. At present, it is difficult to assess the consequences more accurately.

<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>There is currently no globally applicable carbon market or price, only fragmented and uncoordinated regional systems. The Group is preparing for the potential emergence of such a global market by experimenting with an internal standard price for its investment projects, the evaluation of its strategic options, on the basis of 100 EUR per tonne of CO<sub>2</sub> (EUA price was very close to €80/tonne during winter early 2022). This internal price of carbon was raised to €100/tonne in 2021 to better take into account the potential financial impacts of the emerging regulation and to reorient our current investments towards low carbon projects and initiatives. This value reflects a belief that global capital markets are moving towards a long-term carbon price that is higher than the European regional spot price at the end of 2021. The consequence of this choice, throughout the entire Group and independently of the regions with an established carbon market and price, is a shift towards technological solutions that emit less carbon. In addition, the implementation of this policy of applying an internal Group carbon price helps to raise awareness of the climate challenge among all of Eramet's employees.</p> <p>Eramet pays attention to opportunities offered especially by the different national stimulus plans. In 2021, several applications were filed, in order to consider an acceleration of the Group's investments around the reduction of its emissions or its energy consumption. The Group's Energy and Climate department has added staff and been organised to enable more systematic requests for this aid.</p>
<p>Technology</p>	<p>Relevant, always included</p>	<p>Transition risk arises from a variety of technological and market responses to the challenges posed by climate change and the transition to a lower-carbon economy; these are often interconnected with the policy and regulatory risks discussed separately, with more ambitious emissions reduction targets or GHG regulations likely to accelerate the adoption of lower emissions technologies. The substitution of existing technologies with lower emissions options, particularly in the electricity and transport sectors, has the potential to reduce the demand for fossil fuel products. The development of low emissions technologies also presents an enormous opportunity for Eramet. Our metal alloys, products have application applications in a variety of low emissions products in energy generation and transport, for example, electric vehicles, and energy storage, which are likely to see tremendous growth driven by technology technological developments. Likewise, lithium and nickel are critical raw materials for batteries, with battery producers expected to match electric vehicle growth rates. Carbon Capture and Storage (CCS) is another key technology that offers future opportunities for Eramet as it has the potential to play a pivotal role in decarbonizing industrial processes such as Manganese and Alloys production. Technology developments</p>

		also have the potential to impact our operations, with the potential requirement for increased capital expenditure or investment in research and development into low emissions technologies. The deployment of low emissions technologies at our operations also presents opportunities to reduce costs and improve productivity. For example, deploying electric vehicles at our sites has the potential to lower operating costs, as well as to reduce worker exposure to diesel particulate matter.
Legal	Relevant, always included	Non-physical risks are related to various political, legal, technological and commercial issues affected by the challenges of climate change and the transition to a less carbon-intensive economy. For example, to avoid disclosure / market communications-related litigation risks, we need to demonstrate how climate change has been taken into account and embedded into our activities.
Market	Relevant, always included	Eramet aims to take into account the impacts of climate change in its strategic roadmap. The Group recognises that the world could react in different ways to combat climate change. Two scenarios modelling a transition to a low-carbon society, compatible with the 2°C target of the Paris Agreement, were selected: <ul style="list-style-type: none"> <li>• The IEA 2°C scenario with CO2 capture/storage (CCS — Carbon Capture Storage) as a benchmark;</li> <li>• A variant of this first scenario, more cautious on the hypotheses of an improvement in energy efficiency and of CCS deployment kinetics.</li> </ul> In 2018, a business impact analysis was conducted to quantify the change in demand for metals needed for the energy transition and this assessment is continuously updated. These scenarios highlight, for example, the criticality of certain metals produced by the Group and their unique role in the energy transition, which helped to guide the Group's strategy, namely lithium and nickel (often associated with cobalt). The risk is not having secured the metal sources to meet the growing demand.
Reputation	Relevant, always included	Producing critical metals needed for energy transition is a source of pride for employees, as well as a significantly positive branding for the company. Frequent publications are released on the market for such purposes. There is a risk of association of Eramet's high carbon-emission energy-intensive activities with climate change. We have performed a benchmark of the carbon content of our products to demonstrate our efforts and results on this topic. Attracting young talents within the Group could be more difficult, the younger generations being more concerned by climate-related issues and wishing to invest in companies that are strongly committed to the subject.
Acute physical	Relevant, always included	Specific questions are addressed to the operating sites through the Eramet Group's SAFEE environmental reporting tool on their risk assessment and the planned adaptation measures.

		<p>In 2021, we experienced again several impact on our business such as heavy rain and land slides in New Caledonia leading to potable water interruption in Noumea, anormal intensity of rains both in new calodonia and Gaboon which affected our production but increased our ability to use hydro power electricity.</p> <p>Most of them have already begun considering how to limit the impact on their business. In 2021, around one site in ten reported being affected by an extreme weather event that could have arisen from climate change.</p> <p>In 2021 Eramet developed a study using the OCARA methodology, with a time horizon of 2050 and covering all sites, in operation and planned. This analysis highlighted 10 industrial sites of the Metals &amp; Mining Division that are more specifically exposed to physical risks related to climate change, such as extreme climatic phenomena, increase in average temperature, heavy precipitation or water stress. In 2022, Eramet will continue the exercise with the aim of creating mitigation plans for the sites with highest level of exposure.</p>
<p>Chronic physical</p>	<p>Relevant, always included</p>	<p>Risks related to the physical impacts of climate change are also analysed considering continuous and progressive changes.</p> <p>Specifically, through:</p> <ul style="list-style-type: none"> <li>• rising sea levels;</li> <li>• gradual increase in rainfall;</li> <li>• gradual decrease in rainfall;</li> <li>• gradual increase in temperature.</li> </ul> <p>Climate changes are defined by taking into account the RCP8.5 high-emission trajectory and forecasted situation in 2050. Every operation site, plant or office of Eramet is screened in that process. The Group used the OCARA methodology (Operational Climate Adaptation &amp; Resilience Assessment) developed by the consulting firm Carbone 4. OCARA aims to create the benchmark for analysing the resilience of companies to the impacts of climate change physical risks. It allows companies to question their vulnerabilities, identify points of vigilance and then implement climate resilience actions.</p> <p>Eramet is conscious of the particularly close horizon of first consequences of these phenomena, some of which are already visible. Indeed, New Caledonia and Gabon faced specifically high level of rain falls in 2021 which appear to be a chronical trend in last years. The Group has decided to consequently adapt its risk analysis to explicitly include these direct impacts of climate modifications on its activity as from 2020.</p>

## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

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### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Acute physical

Other, please specify

Acute physical Increased severity and frequency of extreme weather events such as extreme heat and drought, on one hand and heavy rains and floods on another hand.

### Primary potential financial impact

Decreased revenues due to reduced production capacity

### Company-specific description

In 2021 we have conducted a study with the OCARA methodology to better assess the physical risks of our metals and mining sites.

We have identified the following materials impacts that some of Eramet's sites could face in the coming years considering climate changes:

- Repeated occurrences of large wildfires and pandemics;
- Competition for access to water;
- Electricity blackout, interruption of communication networks;
- Limitation in the ability to import or export critical goods;
- Stock losses and lasting loss of supply;
- Landslide causing inaccessibility or even partial or complete destruction of buildings;
- Decommissioning or destruction of machinery;
- Limitation of our ability for vegetation recovery.

Risks are considered higher for our plants compared to our mining operations. Northern Europe, the United States and Indonesia are the regions where impacts are estimated at the highest level.

Overall, Eramet's industrial sites present a level of risk below average.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

55,640,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

We estimate that the increased severity and frequency of cyclones may impact around 10% of our mining production in New Caledonia, which approximately equates to €57m of EBITDA as it affects the ore business in the first instance.

Financial impact = 10 % x 2021 New Caledonia mining production x 105 USD /mt  
 Financial impact = 10 % x 5 400 kmt x 105 kUSD /kmt  
 Financial impact = 56 700 kUSD = 55 640 kEUR

With 105 USD / mt : 2021 average price of nickel ore  
 Exchange rate : 1,02 USD / EUR

**Cost of response to risk**

25,196,000

**Description of response and explanation of cost calculation**

1) Case study:

We estimate that the increased severity and frequency of cyclones may impact around 10% of our mining production capacity in New Caledonia, which approximately equates to €57m of EBITDA as it affects the laterite ore mining component of the business in the first instance. A process is in place to mitigate the impact of cyclones: the power of the furnaces of the pyro metallurgical plant (in Doniambo, New Caledonia) is minimised when a cyclone approaches and a section of the oil-fired power plant supplying the furnaces is isolated. To ensure the continuity of the plant, we have increased the stock of safety fuel oil (+ 25kt) and also increased the nickel ore stockpile target (+ 150 kt) to ensure continuity of furnace load.

2) Explanation of how the figure provided in column 'Cost of response to risk' was

calculated:

The cost of the response to risk, which is non-recurring, corresponds to the total value of the additional fuel oil and ore stock (based on its market value):

Cost of response to risk = fuel oil stock cost + ore stock cost

Cost of response to risk = 25 kt \* \$400 USD/mt + 150 kt \* 105 USD /mt

Cost of response to risk = USD 10,0 m + USD 15,7 m

Cost of response to risk = USD 25,7 m

Cost of response to risk = EUR 25,2 m

With \$ 400 USD/mt : 2021 average cost of fuel oil

105 USD / mt : 2021 average price of nickel ore

Exchange rate : 1,02 USD / EUR

### Comment

NA

### Identifier

Risk 2

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

### Primary potential financial impact

Increased direct costs

### Company-specific description

In Europe, the increasing scope and level of carbon taxation may affect the cost of our products from Norwegian and French plants subject to the ETS. The EU ETS in 2021 revealed a level of carbon price not seen for nearly a decade. From 2019, new carbon taxes have been put in place in South Africa, where we buy manganese ore, and in Argentina, where we have a lithium mining project and in Indonesia where we have a Ni pig iron site and are considering a Ni intermediate product project. The Government of Gabon has a project to create a carbon tax in that country. Its terms of application are not yet known. It is likely that other new carbon tax systems will emerge in countries in which Eramet operates.

### Time horizon

Long-term

### Likelihood

More likely than not

### Magnitude of impact

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

203,137,000

**Potential financial impact figure – maximum (currency)**

335,390,000

**Explanation of financial impact figure**

The financial impact figure is based on the projection in 2035 of CO2 emissions without any reduction initiative and on IEA CO2 prices projections. The cost compared to today is estimated between m€ 203-335.

Calculation explanation :

Cost = Current CO2 Eramet's emission by country x 2035 CO2 prices in regions where Eramet operates, by scenario

With :

- Current CO2 Eramet's emission by country : as disclosed in part C7.2
- 2035 CO2 price : assumptions based on carbon cost forecasts for 2030 and 2040 made by the IEA "World Energy Model" according to "announced pledges" and "sustainable development" IEA's scenarios ; 2035 CO2 price = average (2030 CO2 price ; 2040 CO2)

Announced Pledges CO2 prices by 2035 :

- Advanced economies with net zero pledges : 145 USD/t
- China : 62,5 USD/t
- Emerging market and developing economies with net zero pledges : 75 USD / t

Sustainable development CO2 prices by 2035 :

- Advanced economies with net zero pledges : 120 USD/t
- Other selected emerging market and developing economies : 17,5 USD/t

Exchange rate : 1,02 USD / EUR

Each country in which Eramet operates is associated with a geographical area (Advanced economies, emerging market, etc).

Minimum corresponds to 2035 IEA "Announced pledges" scenario CO2 prices

Maximum corresponds to 2035 IEA "Sustainable development" scenario CO2 prices

**Cost of response to risk**

1,300,000,000

### Description of response and explanation of cost calculation

On a like-for-like basis with 2019, Eramet seeks to achieve a -40% reduction in the Group's (scopes 1 and 2) carbon emissions by 2035 compared to 2019. This target requires activating all available levers, including those still at the stage of research and development or first pilot schemes: carbon capture & storage (CCS), bio-reducers, electrical mining machinery and others. The implementation of these levers will generate investment costs or operational expenses.

To estimate a total of € 1,300 m to be spent to reduce the group's emissions by 40%, each emission reduction technology has been associated with an abatement cost (expressed in €/tCO<sub>2</sub>). This cost is a preliminary estimate which will need to be refined over time.

### Comment

NA

## C2.4

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

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#### Identifier

Opp1

#### Where in the value chain does the opportunity occur?

Downstream

#### Opportunity type

Markets

#### Primary climate-related opportunity driver

Access to new markets

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

CENTENARIO PROJECT: ERAMET LITHIUM PROJECT LOCATED IN ARGENTINA

Eramet has defined part of its development strategy on the metals involved in the transition to a climate-neutral economy, mainly lithium, nickel salts and cobalt salts.

The development of batteries will lead to very strong growth in demand for certain critical metals. For instance, the demand for lithium is expected to increase 8-fold by 2030, for pure nickel salts threefold and for cobalt threefold.

It is clear that securing access to critical metal resources will be a key challenge for all European players involved in the battery manufacturing supply chain. For Eramet, access to these critical natural resources is a structural competitive advantage. Eramet is the only European player to have secured significant resources of critical metals in this fast-growing market and has positioned itself as a key supplier, particularly via the Eramet deposit in Argentina.

Since the discovery of the Centenario-Ratones (Argentina) lithium brine deposit, geological works have increased the quantity of available lithium carbonate equivalent resources to around 10 Mt LCE (lithium carbon equivalent), making it a world-class resource. In 2020 and 2021, the pilot plant, a small-scale version of a future industrial facility, achieved the target performance for the brine treatment process over time, under real-world conditions at the deposit. In 2021, the Group decided to launch the construction of the lithium carbonate production site. The construction of the plant, with an annual production of 24,000 tonnes of LCE, is expected to start in the first quarter of 2022, with production beginning in early 2024 and full capacity expected in the second half of 2025. The size of the deposit will allow for further expansion.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

200,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The competitiveness of the process developed by Eramet places it in the first quartile of the lithium industry's cash cost curve. Estimated EBITDA with an annual production of 24,000 tonnes of lithium (LCE), after ramp-up, should reach around \$200 million per year based on the last long-term price consensus (Cost insurance freight - CIF LT price consensus of \$12,900/t LCE).

**Cost to realize opportunity**

400,000,000

**Strategy to realize opportunity and explanation of cost calculation**

The total cost of the facility is estimated at 400 million US dollars. Eramet will have a majority share of 50.1% in the project and will manage it from an operational standpoint. For its part, Tsingshan will contribute up to 375 million US dollars to the project by financing the construction of the plant, with an investment of 49.9% in the project. Production will be independently sold by each of the two shareholders up to their share of the capital on the basis of an off-take contract (trading) under commercial market conditions. Construction of the plant will start in the first quarter of 2022, with production beginning in early 2024.

**Comment**

NA

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Upstream

**Opportunity type**

Resource efficiency

**Primary climate-related opportunity driver**

Use of recycling

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

LI-ION BATTERY RECYCLING PROJECT: RELIEVE PROJECT

Recycling of li-ion batteries is currently a key lever for the sustainability of electric mobility which is dependent on the ability to reuse and recycle batteries and their different compounds. Disruptive projects are necessary to develop this industry with all the benefits of a truly circular-economy approach, by offsetting the negative externalities of batteries production, while providing the value chain with new metals supplied from this urban mine. The ReLieVe project developed by Eramet offers a technologically sound response at industrial scale to this major bottleneck to the development of electric vehicles in Europe. It will contribute significantly to the European objectives by retailing in Europe the metals needed for EV batteries.

On the strength of the technical maturity achieved over several years of research and development, Eramet has decided to launch industrialization studies in early 2022 to develop an integrated recycling solution covering the entire value chain from the dismantling of batteries to the production of nickel, cobalt and lithium salts suitable for

the manufacture of new batteries.

Depending on the outcome of this pre-industrial phase, Eramet and its partners may decide to build a lithium-ion battery recycling plant in France by 2024 to produce black mass, a metal concentrate (nickel, cobalt, manganese, lithium and graphite) suitable for hydrometallurgical refining.

As for the refining steps, Eramet starts the construction of a pre-industrial demonstrator within its research and innovation centre, an essential step to pave the way for the commercial phase. This demonstrator will optimize the efficiency of the recycling process and will address the requirements of future customers and partners by drawing on the Group's expertise in metals extraction process engineering and its operational expertise in hydrometallurgy.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium-low

### **Are you able to provide a potential financial impact figure?**

Yes, an estimated range

### **Potential financial impact figure (currency)**

#### **Potential financial impact figure – minimum (currency)**

40,000,000

#### **Potential financial impact figure – maximum (currency)**

60,000,000

### **Explanation of financial impact figure**

The financial impact of the project is highly dependent on the market prices of the recovered metals, but also on the cost of access to the raw material (end-of-life batteries and manufacturing scrap).

Turnover = Plant capacity \* % of metals recovered \* % of metal concentration \* Metal prices

EBITDA = Turnover - COGS - Other variable costs – Fixed costs

EBITDA = from € 40 m to € 60 m

The estimate provided is thus preliminary by nature. It takes into account:

- The long time to market such project (~ 10 years) which is related to the long life-time of batteries placed on the market. Such batteries can only be recovered and recycled

after their normal operational life time. Therefore the recycling market will only pick-up in 5 to 10 years' time.

- Assumptions made on metal prices for Lithium, Nickel, Cobalt, which is very difficult to firm-up for a potential start of operations in 5 to 10 years' time; (Ni at ~\$16/kg, Co at ~\$44/kg and LCE at ~\$12/kg ).
- An average plant capacity corresponding to 50 kt/year (10% to 20% of the European lithium battery recycling market by 2030)
- Assumptions made on metal recoveries, which are complicated to firm-up at this early stage of the R&D of the processes involved, typically in the range of 80% to 95% depending on metals and process choices.

### **Cost to realize opportunity**

225,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Detail of the cost to realize opportunity :

- Demo Plant : 15 m€
- Feasibility studies : 10 m€
- Industrial facility : 200 m€
- > TOTAL : 200 + 15 + 10 = 225 m€

The project started its industrialization phase in January 2022, with all detailed engineering and technical studies, permitting actions and environmental impact assessments ongoing. ReLieVe is targeting the construction of a first-of-a-kind closed-loop recycling plant in Dunkirk (France) located in the new French battery cluster, with a planned production start date by 2024 for upstream and 2026/27 for downstream, for an estimated total investment of circa 225 m€.

The project was awarded the Innovation Fund in July 2022 and as such will benefit from financial support from the European Union.

The ReLieVe project will pursue the following key strategic objectives:

- To deploy the first-of-a-kind integrated recycling plant in Europe to enable the circularity of strategic metals for the European battery industry.
- To provide a high-capacity / high-yield recycling solution to meet present and future requirements of the European regulation.
- To support the European transition to a low-carbon economy
- To contribute to Eramet's roadmap to consolidate its position of an energy transition champion in Europe and become the reference partner for the development of the recycling industry.

### **Comment**

The ReLieVe project is highly mature thanks to a multi-year robust R&D & piloting program of more than 10 years within Eramet Research & Innovation Center in France.

The project combines:

- Best-in-class technologies available with tailor-made hydrometallurgical processes to deliver an innovative first-of-a-kind recycling facility and ready to cope with the expected growth of market needs.

- Lowest carbon footprint with the avoidance of 4.1M ton of CO<sub>2</sub> over its first 10 years of operations.
- High recovery yields to achieve long-term profitability and comply with upcoming regulations on batteries. The project has been designed to meet the European requirements of future battery regulation in terms of recycling efficiency and material recovery targets.
- Low environmental impact in line with the circular economy approach adopted by Eramet.
- Battery grade specifications for our end-products to directly feed the European battery manufacturing value chain.

**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Access to new markets

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

MnO PROJECT: Production of manganese ore (MnO) addressing various markets including the battery market

Eramet has defined part of its development strategy on the metals involved in the transition to a climate-neutral economy, mainly lithium, nickel salts and cobalt salts. The development of batteries will lead to robust growth in demand for certain critical metals. For instance, demand for lithium is expected to increase threefold by 2025, for pure nickel salts twofold and for cobalt twofold.

It is clear that securing access to critical metal resources will be a key challenge for all European players involved in the battery manufacturing supply chain. For Eramet, access to these natural resources is a structural competitive advantage. Eramet is the only European player to have secured significant resources of critical metals in this fast-growing market, particularly via its affiliate, COMILOG, located in Gabon, a leading player in manganese ore production and transformation.

The MnO process uses existing facilities in Gabon from COMILOG. The first saleable products were delivered end of 2021. In the coming years, the target is to produce ~ 30 kt MnO per year, addressing various markets including the growing battery market.

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

This preliminary estimate of the financial impact is based on a preliminary review of various end-user markets accessible for this product, including the battery market. Based on an average price of approx. € 500/t CIF, and a target capacity of 30 kt MnO per year, the financial impact was calculated as a preliminary estimate, consisting of the targeted EBITDA.

**Cost to realize opportunity**

2,000,000

**Strategy to realize opportunity and explanation of cost calculation**

The existing facilities in Gabon would need to be modified in order to enable new products to be packaged and exported to our customers. The total cost of the project is estimated at 2.0 M€. The investment of the bagging machine (1.4 M€) shall start in mid-2022.

**Comment**

NA

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**Identifier**

Opp4

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Use of public-sector incentives

### **Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

### **Company-specific description**

Most of Eramet manganese plants are located in countries with very low carbon electricity mix (Norway, France, Gabon). In a world where a high carbon price would be applied in every country, Eramet's production cost would be less impacted than competitors and its products would become more competitive. This would result in a strong competitive advantage, even if not being perceived by the market yet.

### **Time horizon**

Medium-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

224,250,000

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact figure**

Eramet's manganese activity through Norwegian, French and Gabonese (Complexe Métallurgique de Moanda) plants have one of the lowest emission factors in the entire manganese industry (about 1,4 tCO<sub>2</sub>/t in average for the sites of Eramet Norway, Dunkerque and Complexe Métallurgique de Moanda).

A benchmark led by Alloy Consult established that, for the alloys production mix of Eramet, the average emission factor of the market would be about 4,85 tCO<sub>2</sub>/t.

If the carbon price were to be 100€/t worldwide, the competitive advantage for Eramet sites would be  $(4,85-1,40) * 100 = 345 \text{ €/t}$ .

If we take the 2021 production of the low-carbon footprint sites of the Fe and Si manganese of Eramet, about 600kt/year, the competitive advantage would be  $650 \text{ kt} * 345 \text{ €/t} = 224 \text{ M€}$ .

### **Cost to realize opportunity**

0

### **Strategy to realize opportunity and explanation of cost calculation**

60% of Eramet's manganese plants are located in France and Norway which have a very low carbon electricity mix. Therefore, Eramet's manganese products have already a very low carbon footprint compared to its competitors. Thus, there is no additional cost to realise this opportunity.

**Comment**

NA

## C3. Business Strategy

### C3.1

**(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?**

**Row 1**

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**Transition plan**

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

**Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future**

Transition plan below 2°C :

Eramet has defined a climate transition plans that it considers aligned with a WB2D (well-below 2 degrees) scenario. Some of the decarbonization levers it contains are using bio-reductants in ore reduction, the development of CCS in partnership with other players, the establishment of renewable electricity purchases and production coupled with the electrification of mines, and substituting natural gas for heavy fuel oil in electricity production.

In light of Eramet's core mining and metals operations, the company is in the process of assessing whether it can possibly elaborate a climate transition plan aligned with a 1.5°C world. Eramet keeps undertaking thorough assessments of its scope 1, 2 and 3 emissions. These assessments underlined that the main sources of emissions are pyrometallurgical activity and ore reduction. Based on these categories of emissions, we establish, review and keep track of our progress against our climate objectives. We have judged it essential to pursue this analysis to establish the foundations of both a robust and feasible 1.5°C transition plan that will follow the guidelines elaborated by CDP's technical note about climate transition plans. To date, our analysis is focusing on whether most of the solutions to decarbonize our emissions will become economic within this decade (2020-2030) and at which scale we will be able to implement them. Solutions investigated for inclusion in a potential 1.5°C climate transition plan are switching to biofuels or syngas or sustainable drivetrains for scope 1 and 2 emissions, enhancing cooperation with raw materials suppliers such as cement, steel and lime. We

aim to finalise and publish our transition plan within the next two years as indicated above.

### C3.2

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative

### C3.2a

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 8.5	Facility		Physical risks review is based on the OCARA method developed by Carbone 4. This consists of characterizing sensitivity to 8 selected climatic aspects of every infrastructure and process in Eramet, including logistics to provide strategic raw material and to deliver final products to main clients. Then these sensitivities are crossed with predictable variations of selected climatic aspects by 2050 considering the RCP8.5 scenario. Following this assessment, a mitigation action plan is under development for sites identified as having a high level of risk. Eramet also follows the emerging regulation especially when related to carbon as our activities are carbon-intensive.
Transition scenarios IEA 2DS	Company-wide		Eramet aims to take into account the impacts of climate change in its strategic roadmap. The Group recognises that the world could react in different ways to combat climate change. Two scenarios modelling a transition to a low-carbon society, compatible with the 2°C target of the Paris Agreement, were selected: <ul style="list-style-type: none"> <li>• The IEA 2°C scenario with CO2 capture/storage (CCS - Carbon Capture Storage) as a benchmark;</li> <li>• A variant of this first scenario, more cautious on the hypotheses of an improvement in energy efficiency and of CCS deployment kinetics. In 2018, a business impact analysis was conducted to quantify the change in demand for metals needed for the energy transition and this assessment has been updated in 2020. These scenarios highlight, for example, the criticality of certain metals produced by the Group and their unique role in</li> </ul>

			the energy transition, which helped to guide the Group's strategy, namely lithium and nickel (often associated with cobalt). The risk is not having secured the metal sources to meet the growing demand.
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## C3.2b

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

### Row 1

#### Focal questions

Focal question 1 = What metals will the world of tomorrow need?

Focal question 2 = What metallurgical extraction techniques will be used in tomorrow's world?

#### Results of the climate-related scenario analysis with respect to the focal questions

Focal question 1

Launched in 2018, the Group's in-depth strategic and managerial transformation programme has enabled it to reposition itself competitively in the Mining and Metals sector, in a rapidly changing environment, to create value over the long term. The worst performing assets were therefore repositioned. The Group's strategy is now based on two areas: growing metals for global economic development and developing critical metals for the energy transition.

The second component involves the expansion of the portfolio into metals for the energy transition. These markets are experiencing very strong growth, driven by the exponential demand for metals used for electrification (electric vehicles in particular) and thus contributing to the decarbonisation of world economies.

These include:

- lithium, with the restart of the Centenario project announced by Eramet in November 2021;
- Development in the production of nickel and cobalt for batteries, thanks to the Sonic Bay project, from the Weda Bay deposit and in partnership with BASF;
- Lithium-ion battery recycling project.

Focal question 2

Conventional metallurgical extraction processes require a large amount of energy and carbon, and in particular electricity. However, if the development of renewable production capacities or bioreductants were not as rapid as expected, pyrometallurgy activities could become incompatible with the Group's low-carbon strategy. Thus, for 2 main projects in development (SonicBay and Relieve projects), Eramet has chosen to use a less energy-consuming by resorting to hydrometallurgy rather than

pyrometallurgy, unlike its main competitors.  
 We have chosen the 2 scenarios in C3.2a because they allow us to analyse the effects of climate change on several of our business units, the timeframe used matches our capital planning and investment plans and goes beyond the lifetime of most of our existing assets.

### C3.3

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>As an emissive industry on one hand but also a contributor to the development of low-carbon technologies on the other, Eramet’s alignment with the transition to a decarbonated economy carries as many risks as opportunities for its business.</p> <p>Scenario-based analyses analysis is a powerful tool for managing this chapter of strategic reflection. It entails a forward-looking review, projecting Eramet’s current activity onto various possible worlds, in order to assess the consequences on the business. This approach is efficient for building a comprehensive model of the complex changes and the interactions between them, which is helpful for defining the transformations caused by climate change.</p> <p>The Group conducted this analysis in 2018 in collaboration with a domain-specific expert consultant. An update was made in 2020. As a result, Eramet’s activity is necessary for the development of low carbon technologies and essential for developing and creating responsible metal sectors involving all critical energy transition stakeholders.</p> <p>The outlook for the demand for metals produced by Eramet is favourable by 2030 in the IEA’s 2°C scenario. Thus, Eramet needs to access to these natural resources as it is a structural competitive advantage.</p> <p>Eramet is the only European player to have secured significant resources of critical metals in this fast-growing market and has positioned itself as a key supplier, particularly via:</p> <ul style="list-style-type: none"> <li>- the Eramet lithium deposit in Argentina</li> <li>- the diversification of Weda Bay (Indonesia) towards products for EV batteries</li> <li>- Li-on batteries recycling R&amp;D program</li> </ul>

<p>Supply chain and/or value chain</p>	<p>Yes</p>	<p>We have an internal price of carbon fixed at €100/tonne of CO2 to select our long-term investments into low carbon technologies and projects.</p> <p>We are currently developing several projects to drive the transition such as providing raw materials for the electric mobility. Securing access to critical metal resources will be a key challenge for all European players involved in the battery manufacturing supply chain. It can be either from primary raw material or through secondary materials originating from li-ion battery recycling.</p> <p>Eramet's strategy is to be able to deliver these critical materials from primary sources as well as from recycled li-ion batteries for the next decades (2030 and beyond).</p> <p>It is the purpose of the ReLieVe project (which stands for Recycling of Li-ion batteries for Electric Vehicles), which is a collaborative research and innovation project whose goal is to develop an innovative process for recycling lithium-ion batteries used in electric vehicles in a closed loop. The idea is also to produce these new batteries in Europe and to build an industrial sector integrated from end to end—from the collection and dismantlement of the batteries at the end of their useful life, to the direct recycling of their components into the production of new electrode materials.</p> <p>ReLieVe is developing a large-scale version of an innovative, "closed-loop" process for recycling lithium-ion batteries. In contrast to more conventional processes, this one will recycle metals while retaining their physical and chemical qualities, so that they may be directly reused in the design of a new lithium-ion battery cathode. From an environmental perspective, the challenge is two-fold: first, to develop a process that has the smallest possible environmental impact—and carbon impact, in particular—and second, to maximise the number of lithium-ion components that can be recycled.</p>
<p>Investment in R&amp;D</p>	<p>Yes</p>	<p>We have an internal price of carbon fixed at €100/tonne of CO2 to select our long-term investments into low carbon technologies and projects.</p> <p>We are currently developing several projects to drive the transition such as providing raw materials for the electric mobility. Securing access to critical metal resources will be a key challenge for all European players involved in the battery manufacturing supply chain. It can be either from primary raw material or through secondary materials originating from li-ion battery recycling.</p> <p>Eramet's strategy is to be able to deliver these critical materials from primary sources as well as from recycled li-</p>

		<p>ion batteries for the next decades (2030 and beyond). It is the purpose of the ReLieVe project (which stands for Recycling of Li-ion batteries for Electric Vehicles), which is a collaborative research and innovation project whose goal is to develop an innovative process for recycling lithium-ion batteries used in electric vehicles in a closed loop. The idea is also to produce these new batteries in Europe and to build an industrial sector integrated from end to end—from the collection and dismantlement of the batteries at the end of their useful life, to the direct recycling of their components into the production of new electrode materials.</p> <p>ReLieVe is developing a large-scale version of an innovative, "closed-loop" process for recycling lithium-ion batteries. In contrast to more conventional processes, this one will recycle metals while retaining their physical and chemical qualities, so that they may be directly reused in the design of a new lithium-ion battery cathode. From an environmental perspective, the challenge is two-fold: first, to develop a process that has the smallest possible environmental impact—and carbon impact, in particular—and second, to maximise the number of lithium-ion components that can be recycled.</p>
Operations	Yes	<p>As an emissive industry, Eramet's alignment with a low-carbon transition by 2050 means it has to reduce its energy consumption and carbon emissions. Our strategy relies on:</p> <ul style="list-style-type: none"> <li>- reducing CO2 emissions on the 1 &amp; 2 scopes: in 2020, we have raised our internal price of carbon for our current operations from €30/tonne of CO2 to €100/tonne for long-term investments to shift our operations toward low carbon projects. The aim is to make CO2 emissions on scopes 1 &amp; 2 costly to encourage companies and investors to deploy low-carbon solutions. In 2021, 25% of the Group's emissions were affected by a carbon valuation mechanism. Moreover, Eramet has set an SBT WB2C target and has committed to reducing its Scope 1+2 by 40% in 2035 from a 2019 base year. The main emissions reduction levers are :</li> <li>- the use of bio-reductants in ore reduction;</li> <li>- replacing heavy fuel oil with gas for the production of electricity;</li> <li>- the development of CCS in partnership with other players;</li> <li>- the establishment of renewable electricity purchases and production coupled with the electrification of mines;</li> <li>- the development of the pre-reduction of hydrogen ore alongside bio-reductants;</li> </ul> <p>Eramet's strategy is to be "part of the solution" by providing unique solutions to customers (scope 3 emissions) to</p>

		<p>reduce their GHG emissions, by offering products and solutions that mainly contribute to reducing the carbon footprint. This is reflected in one of the three pillars of the Group's strategy: "to expand the portfolio of activities towards energy transition metals". To that end and through its SBT commitment, Eramet has set qualitative targets on 67% of its suppliers and customers in terms of CO2e emissions to make them engage by setting SBT targets. Moreover, Eramet plans to help its customers reduce their CO2e emissions by transferring its low carbon know-how regarding pyrometallurgy in exchange for royalties.</p> <p>At the start of 2022, all sites of the Mining &amp; metals Division (excluding two non-core activities, SETRAG whose activity is the transport of people and goods by train in Gabon and the power plant in New Caledonia which is expected to shut down by end of 2021 - beginning of 2022) had implemented an ISO 50001 certified energy management system which covers nearly 80% of the Group's 2021 emissions.</p> <p>At the end of 2021, 100% of the mining facilities have been certified with the ISO 14001 standard.</p>
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### C3.4

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Acquisitions and divestments Assets	<p>Our strategic planning is reviewed every year. We analyse Eramet's different businesses with a 10-year horizon timeframe. The strategic planning is then declined in an operational plan at each business unit level with a 5-year horizon and a financial planning is elaborated following the declination of the strategic plan for each business unit.</p> <p>We take into account our climate scenarios for the elaboration of the business unit's financial planning. Our climate scenarios showed that the energy transition will require the electrification of transportation. This electrification relies heavily on batteries, which will lead to very strong growth in demand for certain critical metals by 2030 such as lithium (x8), pure nickel (x3) or cobalt (x3). On top of maintaining its strong position in nickel mines assets, Eramet develops its lithium mines assets to anticipate the market growth and create additional revenues until 2030 and beyond. Thus, Eramet decided to secure its access to lithium through mines near Salta in Argentina – a mining licence was granted in 2019. The construction of the Centenario lithium plant started in early 2022. Eramet is also working on a project in Alsace, France, to recover</p>

		<p>lithium from water stable in a geothermal source before this water will be used to generate electricity or heat. In addition, our R&amp;D led to the development of a new process for producing battery-quality lithium carbonate. The extraction process developed by Eramet achieves a 90% yield over a processing period of just a few days. By comparison, the traditional evaporation process route delivers less than 50% yield in 18 months.</p> <p>In December 2021, the ReLieVe program was successfully completed: several test campaigns conducted on a laboratory scale and then on a pilot scale at the Group's innovation centre, Eramet Ideas, made it possible to recover all the valuable elements - nickel, cobalt, lithium and manganese - with very high levels of efficiency and to transform them into new battery-grade metals.</p> <p>Finally, in late 2020 Eramet announced a specific partnership with BASF to conduct the PFS (Prefeasibility study) of its nickel-cobalt deposit in Indonesia (owned in JV) in order to produce specific nickel and cobalt salts for electric vehicles batteries. A reconnaissance mission was organised in July 2021, which allowed to approve the choice of the site. The detailed preliminary design stage has begun in early 2022.</p> <p>Eramet committed to an SBT target to reduce its Scope 1+2 CO2 emissions by 40% in 2035 compared to the 2019 base year and to influence its suppliers to reduce decrease their CO2 emissions, which will have an impact on the financial planning of Eramet (Capex, Opex, risks analysis). The impact of the SBT roadmap has been integrated into the strategic plan of the Group through a dedicated chapter on decarbonisation.</p>
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## C4. Targets and performance

### C4.1

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

Intensity target

### C4.1a

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

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**Target reference number**

Abs 1

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

**Base year**

2019

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

3,708,639

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

364,263

**Base year Scope 3 emissions covered by target (metric tons CO2e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

4,072,903

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2035

**Targeted reduction from base year (%)**

40

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

2,443,741.8

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

3,321,239

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

344,265

**Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

3,659,860

**% of target achieved relative to base year [auto-calculated]**

25.3531080902

**Target status in reporting year**

Underway

**Is this a science-based target?**

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

Well-below 2°C aligned

**Please explain target coverage and identify any exclusions**

Eramet has developed a Science-Based Target that has been approved by SBT and that is compliant with the WB2C scenario (reduction of absolute CO2e emissions Scope 1+2 by 40% from a 2019 base year to a 2035 target year). This is a company-wide target and there are no exclusions.

**Plan for achieving target, and progress made to the end of the reporting year**

The main emissions reduction levers are:

- the development of CCS in partnership with other players: this is the action with the greatest impact in terms of CO2 savings, but the cost of these solutions is an obstacle. Therefore, the ambition is to develop a pilot and identify the least capital-intensive technologies;
- using bio-reducers in ore reduction: the issue of this action is the ability to access sustainably managed bio- reducers compatible with the constraints of our processes ;
- replacing heavy fuel oil with gas for the production of electricity
- the establishment of renewable electricity purchases and production coupled with the electrification of mines: at the same time as developing technical solutions, the successful implementation of this lever is based on a radical change of culture which

requires long-term support;  
 - developing the pre-reduction of hydrogen ore alongside bio-reducers.

Moreover, three decarbonisation scenarios have been built:  
 - absolute potential => all levers are fully exploited and there are no other constraints considered  
 - technical potential => all levers are fully exploited and only what is technically feasible is taken into account  
 - actionable potential => all levers are fully exploited while both technical and economic constraints are taken into account. This latter scenario has been used to build the decarbonisation roadmap

This robust roadmap to reduce the carbon footprint of Eramet's activities includes:  
 - the percentage of activation of the different emissions reduction levers  
 - a timeline with intermediate steps (2025, 2030, 2035)  
 - the impact and activation of the levers are detailed at each site's level to facilitate the implementation

The efforts to reduce the carbon footprint of Eramet will not be the same for each business unit: Eramet will mainly focus on the processes that emit the bulk of Eramet emissions (manganese and nickel alloys).

This roadmap has been included in a specific chapter of the annual strategy plan of Eramet. The SBT roadmap is therefore at the core of Eramet's strategy.

**List the emissions reduction initiatives which contributed most to achieving this target**

## C4.1b

**(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

**Target reference number**

Int 1

**Year target was set**

2018

**Target coverage**

Company-wide

**Scope(s)**

Scope 1  
 Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

**Intensity metric**

Metric tons CO<sub>2</sub>e per metric ton of product

**Base year**

2018

**Intensity figure in base year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

0.41

**Intensity figure in base year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

0.03

**Intensity figure in base year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

**Intensity figure in base year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

0.44

**% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure**

99

**% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure**

99

**% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure**

**% of total base year emissions in all selected Scopes covered by this intensity figure**

99

**Target year**

2023

**Targeted reduction from base year (%)**

26

**Intensity figure in target year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

0.3256

**% change anticipated in absolute Scope 1+2 emissions**

-6

**% change anticipated in absolute Scope 3 emissions**

0

**Intensity figure in reporting year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

0.24

**Intensity figure in reporting year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

0.03

**Intensity figure in reporting year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

**Intensity figure in reporting year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

0.27

**% of target achieved relative to base year [auto-calculated]**

148.6013986014

**Target status in reporting year**

Achieved

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain target coverage and identify any exclusions**

The CO<sub>2</sub> emissions generated by the rail transport activity in Gabon (Setrag company) are not included in this target.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the emissions reduction initiatives which contributed most to achieving this target**

The Group's absolute emissions decreased during 2021 and the development of mining activities continued despite the health crisis, making possible a 39% reduction in carbon intensity from 2018 levels. The goal of reducing the Group's carbon intensity (-26% by 2023 compared with the 2018 level) was therefore far exceeded in 2021.

This result was mostly obtained through the deployment of intrinsically lower carbon-emitting mining activities at a sustained pace (volume effect). The effect of emission control actions is also progressing.

## C4.2

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Other climate-related target(s)

### C4.2b

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

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**Target reference number**

Oth 4

**Year target was set**

2020

**Target coverage**

Other, please specify

Sites with an energy consumption > 200GWh/year

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Energy consumption or efficiency

Other, please specify

Quantity of sites certified ISO 50001 (Energy Management System) with an energy consumption > 200GWh/year

**Target denominator (intensity targets only)**

**Base year**

2018

**Figure or percentage in base year**

5

**Target year**

2020

**Figure or percentage in target year**

12

**Figure or percentage in reporting year**

12

**% of target achieved relative to base year [auto-calculated]**

100

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

Eramet is targeting to deploy the ISO 50 001 certification over its main energy and CO2 intensive activities. In 2021, 13 sites are consuming more than 200 GWh/year and those sites represent more than 90% of global Eramet's energy consumption. By the early of 2022, the 12 sites targeted have been ISO 50 001 certified.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

SLN Power plant is one of those 13 which are consuming more than 200 GWh/year, but we have decided not certify it since we are in the process of replacing it by a new more efficient power generation mean.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the actions which contributed most to achieving this target**

We have raised awareness among employees and facilitated the assessments to obtain the ISO 50 001 certification on all sites included in the objective.

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**Target reference number**

Oth 2

**Year target was set**

2020

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

Land use change  
hectares restored

**Target denominator (intensity targets only)**

Other, please specify  
Hectares deforested

**Base year**

2019

**Figure or percentage in base year**

0.85

**Target year**

2023

**Figure or percentage in target year**

1

**Figure or percentage in reporting year**

1.32

**% of target achieved relative to base year [auto-calculated]**

313.3333333333

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

No, it is not part of an emissions target

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

In 2020, Eramet took the objective to preserve water resources and to accelerate the rehabilitation of the company's mining sites by promoting biodiversity. To pursue this objective, Eramet set the target of rehabilitating more surfaces than the ones which have been stripped between 2019 and 2023.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the actions which contributed most to achieving this target**

The Group seeks to achieve a ratio of rehabilitated areas to cleared areas  $\geq 1$  over the period 2019-2023 (long-term infrastructures excluded). This goal corresponds to continued progress on this indicator which was:

- 0.5 from 2011 to 2013;
- 0.85 from 2014 to 2018.

The objective was reached over the 2019-2021 period, with a ratio of 1.32.

**Target reference number**

Oth 3

**Year target was set**

2020

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Waste management  
metric tons of waste reused

**Target denominator (intensity targets only)**

**Base year**

2018

**Figure or percentage in base year**

0

**Target year**

2023

**Figure or percentage in target year**

10,000

**Figure or percentage in reporting year**

27,000

**% of target achieved relative to base year [auto-calculated]**

270

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

No, it is not part of an emissions target

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

Eramet strives to adhere to the waste management hierarchy: first, prevent waste production/reuse waste/maximise recycling and recovery or, failing this and as a last resort, safely dispose of the waste under environmentally friendly conditions.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the actions which contributed most to achieving this target**

Eligible actions are actions that help to enhance waste flows in the waste management hierarchy: re-use > internal or external material recovery (recycling) > energy recovery. The ideal recovery is primarily material recovery, through re-use, internal recycling or

external material recovery.

A special Circular Economy Committee has been created. The Committee's role is to identify and validate the actions and projects that fall within the scope of the above definitions.

At year-end 2021, 13 actions were certified by the Committee. Most of them are innovative R&D projects – sometimes their implementation requires time. However, eight projects are already productive and have contributed to the indicators with the following cumulative results from 2019 to the end of 2021:

- At least 1227 kt of tailings and so-called incidental low-grade ores recovered, ahead of the rate of 2 million tonnes targeted over the period 2018-2023;
- 127,000 tonnes of waste recovered, far exceeding the initial target of 10,000 tonnes

**Target reference number**

Oth 1

**Year target was set**

2020

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Other, please specify

Other, please specify

Engagement with suppliers and customers

**Target denominator (intensity targets only)**

**Base year**

2019

**Figure or percentage in base year**

31

**Target year**

2025

**Figure or percentage in target year**

67

**Figure or percentage in reporting year**

34

**% of target achieved relative to base year [auto-calculated]**

8.3333333333

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

No

**Is this target part of an overarching initiative?**

Science Based Targets initiative – approved supplier engagement target  
Science Based Targets initiative – approved customer engagement target

**Please explain target coverage and identify any exclusions**

Eramet committed that two-thirds of its customers & suppliers (in % of "purchased goods and services" + "processing of sold productions" emissions) will have carbon reduction targets in line with the Paris Agreement by 2025. Traders are excluded as they cannot be engaged.

The suppliers & customers were considered engaged if:

- Their target is validated by SBT, or
- Their target fills the 3 following criterias: time horizon between 5 and 15 years, average absolute reduction of at least 2,5%/year, covering of 100% of scope 1&2)

**Plan for achieving target, and progress made to the end of the reporting year**

Eramet also plans to ask its clients to do the ACT assessment (Assessing low Carbon transition, a methodology developed by ADEME and CDP) to evaluate the robustness of their low carbon strategy, and strengthen their decarbonisation.

Positive outcomes :

A test of a eucalyptus bio-based reductant, provided by one of our major customers, will be soon performed in our pyrometallurgy furnaces.

**List the actions which contributed most to achieving this target**

## C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

## C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	9	0
To be implemented*	3	31,000
Implementation commenced*	3	301,200
Implemented*	8	100,129
Not to be implemented	0	0

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

#### Initiative category & Initiative type

Transportation

Other, please specify

Infrastructure - Electrification of docked ships

#### Estimated annual CO2e savings (metric tonnes CO2e)

1,325

#### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 3 category 4: Upstream transportation & distribution

#### Voluntary/Mandatory

Voluntary

#### Annual monetary savings (unit currency – as specified in C0.4)

0

#### Investment required (unit currency – as specified in C0.4)

3,800,000

#### Payback period

No payback

#### Estimated lifetime of the initiative

21-30 years

#### Comment

Through its Norwegian operations, the Group has been offering since 2021 an electrical connection service to ships parked at the loading docks of the Kvinesdal and Sauda sites in Norway, thus enabling them to consume low-carbon energy, since it is derived from hydroelectricity rather than heavy fuel oil, to meet their electrical needs. The service will be extended to the Porsgrunn site in 2022.

**Initiative category & Initiative type**

Low-carbon energy generation

Solar PV

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

560

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

165,600

**Investment required (unit currency – as specified in C0.4)**

257,400

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

Solar PV plant in Argentina : the commissioning of a solar photovoltaic power plant at the basecamp in Centenario Ratones, Argentina: This 300 kWp plant has been operational since October 2021. It meets the electrical needs of the sixty or so people living at the base camp of Eramet's Lithium project by producing solar electricity during the day, thus reducing the consumption of generators.

**Initiative category & Initiative type**

Non-energy industrial process emissions reductions

Process material efficiency

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

40,000

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

3-5 years

**Comment**

Optimization of the "Coke / ton of ore" ratio in the raw materials mix at the CIM plant (Gabon)

Savings = Coke savings x Coke emission factor

**Initiative category & Initiative type**

Energy efficiency in buildings

Lighting

**Estimated annual CO2e savings (metric tonnes CO2e)**

5

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

10,000

**Investment required (unit currency – as specified in C0.4)**

81,000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

In 2021, the Group extended the use of LED systems for lighting at the Erasteel sites, enabling a reduction in electricity consumption for this purpose. Additional smart meters have also been installed to improve the monitoring of the sites' energy performance.

Savings = Electricity savings x Electricity emission factor

**Initiative category & Initiative type**

Energy efficiency in production processes

Waste heat recovery

**Estimated annual CO2e savings (metric tonnes CO2e)**

365

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

40,000

**Investment required (unit currency – as specified in C0.4)**

200,000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

A unit recovering and using waste heat from the cooling towers of the UKAD site was installed in the autumn of 2021, to heat a workshop.

Savings = Recovered heat x Natural gas emission factor

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**Initiative category & Initiative type**

Non-energy industrial process emissions reductions

Process material substitution

**Estimated annual CO2e savings (metric tonnes CO2e)**

5,500

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

1-2 years

**Comment**

Dolomite in the mix blend consumed by pyrometallurgy furnace have been reduced gradually

**Initiative category & Initiative type**

Energy efficiency in production processes

Waste heat recovery

**Estimated annual CO2e savings (metric tonnes CO2e)**

612

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

2,550,000

**Investment required (unit currency – as specified in C0.4)**

4,800,000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

The NewEra ERU (Energy Recovery Unit) project added a carbon monoxide combustion unit to enable the generation of both heat and electricity from the gases produced by furnace activity. The heat generated is used to improve the efficiency of the process and therefore reduce the electrical power requirements in furnaces. The energy saving is therefore twofold: less energy required for furnaces and more electrical power available. 2021 saw the installation of a pilot facility, fully operational since September of that year, which validated the capacity of the generator to operate with the expected duration and power.

**Initiative category & Initiative type**

Low-carbon energy generation

Wind

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

1,762

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

16-20 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Commissioning of two wind farms in Norway: The Tysvaer and Buhei wind farms, with an installed capacity of 47MW and 80MW respectively, which started construction in 2020, have both been commissioned. Their electricity production is purchased by Eramet Norway through a Corporate PPA over a 17-year period. Signed at the end of 2019, these first Corporate PPAs will provide Eramet Norway with a guaranteed-cost supply of wind-generated electricity. Eramet Norway has secured electricity at a competitive price over the long term, while contributing to the development of renewable energies. This also allows the Norwegian subsidiary to diversify its electricity sourcing, which is traditionally from hydroelectricity. The use of wind power supports the very low level of carbon emissions for Eramet Norway compared to its competitors on the manganese alloy market.

**Initiative category & Initiative type**

Transportation

Other, please specify

Transshipment project

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

50,000

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 3 category 4: Upstream transportation & distribution

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

Comilog's supply chain is evolving: manganese ore are now be partly loaded onto “capesize” ships that can carry up to 200,000 tons of ore — four times more than the 50,000-ton capacity of the “supramax” vessels traditionally used by Comilog. In addition to Comilog’s installations, new ones have been set up in Owendo to load barges with ore. These are then towed offshore where they dock at a floating transfer station operated by the Danish shipowner Norden. The ore is then transhipped onto the capesize.

A fine logistical organization is necessary between several departments of the company and Norden. This innovative system, for Comilog but also for Gabon, was prepared thanks to the expertise of the Eramet group.

The use of these large ore carriers improves Comilog's carbon footprint, with 50,000 tonnes of CO2 saved each year.

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Internal price on carbon	<p>For countries where a carbon valuation mechanism (tax or carbon quota market) is in place, the value of carbon tends to increase over time. Moreover, the development of such initiatives seems to become more widespread worldwide. In order to anticipate this trend, Eramet, has set an internal price for CO2. This price is set at €50/tonne of CO2 for current investments such as the replacement of equipment with an expected life &lt; 10 year and €100/tonne for long-term investments such as:</p> <ul style="list-style-type: none"> <li>- Capacity increase</li> <li>- New activities/ greenfield facilities</li> <li>- Technological breakthrough, with or without a significant increase in capacity (e.g. hydrogen)</li> <li>- Renewal of equipment with an expected life of more than 10 year. It can be revised if necessary.</li> </ul>

Compliance with regulatory requirements/standards	ERAMET conducts internal and external benchmarks (technologies, best practices). Eramet complies with the minimum energy performance requirements, and in particular those applicable in Europe via the BREF.
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## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

### Level of aggregation

Product or service

### Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

### Type of product(s) or service(s)

Shipping

Cold ironing, alternative maritime power

### Description of product(s) or service(s)

Through its Norwegian operations, the Group has been offering since 2021 an electrical connection service to ships parked at the loading docks of the Kvinesdal and Sauda sites in Norway, thus enabling them to consume low-carbon energy, since it is derived from hydroelectricity rather than heavy fuel oil, to meet their electrical needs.

### Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

### Methodology used to calculate avoided emissions

Other, please specify

Own estimation

### Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

### Functional unit used

A shore power facility to supply a ship's electrical needs (2 MW) through a power connection rather than running its generator sets for an hour

### Reference product/service or baseline scenario used

Electricity production by ship generators

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

1,325

**Explain your calculation of avoided emissions, including any assumptions**

Avoided emissions = Emission generated by the fuel oil consumption for electricity production - Emission generated by the electricity production in Norway.

Assumptions :

- 2 shore power facilities
- 50 boat / year / facilities
- Average boat requirement: 2 MW
- A boat stays at the quay for 8 hours
- Generator efficiency: 30%
- Carbon content of diesel: 270 gCO / kWh PCI
- Carbon content of electricity consumed: 7.2 gCO<sub>2</sub>/kWh (Norwegian mix)

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

1

---

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

No taxonomy used to classify product(s) or service(s) as low carbon

**Type of product(s) or service(s)**

Other

Other, please specify

Manganese Alloys

**Description of product(s) or service(s)**

Low-carbon manganese alloy

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Other, please specify

Own estimation

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Gate-to-gate

**Functional unit used**

Ton of manganese alloys

**Reference product/service or baseline scenario used**

Reference product : manganese-alloys produced by industry average in 2019

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Gate-to-gate

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

3

**Explain your calculation of avoided emissions, including any assumptions**

Eramet's manganese activity through Norwegian, French and Gabonese (Complexe Métallurgique de Moanda) plants have one of the lowest emission factors in the entire manganese industry (about 1,5 tCO<sub>2</sub>/t in average for these sites).

A benchmark led by Alloy Consult established that the average emission factor of the market is about 4,5 tCO<sub>2</sub>/ton of maganese-alloy.

Estimated avoided emissions (metric tons CO<sub>2</sub>e per ton of manganese-alloys) =  
Average global emissions factor of manganese alloys - Average Eramet's emissions factor at Production (Scope 1 + Scope 2) of Eramet's plants in Norway, France & Gabon  
3 = 4.5 - 1.5

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

20

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

**Row 1**

**Has there been a structural change?**

No

**C5.1b**

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	<b>Change(s) in methodology, boundary, and/or reporting year definition?</b>	<b>Details of methodology, boundary, and/or reporting year definition change(s)</b>
Row 1	Yes, a change in methodology	The HVC for coal was updated in 2021 (the change in the figure represents +/- 5% compared with the value used in 2020). As coal represents 30% of the group's emissions, this change of methodology does not impact the final emissions result by more than 5%. $0,05 \times 0,3 = 0,015$ hence a 1,5% change in total emissions which does not reach the 5% threshold defined internally and which triggers a recalculation.

**C5.1c**

**(C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?**

	<b>Base year recalculation</b>	<b>Base year emissions recalculation policy, including significance threshold</b>
Row 1	No, because the impact does not meet our significance threshold	The HVC for coal was updated in 2021 (the change in the figure represents +/- 5% compared with the value used in 2020). As coal represents 30% of the group's emissions, this change of methodology does not impact the final emissions result by more than 5%. $0,05 \times 0,3 = 0,015$ hence a 1,5% change in total emissions which does not reach the 5% threshold defined internally and which triggers a recalculation.

**C5.2**

**(C5.2) Provide your base year and base year emissions.**

**Scope 1**

**Base year start**

January 1, 2018

**Base year end**

December 31, 2018

**Base year emissions (metric tons CO<sub>2</sub>e)**

3,886,331

**Comment**

NA

**Scope 2 (location-based)**

---

**Base year start**

January 1, 2018

**Base year end**

December 31, 2018

**Base year emissions (metric tons CO<sub>2</sub>e)**

244,477

**Comment**

NA

**Scope 2 (market-based)**

---

**Base year start**

January 1, 2018

**Base year end**

December 31, 2018

**Base year emissions (metric tons CO<sub>2</sub>e)**

244,477

**Comment**

The location-based result has been used as a proxy since a market-based result cannot be calculated for the base year (2018). However, we now have calculations for both scope 2.

**Scope 3 category 1: Purchased goods and services**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO<sub>2</sub>e)**

908,476

**Comment**

NA

### Scope 3 category 2: Capital goods

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

484,201

**Comment**

NA

### Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

652,040

**Comment**

NA

### Scope 3 category 4: Upstream transportation and distribution

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

36,430

**Comment**

NA

### Scope 3 category 5: Waste generated in operations

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

592,113

**Comment**

NA

**Scope 3 category 6: Business travel**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

36,469

**Comment**

NA

**Scope 3 category 7: Employee commuting**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

20,400

**Comment**

NA

**Scope 3 category 8: Upstream leased assets**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

9,000

**Comment**

NA

**Scope 3 category 9: Downstream transportation and distribution**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

7,176,097

**Comment**

NA

**Scope 3 category 11: Use of sold products**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

**Scope 3 category 12: End of life treatment of sold products**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

107,245

**Comment**

NA

**Scope 3 category 13: Downstream leased assets**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

**Scope 3 category 14: Franchises**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

**Scope 3 category 15: Investments**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

427,313

**Comment**

NA

**Scope 3: Other (upstream)**

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

### Scope 3: Other (downstream)

---

**Base year start**

January 1, 2019

**Base year end**

December 31, 2019

**Base year emissions (metric tons CO2e)**

0

**Comment**

NA

## C5.3

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

Bilan Carbone

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

#### Reporting year

---

**Gross global Scope 1 emissions (metric tons CO2e)**

3,321,002

**Start date**

January 1, 2021

**End date**

December 31, 2021

**Comment**

NA

#### Past year 1

---

**Gross global Scope 1 emissions (metric tons CO2e)**

3,667,375

**Start date**

January 1, 2020

**End date**

December 31, 2020

**Comment**

NA

## C6.2

**(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

Purchases of low carbon electricity :

More than 90 % of the electricity purchased in 2021 was generated with low-carbon sources (Norway, Sweden, France, Gabon).

## C6.3

**(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

552,230

**Scope 2, market-based (if applicable)**

349,265

**Start date**

January 1, 2021

**End date**

December 31, 2021

**Comment**

NA

**Past year 1**

**Scope 2, location-based**

308,102

**Scope 2, market-based (if applicable)**

14,680

**Start date**

January 1, 2020

**End date**

December 31, 2020

**Comment**

NA

**C6.4**

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

Yes

**C6.4a**

**(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

---

**Source**

Facilities whose activity is limited to distribution

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

**Explain why this source is excluded**

Sites whose activity is limited to the distribution of products are excluded from environmental and energy reporting, because their cumulative impact is less than 0.1% for the main environmental and energy indicators monitored within the Group.

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

1

**Explain how you estimated the percentage of emissions this excluded source represents**

In 2020, the distribution sites had transmitted energy consumption data, which accounted for less than 0,1% of the Group's emissions for that year.

**Source**

Facilities in project

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

**Explain why this source is excluded**

Project facilities have by definition not entered the operating phase. These sites are made up of offices, life bases, and possibly industrial demonstrators to test the industrial processes that will be implemented. The energy needs of this equipment are by nature very limited. If these projects become operating sites, their energy consumption and related emissions will then be included in the GHG emissions report.

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

1

**Explain how you estimated the percentage of emissions this excluded source represents**

The main facility in project is Eramine Sudamerica. Eramine is composed of three sites : Centenario (training centre, an on-site reproduction of the industrial plan on a reduced scale), Salta (office) & Buenos Aires (office).

The different types of energy consumed are electricity for office needs and diesel fuel for electricity production (used to spin pumps and centrifuges).

Centenario's fuel consumption during the first half of 2022 was 585 m3. The annual consumption is thus estimated at 1,200 m3 per year, i.e. approximately 3,100 tCO2/year (which represents less than 0.1% of 2021 emissions)

**Source**

Refrigerant leaks

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

**Explain why this source is excluded**

Difficulty in counting the number of air conditioning units

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

1

**Explain how you estimated the percentage of emissions this excluded source represents**

The industrial facilities operated by Eramet do not require the production of cold, and therefore the operation of refrigeration units liable to generate refrigerant leaks. Only offices may require, depending on their geographical location, the operation of air conditioners.

Considering, in the upper case, that each of the 13,400 Eramet employees has an air conditioner assigned to them (which is very far from being the case), and that each air conditioner unit contains 1,0 kg of refrigerant such as R32, with a leakage rate of 5% / year, refrigerant leaks would only represent 0,012% of the group's GHG emissions.

Calculation :

Emission due to refrigerant leaks = 13,400 employees x 1 unit conditioner / employee x 1,0 kg of R32 / unit conditioner x 675 x 5 %

Emission due to refrigerant leaks = 452 tCO<sub>2</sub>eq / year

Emission due to refrigerant leaks < 0,015 % x (2021 Scope 1 + Scope 2)

With :

675 = R32 global warming potential

5 % = Annual leakage

## C6.5

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

776,944

**Emissions calculation methodology**

Spend-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### Please explain

Eramet has a comprehensive spend dataset with purchased goods and services, as well as capital assets spend. Each spend has been split between purchased goods and services/capital goods/energy / business travel / upstream leased assets and allocated between each entity of Eramet as well as each purchase segment of Eramet to have a better granularity. The emissions factors come from Quantis Scope 3 evaluator, and they are mainly monetary emissions factors. There are also some physical emissions factors coming from ADEME Base Carbone and an LCA database when possible, as physical emissions factors are more accurate.

No data come from our suppliers, as this is the internal spend dataset from Eramet, with emissions factors coming from Quantis Scope 3 evaluator, ADEME Base Carbone and an LCA database.

### Capital goods

---

#### Evaluation status

Relevant, calculated

#### Emissions in reporting year (metric tons CO<sub>2</sub>e)

432,723

#### Emissions calculation methodology

Spend-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### Please explain

Eramet has a comprehensive spend dataset with purchased goods and services, as well as capital assets spend. Each spend has been split between purchased goods and services/capital goods/energy / business travel / upstream leased assets and allocated between each entity of Eramet as well as each purchase segment of Eramet to have a better granularity. The emissions factors come from Quantis Scope 3 evaluator, and they are mainly monetary emissions factors. There are also some physical emissions factors coming from ADEME Base Carbone and an LCA database when possible, as physical emissions factors are more accurate.

No data come from our suppliers, as this is the internal spend dataset from Eramet, with emissions factors coming from Quantis Scope 3 evaluator., ADEME Base Carbone and an LCA database.

### Fuel-and-energy-related activities (not included in Scope 1 or 2)

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

845,657

**Emissions calculation methodology**

Spend-based method

Fuel-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Several cases exist in the calculation: - Monetary emissions factors coming from Quantis Scope 3 evaluator for some data, as Eramet only had spent data coming from the spend dataset - For the bulk of the category 3 CO2e emissions, physical data have been used because they provide more accurate results (MWh of electricity, tonnes of coke etc.). The emissions factors come from ADEME and IEA. A calculator has been built to compute the Scope 3 of electricity, which is the CO2e emissions to generate electricity except the combustion of fossil fuels and the electricity losses in the grid. To this end, the Scope 3 emissions factors per technology have been taken, and the electricity mix generation per country, to get the Scope 3 electricity emissions factor for each country where Eramet operates. .

Eramet used its own data from internal data collection IT system Enablon, and emissions factors from ADEME and IEA, as well as the calculator developed for Scope 3 electricity emissions.

**Upstream transportation and distribution****Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

262,103

**Emissions calculation methodology**

Spend-based method

Distance-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Several cases exist in the calculation: - Monetary emissions factors coming from Quantis Scope 3 evaluator for some data, as Eramet only had spent data coming from the spend dataset - For the bulk of the category 3 CO2e emissions, physical data have

been used because they provide more accurate results : distance of routes travelled and tonnes of products transported . The emissions factors come from ADEME.

## Waste generated in operations

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

260,722

### Emissions calculation methodology

Waste-type-specific method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Eramet reports its tonne of waste generated during processes. The waste has been split to match with ADEME and LCA database emissions factors. When the waste will be recycled, then an emissions factor of 0 tCO2e has been allocated.

No data come from suppliers, as this is the internal dataset from Eramet, with emissions factors coming from ADEME Base Carbone and an LCA database.

## Business travel

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

27,640

### Emissions calculation methodology

Spend-based method

Distance-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

Eramet has a comprehensive spend dataset with business travel data. Each spend has been split between purchased goods and services / capital goods / energy / business travel / upstream leased assets, and allocated each entity of Eramet as well as each purchase segment of Eramet to have a better granularity. The emissions factors come from Quantis Scope 3 evaluator, and they are monetary emissions factors.

No data come from suppliers, as this is the internal spend dataset from Eramet, with emissions factors coming from Quantis Scope 3 evaluator.

### Employee commuting

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

20,400

**Emissions calculation methodology**

Average data method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Input from Quantis evaluator directly - select "Basic Metals and Fabricated Metal" for the industry type, then select a full year and > 10k employees Assumption to simplify the calculation: equal distribution between the four business units of Eramet.

No data come from suppliers, as Eramet only used the Quantis Scope 3 evaluator.

### Upstream leased assets

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

10,560

**Emissions calculation methodology**

Average data method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Eramet has a comprehensive spend dataset with upstream leased assets data. Each spend has been split each entity of Eramet as well as each purchase segment of Eramet to have a better granularity. The emissions factors come from Quantis Scope 3 evaluator, and they are monetary emissions factors.

No data come from suppliers, as this is the internal spend dataset from Eramet, with emissions factors coming from Quantis Scope 3 evaluator.

### Downstream transportation and distribution

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Category 9 of the GHG Protocol "Downstream transportation and distribution" is irrelevant for Eramet, as Eramet already reported all its Scope 3 transportation emissions in category 4 "Upstream transportation and distribution". All downstream transportation emissions paid are reported in category 4, and Eramet does not have sufficient data to compute its non-paid downstream transportation emissions.

**Processing of sold products**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

10,984,418

**Emissions calculation methodology**

Average data method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

The boundaries used for Eramet's processing of sold products emissions concern only first transformations (such as pyrometallurgy or hydrometallurgy). The second transformation is out of scope and not considered in the GHG inventory. The rationale is that the bulk of the CO<sub>2</sub>e emissions arises at the first transformation when reducing the ore. The conversion of ore into metals consists of transforming the ore oxides into metals which intrinsically generates CO<sub>2</sub> in this first conversion step. Moreover, it is very difficult for Eramet to get data for the second transformation as there are many different ones, and Eramet has several clients. The tonnes of ore sold by Eramet to external clients are reported internally by Eramet, and the emissions factors used come from an LCA database.

No data come from value chain partners as it is difficult to get data from customers.

**Use of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Eramet has no direct emissions associated with the use of the sold products. We wish to underline that we are not a coal-mining company for which use of sold products emissions usually represent up to 95% of the total emissions.

**End of life treatment of sold products**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

176,796

**Emissions calculation methodology**

Waste-type-specific method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

The emissions taken into account here concern waste generated during first and second transformations not done by our company. End-of-life treatment of sold products is considered out of scope as this is too far away from Eramet's activity, and data are difficult to collect. The volumes considered are those sold by Eramet to customers. The emissions factors are computed as explained below:

- for each product sold by Eramet, what is the waste (in tonnes and per type of waste) that will be generated during first and second transformations
- Eramet then uses the emissions factors from ADEME and the LCA database on the waste
- Eramet multiplies the two data to get the end-of-life treatment of sold products' CO2e emissions.

No data from value chain partners as not available, but a small calculator has been built to estimate the CO2e emissions for this category.

**Downstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Our company does not have downstream leased assets.

**Franchises**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Our company does not have franchises.

**Investments**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

1,157,987

**Emissions calculation methodology**

Investment-specific method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

Eramet has a joint-venture, WeDa Bay, and owns 39% of it. The equity share approach has been chosen. Therefore, the Scope 3 of Eramet category 15 is the Scope 1+2 of this joint-venture. The Scope 1+2 of Weda Bay has been computed, and thanks to this result the Scope 3 category 15 of Eramet has been computed.

No data from value chain partners as that Weda Bay is part of Eramet through a joint-venture contract.

**Other (upstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

No other upstream emissions have been identified.

**Other (downstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

No other downstream emissions have been identified.

**C6.5a**

**(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.**

**Past year 1**

---

**Start date**

January 1, 2020

**End date**

December 31, 2020

**Scope 3: Purchased goods and services (metric tons CO2e)**

790,327

**Scope 3: Capital goods (metric tons CO2e)**

401,389

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)  
(metric tons CO<sub>2</sub>e)**

889,893

**Scope 3: Upstream transportation and distribution (metric tons CO<sub>2</sub>e)**

24,104

**Scope 3: Waste generated in operations (metric tons CO<sub>2</sub>e)**

295,129

**Scope 3: Business travel (metric tons CO<sub>2</sub>e)**

23,660

**Scope 3: Employee commuting (metric tons CO<sub>2</sub>e)**

20,400

**Scope 3: Upstream leased assets (metric tons CO<sub>2</sub>e)**

7,331

**Scope 3: Downstream transportation and distribution (metric tons CO<sub>2</sub>e)**

0

**Scope 3: Processing of sold products (metric tons CO<sub>2</sub>e)**

9,531,492

**Scope 3: Use of sold products (metric tons CO<sub>2</sub>e)**

0

**Scope 3: End of life treatment of sold products (metric tons CO<sub>2</sub>e)**

139,289

**Scope 3: Downstream leased assets (metric tons CO<sub>2</sub>e)**

0

**Scope 3: Franchises (metric tons CO<sub>2</sub>e)**

0

**Scope 3: Investments (metric tons CO<sub>2</sub>e)**

599,381

**Scope 3: Other (upstream) (metric tons CO<sub>2</sub>e)**

0

**Scope 3: Other (downstream) (metric tons CO<sub>2</sub>e)**

0

**Comment**

NA.

## C6.7

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

## C6.10

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

**Intensity figure**

0.001

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

3,670,504

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

3,668,000,000

**Scope 2 figure used**

Market-based

**% change from previous year**

30

**Direction of change**

Decreased

**Reason for change**

The group's emissions fell by 8% between 2021 and 2020, while turnover increased sharply at the same time, thanks to the increase in production and high metal prices.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

## C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	3,321,002	IPCC Sixth Assessment Report (AR6 - 100 year)
CH <sub>4</sub>	0	IPCC Sixth Assessment Report (AR6 - 100 year)
N <sub>2</sub> O	0	IPCC Sixth Assessment Report (AR6 - 100 year)

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO <sub>2</sub> e)
France	172,804
Gabon	378,895
Norway	976,935
New Caledonia	1,505,768
Senegal	116,813
Sweden	1,519
United States of America	168,320
China	129
India	56

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

- By business division
- By facility
- By activity

## C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO <sub>2</sub> e)
Mines and metals division	3,211,959
High performances alloys division	86,414

## C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO <sub>2</sub> e)	Latitude	Longitude
AD Firminy	8,572	45.392253	4.281231
AD Imphy	1,569	46.935086	3.257984
AD Issoire	2,936	45.563695	3.252322
AD Les Ancizes	29,912	45.926026	2.839456
AD Pamiers	16,971	43.116515	1.607468
ECOTITANIUM	265	45.918376	2.848571
Interforge	10,243	45.558497	3.25228
Les forges de Montplaisir	182	45.715434	4.957805
UKAD	2,444	45.921132	2.839171
Erasteel Champagnole	404	46.743936	5.915298
Erasteel Commentry	15,840	46.287682	2.744858
Erasteel Långshyttan	729	60.452064	16.035988
Erasteel Söderfors	790	60.383369	17.243587
Erasteel Vikmanshyttan	0	60.298212	15.82785
Comilog Dunkerque	82,060	51.014155	2.169046
Comilog Gabon Moanda Industrial Complex	187,845	-1.502145	13.273832
Comilog Gabon Mine Moanda	49,487	-1.541007	13.237167

Complexe Métallurgique de Moanda	83,801	-1.504619	13.275844
Port Minéralier Owendo	38,691	0.291233	9.496397
ERAMET Marietta	168,320	- 81.515797	-81.522334
ERAMET Norway Kvinesdal	204,062	58.278851	6.894714
ERAMET Norway Porsgrunn	149,529	59.127216	9.623821
ERAMET Norway Sauda	339,788	59.648422	6.361911
Setrag	19,070	0.32375	9.501057
Grande-Côte Opérations	116,813	14.717099	-17.485214
TTI Tyssedal	283,556	60.118635	6.555183
ERAMET Sandouville	993	49.473539	0.282432
SLN Centrale Thermique Doniambo	663,610	- 22.252645	166.446777
SLN Doniambo	788,725	- 22.252645	166.446777
SLN Mines Kouaoua	5,197	- 21.454258	165.763886
SLN Mines Nepoui Kopéto	15,094	- 21.222474	165.035692
SLN Mines Poum	8,701	- 20.246581	164.044204
SLN Mines Thio	11,163	- 21.617254	166.187773
SLN Mines Tiébaghi	13,277	- 20.468613	164.221923
ERAMET Research	411	48.767484	2.000559
EIML	129	19.054494	72.892264
SQUAD	56	16.113933	74.524398

## C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO <sub>2</sub> e)
Alloys others & Forged & Rolled Long Products	43,310
Closed-die Forged Parts	30,151
High-Speed Steels and Recycling	17,763
Manganese	1,322,472
Mineralized Sands	400,369
Nickel	1,506,706
R&D	411

## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO<sub>2</sub>e.**

	Gross Scope 1 emissions, metric tons CO <sub>2</sub> e	Comment
Metals and mining production activities	3,321,002	NA

## C7.5

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)
France	37,960	36,751
Gabon	6,605	5,980
Norway	16,806	13,014
New Caledonia	231,880	35,558
Senegal	496	496
Sweden	1,649	1,649
United States of America	224,156	251,538
China	3,125	3,125
India	1,156	1,156

## C7.6

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

- By business division
- By facility
- By activity

### C7.6a

**(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Mines and metals division	504,395	331,361
High performances alloys division	17,762	17,831

### C7.6b

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
AD Firminy	366	366
AD Imphy	450	450
AD Issoire	1,142	1,142
AD Les Ancizes	4,369	4,369
AD Pamiers	1,599	1,599
ECOTITANIUM	217	217
Interforge	602	602
Les forges de Montplaisir	41	41
UKAD	646	646
Erasteel Champagnole	281	281
Erasteel Commentry	2,189	2,189
Erasteel Långshyttan	568	568
Erasteel Söderfors	983	983
Erasteel Vikmanshyttan	99	99
Comilog Dunkerque	13,441	13,441
Comilog Gabon Moanda Industrial Complex	174	116
Comilog Gabon Mine Moanda	272	181

Complexe Métallurgique de Moanda	1,430	953
Port Minéralier Owendo	2,233	2,233
ERAMET Marietta	224,156	251,538
ERAMET Norway Kvinesdal	5,563	5,563
ERAMET Norway Porsgrunn	3,256	1,809
ERAMET Norway Sauda	5,277	2,931
Setrag	2,496	2,496
Grande-Côte Opérations	496	496
TTI Tyssedal	2,710	2,710
ERAMET Sandouville	11,335	11,335
SLN Centrale Thermique Doniambo	0	0
SLN Doniambo	209,564	17,040
SLN Mines Kouaoua	2,843	2,843
SLN Mines Nepoui Kopéto	7,458	7,458
SLN Mines Poum	41	41
SLN Mines Thio	1,080	1,080
SLN Mines Tiébaghi	7,095	7,095
ERAMET Research	72	72
EIML	3,125	3,125
SQUAD	1,156	1,156

## C7.6c

**(C7.6c) Break down your total gross global Scope 2 emissions by business activity.**

Activity	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)
Alloys others & Forged & Rolled Long Products	10,370	10,370
Closed-die Forged Parts	3,343	3,343
High-Speed Steels and Recycling	4,119	4,119
Manganese	258,297	281,262
Mineralized Sands	3,206	3,206
Nickel	242,892	46,893
R&D	72	72

## C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO<sub>2</sub>e.

	Scope 2, location-based, metric tons CO <sub>2</sub> e	Scope 2, market-based (if applicable), metric tons CO <sub>2</sub> e	Comment
Metals and mining production activities	522,230	349,265	NA

### C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

### C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO <sub>2</sub> e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	214,083	Decreased	5.4	<p>The shutdown of one of the four units of the SLN's power plant reduced the electrical production from fuel to meet the electrical needs of SLN's Doniambo plant increasing the amount of electricity consumed from a hydroelectric plant</p> <p>Change in emissions = CO<sub>2</sub> emissions of SLN thermal power plant in 2021 - CO<sub>2</sub> emissions of SLN thermal power plant in 2020</p> <p>Change in emissions = 663,610 – 877,693 = 214,083.</p> <p>The corresponding emissions value (percentage) is obtained as follows :</p>

				214,083 / 3,988,471 = 5,4 % with 3,988,471 = CO2 emissions during 2020
Other emissions reduction activities	48,804	Decreased	1.2	<p>The calculations for this row are based on the information provided in the section "initiatives reduction" for Scope 1 + Scope 2.</p> <p>Savings = 560 + 40,000 + 5 + 365 + 5,500 + 612 + 1,762 = 48 804.</p> <p>The corresponding emissions value (percentage) is obtained as follows :  <math>48,804 / 3,988,471 = 1,2 \%</math> with 3,988,471 = CO2 emissions during 2020</p>
Divestment	51,558	Decreased	1.3	<p>2 sites have been closed: Booton and Brown Europe</p> <p>51,558 = Booton 2020 Emissions + Brown Europe 2020 Emissions = 51 231 + 327</p> <p>The corresponding emissions value (percentage) is obtained as follows :  <math>48,804 / 3,988,471 = 1,2 \%</math> with 3,988,471 = CO2 emissions during 2020</p>
Acquisitions	0	No change	0	Not applicable
Mergers	0	No change	0	Not applicable
Change in output	0	No change	0	Not applicable
Change in methodology	0	No change	0	Not applicable
Change in boundary	0	No change	0	Not applicable
Change in physical operating conditions	87,598	Decreased	2.2	<p>Decreasing trend:</p> <ul style="list-style-type: none"> <li>- A drop in the level of activity at SLN's Doniambo plant (- 18 % compared to 2020) and therefore in consumption of reducing coal and fuel oil (- 132 279 tCO<sub>2</sub>);</li> <li>- The shutdown of a furnace at the</li> </ul>

				<p>Porsgrunn pyrometallurgical plant in Norway for four months and so a reduction in the consumption of reducing coal and electricity (-15 689 tCO<sub>2</sub>);</p> <p>Increased trend: - Sharp increase in production at the Sauda and Kvinesdal pyrometallurgical sites (Eramet Norway) : + 60 370 tCO<sub>2</sub></p> <p>The overall reduction was calculated as follows: -87,598 = -15,689 - 132,279 + 60,370</p> <p>The corresponding emissions value (percentage) is obtained as follows : 87,598 / 3,988,471 = 2,2 % with 3,988,471 = CO<sub>2</sub> emissions during 2020</p>
Unidentified	83,861	Increased	2.1	<p>Minor increase in production, weather conditions,</p> <p>= Emissions 2021 – Emissions 2020 - Change in physical operating conditions – Divestment - Change in renewable - Other emissions reduction activities</p> <p>The corresponding emissions value (percentage) is obtained as follows : 83,861 / 3,988,471 = 2,1 % with 3,988,471 = CO<sub>2</sub> emissions during 2020</p>
Other	0	No change	0	Not applicable

### C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Market-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 15% but less than or equal to 20%

### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

### C8.2a

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	5,539,464.31	5,539,464.31
Consumption of purchased or acquired electricity		2,605,994	1,490,084	4,096,079
Consumption of purchased or acquired steam		58,685	41,220	99,906

Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		2,664,679	7,070,768.31	9,735,448.31

## C-MM8.2a

**(C-MM8.2a) Report your organization’s energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	5,539,464.31
Consumption of purchased or acquired electricity		4,096,079
Consumption of purchased or acquired steam		99,906
Consumption of self-generated non-fuel renewable energy		0
Total energy consumption		9,735,448.31

## C8.2b

**(C8.2b) Select the applications of your organization’s consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

### **Other biomass**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

### **Other renewable fuels (e.g. renewable hydrogen)**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

### **Coal**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

972,337

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

972,337

**Comment**

**Oil**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

4,057,526

**MWh fuel consumed for self-generation of electricity**

2,703,173

**MWh fuel consumed for self-generation of heat**

1,354,353

**Comment**

**Gas**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

509,601.31

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

509,601.3

**Comment**

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

5,539,464.31

**MWh fuel consumed for self-generation of electricity**

3,238,873.82

**MWh fuel consumed for self-generation of heat**

2,836,291.31

**Comment**

## C8.2d

**(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	<b>Total Gross generation (MWh)</b>	<b>Generation that is consumed by the organization (MWh)</b>	<b>Gross generation from renewable sources (MWh)</b>	<b>Generation from renewable sources that is consumed by the organization (MWh)</b>
Electricity	858,534.4	858,534.4	0	0
Heat	452,872	452,827	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

## C-MM8.2d

**(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.**

	<b>Total gross generation (MWh) inside metals and mining sector boundary</b>	<b>Generation that is consumed (MWh) inside metals and mining sector boundary</b>
Electricity	858,534.4	858,534.4
Heat	0	0

Steam	0	0
Cooling	0	0

## C8.2e

**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.**

---

### Sourcing method

Direct line to an off-site generator owned by a third party with no grid transfers

### Energy carrier

Electricity

### Low-carbon technology type

Large hydropower (>25 MW)

### Country/area of low-carbon energy consumption

Gabon

### Tracking instrument used

Contract

### Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

312,550

### Country/area of origin (generation) of the low-carbon energy or energy attribute

Gabon

### Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,013

### Comment

NA

---

### Sourcing method

Direct procurement from an off-site grid- connected generator e.g. Power purchase agreement (PPA)

### Energy carrier

Electricity

**Low-carbon technology type**

Large hydropower (>25 MW)

**Country/area of low-carbon energy consumption**

New Caledonia

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

307,925

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

New Caledonia

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

1,959

**Comment**

NA

## C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

---

**Country/area**

China

**Consumption of electricity (MWh)**

5,016

**Consumption of heat, steam, and cooling (MWh)**

546.02

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

5,562.02

---

**Country/area**

France

**Consumption of electricity (MWh)**

548,078

**Consumption of heat, steam, and cooling (MWh)**

489,622.68

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

1,037,700.68

---

**Country/area**

Gabon

**Consumption of electricity (MWh)**

320,885

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

320,885

---

**Country/area**

India

**Consumption of electricity (MWh)**

1,604

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

1,604

---

**Country/area**

New Caledonia

**Consumption of electricity (MWh)**

1,126,326

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

1,126,326

---

**Country/area**

Norway

**Consumption of electricity (MWh)**

2,334,180

**Consumption of heat, steam, and cooling (MWh)**

7,958.7

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

2,342,138.7

---

**Country/area**

Senegal

**Consumption of electricity (MWh)**

136,485.4

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

136,485.4

---

**Country/area**

Sweden

**Consumption of electricity (MWh)**

77,776

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

77,776

---

**Country/area**

United States of America

**Consumption of electricity (MWh)**

404,401

**Consumption of heat, steam, and cooling (MWh)**

54,651.01

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

459,052.01

## C9. Additional metrics

### C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

---

**Description**

Other, please specify

% sites with consumption >200GWh/year certified ISO 50001

**Metric value**

0.92

**Metric numerator**

# of ISO 50001 sites with consumption >200GWh/year

**Metric denominator (intensity metric only)**

# sites with energy consumption > 200GWh/y

**% change from previous year**

50

**Direction of change**

Increased

**Please explain**

Eramet is targeting to deploy the ISO 50 001 certifications over its main energy and CO2 intensive activities. In 2021, 13 sites are consuming more than 200GWh/year and those sites represent more than 90% of global Eramet's energy consumption. By early 2022, the 12 sites targeted have been ISO 50 001 certified.

---

**Description**

Land use

**Metric value**

1.32

**Metric numerator**

Hectares restored

**Metric denominator (intensity metric only)**

Hectares deforested

**% change from previous year**

28

**Direction of change**

Increased

**Please explain**

In 2020, Eramet took the objective to preserve water resources and accelerate the rehabilitation of the company's mining sites by promoting biodiversity. To pursue this objective, Eramet set the target of rehabilitating more surfaces than the ones which have been stripped between 2019 and 2023.

The Group seeks to achieve a ratio of rehabilitated areas to cleared areas  $\geq 1$  over the period 2019-2023 (long-term infrastructures excluded). This goal corresponds to continued progress on this indicator which was:

- 0.5 from 2011 to 2013;
- 0.85 from 2014 to 2018.

The objective was reached over the 2019-2021 period, with a ratio of 1.32.

**C-MM9.3a**

**(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.**

**Output product**

Other non-ferrous metal mining (Please specify)  
Manganese ore and sinter production)

**Capacity, metric tons**

43,380,000

**Production, metric tons**

7,277,475

**Production, copper-equivalent units (metric tons)**

0

**Scope 1 emissions**

237,332

**Scope 2 emissions**

297

**Scope 2 emissions approach**

Market-based

**Pricing methodology for copper-equivalent figure**

Copper equivalent is not relevant for manganese ore and sinter production

**Comment**

Manganese ore and sinter production.

---

**Output product**

Other non-ferrous metal mining (Please specify)

Mineral sands

**Capacity, metric tons**

774,000

**Production, metric tons**

616,064

**Production, copper-equivalent units (metric tons)**

0

**Scope 1 emissions**

116,813

**Scope 2 emissions**

496

**Scope 2 emissions approach**

Market-based

**Pricing methodology for copper-equivalent figure**

Copper equivalent is not relevant for mineral sands

**Comment**

Mineral sands

---

**Output product**

Nickel

**Capacity, metric tons**

6,000,000

**Production, metric tons**

4,759,943

**Production, copper-equivalent units (metric tons)**

0

**Scope 1 emissions**

53,433

**Scope 2 emissions**

18,518

**Scope 2 emissions approach**

Market-based

**Pricing methodology for copper-equivalent figure**

Copper equivalent is not relevant for nickel

**Comment**

Nickel

## C-MM9.3b

**(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.**

---

**Output product**

Nickel

**Capacity (metric tons)**

6,000,000

**Production (metric tons)**

39,000

**Annual production in copper-equivalent units (thousand tons)**

0

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

1,451,950

**Scope 2 emissions (metric tons CO<sub>2</sub>e)**

17,568

**Scope 2 emissions approach**

Market-based

**Pricing methodology for-copper equivalent figure**

Copper equivalent is not relevant for nickel

**Comment**

Nickel is primarily used to produce specific steels such as stainless steels, high-performance alloys and superalloys, which together account for roughly 85% of nickel uses. Its rich and varied properties are also appropriate for smaller-volume uses, such

as electroplating, the process of forming a thin coherent metal coating using electrochemistry on valves or auto parts. Another flourishing application for nickel is its use in rechargeable batteries and in particular for electric vehicles. Finally, nickel also has catalytic properties valued in chemical applications.

### Output product

Other non-ferrous metals (Please specify)

Titanium dioxide

### Capacity (metric tons)

325,000

### Production (metric tons)

209,000

### Annual production in copper-equivalent units (thousand tons)

0

### Scope 1 emissions (metric tons CO2e)

283,556

### Scope 2 emissions (metric tons CO2e)

2,710

### Scope 2 emissions approach

Market-based

### Pricing methodology for-copper equivalent figure

Copper equivalent is not relevant for pig iron and titan dioxide

### Comment

Mineral sands are mineral raw materials that contain heavy minerals concentrated over time in an alluvial environment (rivers, coasts and lakes) or a windy environment (dunes). Mineral sand deposits are thus old beaches, dunes or riverbeds. These sands contain titaniferous ore deposits, mainly found in the form of ilmenite (FeTiO<sub>3</sub>), but also rutile (TiO<sub>2</sub>), and to a lesser extent leucosene (ilmenite partially altered into rutile) and zircon (ZrSiO<sub>4</sub>). The levels of these ores in the sand are often in the order of a few per cent. One of the most economical methods of extraction entails using a floating dredge in a basin. However, this is only possible if the sands contain very few clay particles, which is the case at the TiZir mine in Senegal (Grande Côte operations – GCO). Otherwise, more conventional mining methods (excavators and dumpers or bulldozers) are used – for rocky titaniferous ore, for example. Ilmenite is the main titaniferous ore in terms of tonnage, but its titanium dioxide (TiO<sub>2</sub>) content is relatively low. As a result, it is often enriched by transformation into TiO<sub>2</sub> slag, as is the case at the TiZir Titanium and Iron (TTI) plant in Norway, before being used mainly by pigment producers.

### Output product

Other non-ferrous metals (Please specify)

Steel alloys

**Capacity (metric tons)**

0

**Production (metric tons)**

0

**Annual production in copper-equivalent units (thousand tons)**

0

**Scope 1 emissions (metric tons CO2e)**

88,193

**Scope 2 emissions (metric tons CO2e)**

17,762

**Scope 2 emissions approach**

Market-based

**Pricing methodology for-copper equivalent figure**

We do not communicate about this segment production as it is considered too confidential.

**Comment**

We do not communicate about this segment production. The High Performance Alloys Division develops its metallurgical business upstream of strategic industries including aeronautics, space, energy and defence. It operates through two main subsidiaries, Aubert & Duval and Erasteel, who are two renowned experts in the design, development, transformation and manufacture of cutting-edge metallurgical solutions. This positioning is based on:

- 1) a unique industrial set-up in France and Europe; the capacity to secure the supply of critical materials such as special steels, superalloys and titanium to French and European industries;
- 2) an integrated offer, from developing the materials to transforming them into finished products;
- 3) R&D management, an essential part of meeting future challenges in materials' design and transformation, combined with historic metallurgical know-how recognised worldwide.

**Output product**

Other non-ferrous metals (Please specify)

Manganese alloys

**Capacity (metric tons)**

4,800,000

**Production (metric tons)**

768,000

**Annual production in copper-equivalent units (thousand tons)**

0

**Scope 1 emissions (metric tons CO2e)**

1,027,378

**Scope 2 emissions (metric tons CO2e)**

276,236

**Scope 2 emissions approach**

Market-based

**Pricing methodology for-copper equivalent figure**

copper equivalent is not relevant for manganese alloys

**Comment**

Over 90% of the world's manganese is used for the production of steel. All steel producers use manganese in their production processes – an average of 6-7 kg per tonne of steel. Manganese is used in steel in the form of manganese metal (pure manganese) or as an alloy (ferromanganese or silicomanganese) with an average content of 70% manganese: 1.8 tonnes of ore with roughly 40% manganese content are required to produce one tonne of alloy. Manganese is mostly used in manganese alloys. It is mainly used as an alloying element to improve hardness, abrasion resistance, elasticity and surface condition for rolling. As an alloying element, it cannot be replaced by other non-ferrous metals. It is also used for deoxidation and desulphurisation during production.

Other applications :

- 1) Batteries: mainly alkaline batteries. A less significant application is in saltwater batteries, which have inferior performance. Manganese derivatives are also used in rechargeable lithium batteries;
- 2) Ferrites: used in electronic circuits;
- 3) Agriculture: fertiliser and animal feed;
- 4) Various chemicals: pigments, fine chemicals;
- 5) Other metallurgical uses: mainly as a hardening agent for aluminium (beverage cans).

**C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6**

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

Investment in low-carbon R&D	Comment

Row 1	Yes	<p>The ReLieVe project (which stands for Recycling of Li-ion batteries for Electric Vehicles), is a collaborative research and innovation project whose goal is to develop an innovative process for recycling lithium-ion batteries used in electric vehicles. The idea is also to produce these new batteries in Europe and to build an industrial sector integrated from end to end— from the collection and dismantlement of the batteries at the end of their useful life, to the direct recycling of their components, to the production of new electrode materials. On the strength of the technical maturity achieved over several years of research and development, Eramet has decided to launch industrialization studies in early 2022 to develop an integrated recycling solution covering the entire value chain from the dismantling of batteries to the production of nickel, cobalt and lithium salts suitable for the manufacture of new batteries.</p> <p>Depending on the outcome of this pre-industrial phase, Eramet and its partners may decide to build a lithium-ion battery recycling plant in France by 2024 to produce black mass, a metal concentrate (nickel, cobalt, manganese, lithium and graphite) suitable for hydrometallurgical refining.</p> <p>As for the refining steps, Eramet starts the construction of a pre-industrial demonstrator within its research and innovation centre, an essential step to pave the way for the commercial phase. This demonstrator will optimize the efficiency of the recycling process and will address the requirements of future customers and partners by drawing on the Group’s expertise in metals extraction process engineering and its operational expertise in hydrometallurgy.</p>
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### C-MM9.6a

**(C-MM9.6a) Provide details of your organization’s investments in low-carbon R&D for metals and mining production activities over the last three years.**

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Other, please specify Process and energy recovery	Pilot demonstration	≤20%	90,000	The main project here consists of producing electricity from furnace off-gas and using sensible heat from electricity production for metallurgical purposes
Other, please specify	Applied research and development	≤20%	150,000	Several cooperation projects with research institutes to develop biomass-based reductants well

Non-fossil raw materials				suited for Mn-alloy & Ni-alloy production. Bio carbon project: ongoing R&D with 2 partners regarding non-fossil coke supply. : Laboratory and pilot tests have been carried out to replace a significant portion of the carbonaceous materials used in pyro-metallurgical furnaces with pre-treated bio-reductants produced from biomass such as wood waste. The next step will be an industrial trial at a Norwegian site to confirm the technical feasibility of this innovation.
Other, please specify Carbon capture and storage	Applied research and development	≤20%	40,000	In 2021, Eramet began a feasibility study to build a pilot plant on the Sauda site in Norway to evaluate a process for capturing the carbon dioxide generated at the site.

## C10. Verification

### C10.1

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

 I Care - Eramet - verification letter Scopes 1 2 3 -vf.pdf

**Page/ section reference**

P4 - Assurance opinion

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

## C10.1b

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

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**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

 I Care - Eramet - verification letter Scopes 1 2 3 -vf.pdf

**Page/ section reference**

P4 - Assurance opinion

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

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**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

 I Care - Eramet - verification letter Scopes 1 2 3 -vf.pdf

**Page/ section reference**

P4 - Assurance opinion

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

## C10.1c

**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

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**Scope 3 category**

Scope 3: Purchased goods and services

Scope 3: Capital goods

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Scope 3: Upstream transportation and distribution

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

Scope 3: Upstream leased assets

Scope 3: Investments

Scope 3: Processing of sold products

Scope 3: End-of-life treatment of sold products

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

 I Care - Eramet - verification letter Scopes 1 2 3 -vf.pdf

**Page/section reference**

P4 - Assurance opinion

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

77

**C10.2**

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

Yes

**C10.2a**

**(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Year on year change in emissions (Scope 1 and 2)	ISAE3000	A third party provided limited assurance regarding our emission intensity, emissions from the use and processing of ore and products, and energy use.
C4. Targets and performance	Year on year emissions intensity figure	ISAE3000	All variations have been explained and checked by a third party.
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISAE3000	A third party provided limited assurance regarding our emission intensity, emissions from the use and processing of ore and products, and energy use.
C8. Energy	Other, please specify	Non-financial performance	A third party provided limited assurance regarding our

	Specific cost of energies split by plant and energy	statement EU-ETS	emission intensity, emissions from the use and processing of ore and products, and energy use.
C9. Additional metrics	Other, please specify Energy use	ISAE3000 EU-ETS	A third party provided limited assurance regarding our emission intensity, emissions from the use and processing of ore and products, and energy use.
C2. Risks and opportunities	Other, please specify Risks and opportunities	ISAE3000	A third party has checked the identified risk and opportunities.
C12. Engagement	Other, please specify Engagement with suppliers and customers	ISO 14064-3	The indicator "Share of engagement on Scope 3" has been validated by a third party.  1

 1 Care - Eramet - verification letter Scopes 1 2 3 -vf.pdf

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

### C11.1a

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

EU ETS

France carbon tax

### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

**EU ETS**

**% of Scope 1 emissions covered by the ETS**

34

**% of Scope 2 emissions covered by the ETS**

10

**Period start date**

January 1, 2021

**Period end date**

December 31, 2021

**Allowances allocated**

740,896

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO2e**

1,140,543

**Verified Scope 2 emissions in metric tons CO2e**

35,580

**Details of ownership**

Facilities we own and operate

**Comment**

We set the "allowances purchased" data at zero because we do not communicate detail about our allowances purchased under the ETS.

## C11.1c

**(C11.1c) Complete the following table for each of the tax systems you are regulated by.**

### France carbon tax

---

**Period start date**

January 1, 2021

**Period end date**

December 31, 2021

**% of total Scope 1 emissions covered by tax**

2.6

**Total cost of tax paid**

320,000

**Comment**

The Carbon Charge Component (also known as Contribution Climat-Énergie) applies to all fossil fuel use at a nominal rate of EUR 44.6 per tCO<sub>2</sub>. This Carbon Charge Component is included in the TICGN that applies to natural gas when used for heating purposes. French sites subject to ETS are exempt from this tax.

## C11.1d

### (C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

We recognise both the risks and opportunities posed by carbon pricing schemes and we continue to ensure that our strategy minimises the risks and maximises opportunities. We use an internal carbon pricing system to consider the impacts of climate change in our strategy. In our operations, this mandatory shadow price is equal to 50 EUR and in our long-term investment evaluation process, this shadow price is 100 EUR.

Our operations that participate in the EU ETS are required to maintain an accurate emission and energy inventory through consistent data gathering and emissions reporting; provide timely, accurate and detailed data books for internal and external verifier review; understand the regulator's perspective and maintain awareness of future scheme requirements through government interaction and legal compliance registers; identify, evaluate and implement all suitable projects to reduce GHG emissions.

To comply with the EU-ETS system, the ERAMET group is working to reduce its emissions and its energy consumption, notably by following a plan to obtain the ISO 50001 certification for all significant energy-consuming sites. In early 2022, 100% of the mining facilities have been certified with the ISO 50001 standard.

Eramet has set an SBT WB2C target and a detailed roadmap to reduce its Scope 1+2 by 40% in 2035 from a 2019 base year. The main emissions reduction levers are:

- the development of CCS in partnership with other players: this is the action with the greatest impact in terms of CO<sub>2</sub> savings, but the cost of these solutions is an obstacle. Therefore, the ambition is to develop a pilot and identify the least capital-intensive technologies;
- using bio-reducers in ore reduction: the issue of this action is the ability to access sustainably managed bio-reducers compatible with the constraints of our processes (mechanical strength, polluting elements);
- replacing heavy fuel oil with gas for the production of electricity;
- the establishment of renewable electricity purchases and production coupled with the electrification of mines: at the same time as developing technical solutions, the successful implementation of this lever is based on a radical change of culture (electric mining trucks for example) which requires long-term support;
- developing the pre-reduction of hydrogen ore alongside bio-reductants.

## C11.2

### (C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

## C11.3

### (C11.3) Does your organization use an internal price on carbon?

Yes

## C11.3a

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

### Objective for implementing an internal carbon price

- Stakeholder expectations
- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment
- Identify and seize low-carbon opportunities

### GHG Scope

- Scope 1
- Scope 2

### Application

The internal price is systematically applied for the long-term investments such as:

- Capacity increase
- New activities/ greenfield facilities
- Technological breakthrough, with or without a significant increase in capacity (e.g. hydrogen)
- Renewal of equipment with an expected life of more than 10 years
- Productivity (may include sub-categories that impact productivity such as energy or digital transformation CAPEX)
- Strategy scenarios evaluation

### Actual price(s) used (Currency /metric ton)

100

### Variance of price(s) used

No variance, same price at group level

### Type of internal carbon price

Shadow price

### Impact & implication

There is currently no globally applicable carbon market or price, only fragmented and uncoordinated regional systems. The Group is preparing for the potential emergence of such a global market by applying an internal price for its investment projects on the basis of 100 EUR per tonne of CO<sub>2</sub>.

The consequence of this choice, throughout the entire Group and independently of the regions with an established carbon market and price, is a more rapid shift towards technological solutions that emit less carbon.

This value reflects a conviction that markets are moving towards a long-term price that is significantly higher (around 25%) than the European regional spot price at the end of 2021.

Example of impacts :

- Eramet has implemented such internal price of CO2 for a solar farm and a battery project (21 MW) in Senegal to produce renewable electricity to replace the energy of our fuel oil-fired power plant. The profitability of the project is improved due to the internal carbon price. With this project, around 20% of the electricity consumed from the current fuel oil power plant would come from renewable solar farms. The expected impact is a reduction of around 20ktCO2/year.

- The CO2 internal price has been used for the Weda Bay PFS project, a state-of-the-art nickel and cobalt hydrometallurgical refining complex. Such a development includes a High-Pressure Acid Leaching (HPAL) plant which would produce materials for lithium-ion batteries in electric vehicles. Hydrometallurgy has been chosen against pyrometallurgy as this emits less CO2, hence a smaller Opex when taking into account the carbon tax.

### **Objective for implementing an internal carbon price**

Stakeholder expectations

Change internal behavior

Drive energy efficiency

Identify and seize low-carbon opportunities

Supplier engagement

Other, please specify

The Group is preparing for the potential emergence of such a CO2-coordinated market.

### **GHG Scope**

Scope 1

Scope 2

### **Application**

The internal price is systematically applied for the following types of projects:

- Strategy scenarios evaluation

- Projects of modification of the production capacities (furnaces, mining engines, etc.)

-Logistics projects (locomotives, trucks, etc.)

- Projects that substantially change the way energy is used (savings, change of energy source...)

### **Actual price(s) used (Currency /metric ton)**

50

### **Variance of price(s) used**

No variance, same price at group level

### **Type of internal carbon price**

Shadow price

### Impact & implication

There is currently no globally applicable carbon market or price, only fragmented and uncoordinated regional systems. The Group is preparing for the potential emergence of such a market by experimenting with an internal price for its investment projects and the evaluation of its strategic options.

Eramet has revaluated its internal carbon price in 2021, from €30 the tonne of CO<sub>2</sub> to €50 for the current investments such as the replacement of equipment with an expected life < 10 years to better anticipate the future carbon price that could be applicable. This internal carbon price will therefore penalise the most carbon-intensive solutions over the least carbon-intensive ones.

For current investments implemented on sites subject to the ETS, given that the ETS quota value is currently (mid-2022) higher than 50 EUR/t, the ETS market prices (about 80 EUR/t) is taken into account rather than the internal price for these investments.

## C12. Engagement

### C12.1

#### (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

### C12.1a

#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

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##### Type of engagement

Information collection (understanding supplier behavior)

##### Details of engagement

Collect climate change and carbon information at least annually from suppliers

##### % of suppliers by number

4

##### % total procurement spend (direct and indirect)

80

##### % of supplier-related Scope 3 emissions as reported in C6.5

67

##### Rationale for the coverage of your engagement

The top 600 Eramet's suppliers and subcontractors have been asked to participate in the assessment programme because they represent a significant part of our spending (80%). The company has a large number of suppliers but they don't equally contribute to the share of spending which is why we have targeted these 600 suppliers.

### **Impact of engagement, including measures of success**

- Threshold at which we consider our impact to be successful with regard to the measure of success:

Eramet launched a comprehensive and progressive approach to assess the CSR performance of its suppliers and subcontractors in 2017. Since the launch of the consolidated programme, more than 600 suppliers and subcontractors identified at risk, representing more than 50% of the Group's purchasing expenses in 2021, have been assessed via Ecovadis. In June 2022 we were at 83% of the assessed suppliers were considered to comply with the Group's requirements. The majority of noncompliant non-compliant suppliers are explained by the non-responses of the latter, which automatically classifies them in the category of high-risk suppliers. For suppliers who declined the evaluation, the committees have ruled on sending other questionnaires and proposing on-site audits. Finally, 110 suppliers are currently the subject of a corrective action plan, adapted to the characteristics and avenues for improvement of each of them. Thus, a supplier whose activity has a high potential environmental impact, will first of all be offered improvement actions, and environmental practices, conversely a supplier with strong social issues will first and foremost be monitored on these aspects, before being recommended for actions relating to other themes and whose societal impact would thus be more limited.

- Examples of positive outcomes achieved:

Following the approach launched by Eramet for its main suppliers, Eramet's Innovation and Decarbonization Director met in September 2021 with TotalEnergies' SVP Strategy & Climate to identify how TotalEnergies (which supplies the heavy fuel oil consumed by the GCO site) could help Eramet to reduce its emissions. This meeting led to several opportunity studies (substitution of heavy fuel oil with natural gas for electricity production at GCO, use of biofuels on mining sites, etc.).

### **Comment**

NA

### **Type of engagement**

Engagement & incentivization (changing supplier behavior)

### **Details of engagement**

Other, please specify

Eramet asks its main suppliers to implement low carbon targets

### **% of suppliers by number**

4

### **% total procurement spend (direct and indirect)**

67

**% of supplier-related Scope 3 emissions as reported in C6.5**

67

**Rationale for the coverage of your engagement**

The main suppliers of Eramet's have been asked to implement low carbon targets similar to SBT's low carbon targets.

**Impact of engagement, including measures of success**

- Threshold at which we consider our impact to be successful with regard to the measure of success:

Eramet committed that two-thirds of its suppliers will have carbon reduction targets in line with the Paris Agreement by 2025. Eramet has sent a letter to its main suppliers to inform them that Eramet has committed to SBT, and to encourage them to do so. Eramet commitment cannot be limited to the Group activity alone. Eramet wishes to motivate and engage the key players in its value chain in this issue. As such, Eramet has invited its key suppliers to support its cause and play a role. It will allow them to share their initiatives and targets to reduce greenhouse gas emissions. Eramet asks its suppliers to share their initiatives and targets to reduce greenhouse gas, their current low carbon strategy of today or their plan to develop until 2025. Eramet is creating a tracking tool to follow its performance and strengthen its commitment.

- Examples of positive outcomes achieved:

Moreover, Eramet has committed to the French Climate Pledge (MEDEF initiative): Eramet invited 10 of its main suppliers, based on their relevance and carbon footprint, to engage to decarbonise their activities and join the Climate Pledge. Through a letter sent to them, Eramet indicated that it engaged itself, and encouraged its suppliers to do the same.

**Comment**

This objective is combined with that of committing suppliers to adopting a reduction objective, the objective of 67% relating to the accumulation of the two sets

**C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement & Details of engagement**

Collaboration & innovation

Other, please specify

Transfer of low-carbon pyrometallurgy patents to its customers in exchange of royalties

**% of customers by number**

0

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Please explain the rationale for selecting this group of customers and scope of engagement**

We plan to launch this action in the near future, but we have not started to quantify this action as of yet.

**Impact of engagement, including measures of success**

Eramet has the chance to be an integrated Group, with activities both in the mining extraction and the primary transformation. Eramet is therefore able to develop low carbon technologies for the primary transformation through its R&D department. Eramet plans to transfer its low-carbon pyrometallurgy patents and know how to its customers in pyrometallurgy in a dedicated partnership. This will enable its customers to reduce their CO2e emissions, and work towards setting SBT targets.

**Type of engagement & Details of engagement**

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

**% of customers by number**

0

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Please explain the rationale for selecting this group of customers and scope of engagement**

We plan to launch this action in the near future, but we have not started to quantify this action as of yet. Our target is to ask 67% of our customers to pursue the training.

**Impact of engagement, including measures of success**

Eramet also plans to ask its clients to do the ACT assessment (Assessing low Carbon transition, a methodology developed by ADEME and CDP) to evaluate the robustness of their low carbon strategy, and strengthen their decarbonisation.

Positive outcomes :

A test of a eucalyptus bio-based reductant, provided by one of our major customers, will be soon performed in our pyrometallurgy furnaces.

**C12.1d**

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Eramet actively participates in dialogue and decisions on these climate challenges within national and international professional organisations, such as chairing the Strategic Committee of the Mining and Metallurgy sector, its role as Vice-Chair of the Ore and Metals Alliance, its membership of the Cobalt Institute, and serving as Board Director of the Nickel Institute, and a Director of Euro Alliances. Eramet takes an active part in the working groups on the decarbonisation of industry and on assessing the transition to low carbon in iron & steel. The value chain engagement strategy translates into a strong collaboration between Eramet's R&D centres and external players. Open innovation is a process of opening up to industrial and academic partners to generate sources of opportunities while minimising the risks of innovation. Eramet Ideas helps to improve the Group's short-term operating performance while developing long-term innovation projects that support the strategic roadmap, in particular decarbonization. In Norway, Eramet's R&D department develops technological solutions and innovations to produce more efficiently and to further reduce our climate and environmental footprint. The department cooperates with Eramet IDEAS, the Group's technology centre in France, and with leading universities, research institutes, clusters and other companies. In particular, Eramet Norway's R&D department collaborates externally with institutions like SINTEF and NTNU in Trondheim:

- NTNU, the Norwegian University of Science and Technology, is the country's largest and leading educator of engineers and civil engineers. The disciplines range from nanotechnology and IT to petroleum engineering and ship design. NTNU cooperates with some of the country's most important technology and industrial companies and has its own research environments. Eramet Norway cooperates mainly with the Department of Material Technology
- SINTEF is a broad, multidisciplinary world-leading research institute with international expertise in technology, science, medicine and social sciences. SINTEF conducts commissioned research as an R&D partner for business and local authorities and is among the four largest mission research institutes in Europe. Eramet Norway cooperates mostly with SINTEF Industry, in addition to projects with SINTEF Energy and SINTEF Digital. The cooperation projects have an annual budget of about 24 million euros. In addition, Eramet Norway is actively involved in projects together with Elkem Technology and Ferrolegeringsindustriens.

Climate-related R&D projects in which Eramet Norway is involved are :

- IPN Pyrogass: The Research Council of Norway's innovation project for the development of biocarbon adapted to Mn production
- KPN BioCarbUp: Research Council of Norway's competence project for the development of biocarbon in the metallurgical industry
- KPN Reduced CO<sub>2</sub>: The Research Council's competence project to reduce CO<sub>2</sub> emissions in the metallurgical industry
- BioCoke4FAI project: A Norwegian-Polish collaboration aiming at developing innovative and economically viable technology for bio-coke production for the ferroalloys industry, supported by The Norway Grants
- Danish collaborative project Waste to Biocarbon: Development of biocarbon
- Eramet IDEAS, Pre-reduction in furnace: Reduction of carbon and energy consumption by process improvement
- Eramet IDEAS: Groundbreaking process with zero CO<sub>2</sub> emissions
- Climit Eyde CO<sub>2</sub> Tek: Examination of CCS technologies for the process industry
- Eramet Norway's NewERA Program: Development and implementation of new climate and energy technology for Eramet Norway's smelters

Eramet Norway is involved in a collaborative project headed by the Grenland Industrial Cluster (GIC) for the study of CCUS (Carbon Capture, Utilisation and Storage) opportunities in Grenland. GIC represents process industry companies from southeastern Norway in efforts to reduce emissions and become climate neutral by 2040. Among the measures the cluster is working on is to assess the potential for adopting comprehensive CCS. In particular, the GICCS project is working to investigate the great potential for implanting CCUS from the major sources of emissions in Grenland, which represents a capture potential of more than 1,000,000 tonnes of CO<sub>2</sub>. Eramet Norway, together with the other industrial and research partners in Herøya Industrial Park, is working on defining a common carbon capture solution, valorising surplus energy and developing infrastructures for later CO<sub>2</sub> utilisation, transport and storage. BASF and Eramet have partnered to assess the development of a nickel-cobalt refining complex to supply the growing electric vehicle market. The aim is to develop mining, refining and recycling projects with a fully integrated approach throughout the Electric Vehicle value chain. This is a unique opportunity in line with our strategy to provide a solid and sustainable supply for the batteries industry.

## C12.2

### **(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

Yes, climate-related requirements are included in our supplier contracts

## C12.2a

### **(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.**

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#### **Climate-related requirement**

Setting a science-based emissions reduction target

#### **Description of this climate related requirement**

The top 600 suppliers of Eramet's have been asked to implement low carbon targets similar to SBT's low carbon targets.

When awarding a tender, buyers must include a climate criterion that accounts for at least 5% of the overall score (they can go further).

If the supplier does not declare any commitment, he gets 0 on this score. If the supplier declares a reduction commitment, it gets 1/3 of the points, and if this commitment is SBT aligned, it gets the full score. The questions asked in the form are not scored, it is the final objective that is considered. Thus, in a tender, if the difference between two bidders is limited, the one with the best climate performance will be selected.

In addition, all suppliers must sign a charter stating that :

"Eramet requests that its suppliers implement actions to improve their energy efficiency and reduce their greenhouse gas emissions and other environmental impacts.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

67

**% suppliers by procurement spend in compliance with this climate-related requirement**

24

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

**Response to supplier non-compliance with this climate-related requirement**

No response

## C12.3

**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

Row 1

**Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

Yes

**Attach commitment or position statement(s)**

2021 Eramet's URD : p391

Also see section 6.2 - Environmental protection and subsection 6.2.6 Fight against climate change

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**Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy**

Eramet has implemented mechanisms to ensure that all its activities support the mitigation of climate change. These mechanisms are aligned with the Group's climate change policy and strategy and are reviewed by the CEO. According to our climate change policy, all of Eramet's operations across all business units and geographies have to be compliant with the policy. The policy contains guidelines concerning climate change which apply to all Eramet businesses and countries in which we operate. These principles are included in the activities, operations and processes and are regularly

reviewed, improved and approved by management. Climate change-related information is made available to the entire organisation via various internal communication channels. Eramet's commitment to climate change is managed by its senior executives and is applied by all our employees. The Board is directly involved in influencing such activities so that they remain aligned with the company's strategy and policies on climate change.

Eramet is a member of the steering committee of CSF and follows up on the CSF projects. Concerning the workshop on the reduction of greenhouse gas emissions, the target of the project is to:

- Demonstrate on the ArcelorMittal site of Dunkirk, on the scale of an industrial pilot, a technology of optimal capture of CO<sub>2</sub>, industrial gases, and the DMXTM process.
- Study the feasibility of developing in Dunkirk, an intermediate CO<sub>2</sub> storage hub for shipping to offshore CO<sub>2</sub> storage areas in the North Sea
- The Dunkirk area becoming an experimental territory for CO<sub>2</sub> reduction will benefit our facilities located in this same area and it is consistent with our climate change strategy. Concerning the subject of the electric vehicles' development, Eramet pilots directly a Workshop related to the development of an integrated recycling network for lithium batteries. Lithium is one of the metals of energetic transition on which Eramet strategy is based.

## C12.3a

**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

### **Focus of policy, law, or regulation that may impact the climate**

Renewable energy generation

### **Specify the policy, law, or regulation on which your organization is engaging with policy makers**

New Caledonia's energy transition plan:

Framework agreement for the evolution of the energy paradigm of nickel metallurgy - decarbonization of the electricity mix and integration into the New Caledonian network

### **Policy, law, or regulation geographic coverage**

National

### **Country/region the policy, law, or regulation applies to**

New Caledonia

### **Your organization's position on the policy, law, or regulation**

Support with minor exceptions

### **Description of engagement with policy makers**

Signing of a MOU to facilitate the emergence of renewable energies on New Caledonian territory

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Not applicable

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Focus of policy, law, or regulation that may impact the climate**

Circular economy

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

EU Battery Directive

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with major exceptions

**Description of engagement with policy makers**

Exchanges with European parliamentarians, the European Commission and member states to inform them of the technological capabilities of European players that would allow the European directive to target a higher recycling rate (compared to the initial proposal of the European Commission).

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

The recycling rate targeted by appendix 12 of the new regulations was aimed at a recycling rate that seemed to be too unambitious given the technologies available. Eramet then demonstrated the possibility of achieving higher rates while remaining technically viable.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

## **C12.3b**

**(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.**

**Trade association**

Other, please specify

A3M

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

- Maintaining an emission factor at regional level which does not create distortion of competition within the EU
- The protection of all sectors of the metallurgical industry exposed to the risk of carbon leakage - Conditions for obtaining aid which take more account of the constraints and efforts made by businesses
- A Carbon Border Adjustment Mechanism (CBAM) at the EU's borders can be an effective mechanism if it works in addition to the existing protection mechanism, consisting of free allowance allocations and compensation for the indirect costs of CO<sub>2</sub>.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Trade association**

Other, please specify

Trade association Cobalt Institute and Nickel Institute

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

Cobalt Institute and Nickel Institute support Eurometaux's positions about climate change.

The Cobalt and Nickel Institute support Eurometaux's position on climate change which was published in May 2018.

- Eurometaux is committed to further innovation and constant reduction of greenhouse gas emissions in our production processes.
- Eurometaux stresses the continued importance of reciprocal commitments to tackling climate change from regions beyond Europe.
- A global approach is needed to limit climate change to below 2°C. - Shared international commitments would ease the regulatory burden on key European industries such as metals and facilitate the EU's transition towards a low-carbon economy.
- As metals are globally-priced commodities, European companies cannot pass any additional regulatory costs onto consumers and remain competitive.
- Reciprocal climate change commitments from comparable industries are thus essential to establish a level playing field between EU and non-EU producers.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Trade association**

Other, please specify  
Euroalliages

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

- Euroalliages calls for a detailed assessment of the electro-intensive industries that are constantly facing unfair trade practices and increasing carbon leakage pressure due to weaker (or inexistent) climate policies in third countries.
- Euroalliages also calls for a fair redistribution of efforts and timing for all the sectors that need to further decarbonise (i.e. agriculture, transport, etc).
- As part of key strategic values chains, Euroalliages express its concern about the ongoing COVID-19 crisis and its impacts on the energy and climate policies. We therefore call for a full and robust ex-ante impact assessment that shows all the scenarios and regulations needed to support such an ambitious acceleration of the decarbonisation with particular consideration to regions, industries and communities highly challenged by the costs of climate change policies.
- Euroalliages highly recommend the European Commission to present the results of the modelling with all the different scenarios before unveiling a new legislative proposal. We believe that, if new ambitious targets are to be set, a debate with relevant stakeholders should take place before new regulation is adopted.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

**Trade association**

Other, please specify

UNIDEN

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The mission of UNIDEN is to coordinate and represent its Members before the Public Authorities (parliament and territorial assemblies, Government, European institutions, central and territorial administrations, public establishments.), Professional organizations, associations and any other concerned entity. UNIDEN's position is to ensure the energy competitiveness of French industrial players and their access to low-carbon energy. As part of this mission, the Steering Committee oversees the

governance of the association, as well as the quality and efficiency of its organization. It decides on the major orientations of UNIDEN's actions, in line with the expertise and skills resources required for their implementation. A committee made up of a president, a vice president and a treasurer ensures, by a delegation of the Steering Committee, the day-to-day management of the association and the execution of the decisions of the Steering Committee. A general assembly meets once a year to ratify decisions concerning governance and internal organization, as well as the association's priority axes. UNIDEN's technical commissions - electricity, oil and gas, climate and energy efficiency - form the hard core of the association's activity. They capitalize on the internal expertise and skills resources made available by UNIDEN members. The commissions are led by presidents and vice-presidents appointed by the Steering Committee from among the members of the association. They coordinate their work within the framework of a coordination committee which meets once a month to deal with topical issues and propose actions. In liaison with the President, the committee presidents ensure the representation of UNIDEN to bodies outside the association and to IFIEC Europe (International Federation of Industrial Energy Consumers) which brings together the European associations equivalent to UNIDEN, IFIEC Europe, with its headquarters in Brussels, is an interlocutor fully recognized by the European institutions.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Trade association**

Eurometaux

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

Eurometaux's position on climate change was published in May 2018.

- Eurometaux is committed to further innovation and constant reduction of greenhouse gas emissions in our production processes.
- Eurometaux stresses the continued importance of reciprocal commitments to tackling

climate change from regions beyond Europe.

- A global approach is needed to limit climate change to below 2°C. - Shared international commitments would ease the regulatory burden on key European industries such as metals and facilitate the EU's transition towards a low-carbon economy.

- As metals are globally-priced commodities, European companies cannot pass any additional regulatory costs onto consumers and remain competitive.

- Reciprocal climate change commitments from comparable industries are thus essential to establish a level playing field between EU and non-EU producers.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

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**Page/Section reference**

6.2 environmental protection  
p.301 - 341

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures

Emission targets  
Other metrics

**Comment**

## C15. Biodiversity

### C15.1

**(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?**

	<b>Board-level oversight and/or executive management-level responsibility for biodiversity-related issues</b>	<b>Description of oversight and objectives relating to biodiversity</b>
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>The executive board, overseen by the CEO, is in charge of the sustainable development of the company, including biodiversity issues. The CEO is responsible for approving strategy, long-term business and investment plans. He reviews and approves the group's biodiversity policy, which is reviewed annually. This policy drives the implementation of Eramet's biodiversity strategy across our business. Its main pillars are as follows:</p> <ol style="list-style-type: none"> <li>1) Avoid: Eramet is primarily concerned with avoiding negative impacts on biodiversity</li> <li>2 Reduce: Eramet prioritise reducing impacts that cannot be avoided in order to reduce their duration, intensity and/or extent</li> <li>3) Rehabilitate: Eramet undertakes to rehabilitate areas affected by its activities as soon as possible, giving priority to the reintroduction of endemic species;</li> <li>4) Compensate: Eramet compensates for significant residual impacts that could not be avoided, reduced and, where appropriate, rehabilitated.</li> </ol> <p>One example objective that we have set is the achievement of a ratio of (rehabilitated land / cleared land) <math>\geq 1</math> over the period 2019- 2023 (excluding long-term infrastructure). This target corresponds to a continuation of the progress on this indicator which was at:</p> <ul style="list-style-type: none"> <li>● 0.5 from 2011 to 2013 ;</li> <li>● 0.85 from 2014 to 2018.</li> </ul> <p>For the period 2019-2021, the target is achieved with a ratio of 1,32. The contributions of each subsidiary to this overall result are detailed in the biodiversity section of our annual report 2021.</p>

## C15.2

**(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?**

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas	SDG Other, please specify Act4Nature International

## C15.3

**(C15.3) Does your organization assess the impact of its value chain on biodiversity?**

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain

## C15.4

**(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?**

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness

## C15.5

**(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?**

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators

## C15.6

**(C15.6) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	Our biodiversity strategy, commitments, and assessments are included within our URD 2021 in the section 6.2.8 "Preservation of biodiversity".   1

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## C16. Signoff

### C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### C16.1

**(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Chairwoman and Chief Executive Officer	Chief Executive Officer (CEO)

## SC. Supply chain module

### SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

## SC0.1

**(SC0.1) What is your company's annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	

## SC1.1

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

**Requesting member**

**Scope of emissions**

**Allocation level**

**Allocation level detail**

**Emissions in metric tonnes of CO<sub>2</sub>e**

**Uncertainty (±%)**

**Major sources of emissions**

**Verified**

**Allocation method**

**Market value or quantity of goods/services supplied to the requesting member**

**Unit for market value or quantity of goods/services supplied**

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

## SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

## SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
-----------------------	--

## SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

## SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

## SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

## SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

## Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
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Please select your submission options	Yes	Public
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## The European Climate Pact Submission

**Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.**

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

### Please confirm below

I have read and accept the applicable Terms