



2019 CSR REPORT

Extract from the Eramet's
Universal Registration
Document 2019 including the
presentation of the Group, the
non-financial performance
statement and the vigilance Plan



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2019

UNIVERSAL REGISTRATION DOCUMENT

*including
the annual financial report*



This Universal Registration Document was filed with the Autorité des marchés financiers (AMF) on 31 March 2020, as the competent authority under regulation (EU) 2017/1129, without prior approval pursuant to Article 9 of the said regulation.

The Universal Registration Document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market if completed by a prospectus and, if applicable, a summary and any amendments to the Universal Registration Document. All of the above is approved by the AMF in accordance with Regulation (EU) 2017/1129.





Presentation of the Group

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The in-depth,
group-wide
transformation
is shaping a new
Eramet.

33

MESSAGE FROM THE CHAIRPERSON

CHRISTEL BORIES CHAIRPERSON AND CEO

Following the in-depth strategic, managerial and digital transformation undertaken over the past two years, Eramet made decisive headway for its future in 2019. The excellent production levels recorded at all of our mines illustrate not only the first achievements following changes to our model, but also our operational improvements and the challenges taken up each and every day by our teams. In this new Eramet, Corporate Social Responsibility is at the core of our strategic choices, based on our conviction that the mining and metallurgy companies of the future must be exemplary corporate role models. Our commitment translates into an ambitious CSR roadmap built around thirteen goals on which we have made substantial headway in 2019. Although the headwinds and economic downturn in 2019 weighed on Eramet's financial performance, the initial results speak for themselves and the fundamentals of our strategy are sound.

We will stay the course on our strategic roadmap in 2020.

The year ahead will stand as an important milestone in Eramet's growth and development in all our business lines. The expansion of the Moanda mines in Gabon will consolidate our position in manganese, while new perspectives are opening up in nickel, thanks to the start-

up of the Weda Bay plant in Indonesia and the continued implementation of the new SLN business model. At Aubert & Duval, we expect activities to return to normal.

With uncertainty stalking the global economy, we are constantly adapting our action plans and ensuring cautious and controlled management of our cash. Accordingly, we have reviewed the scope and scheduling of our investment projects, especially in Gabon and Argentina.

And, in the light of the global Coronavirus epidemic, our priority is to safeguard the health of our employees and of their family.

We are fully mobilized in each of the countries where we operate to deal with this exceptional health situation. Our vigilance in no way detracts from our determination to pursue the Group's transformation, primarily by diversifying our assets to better spread risks, as we did with developments in mineral sands, and by positioning ourselves as an important player in the energy transition.

We are as determined as ever to harness the energy of all our teams and to be even more competitive in this highly uncertain environment.

Combined with agility, flexibility and tight control of our financial balances, this drive will ensure we stay on course and make progress on our trajectory of long-term profitability.



Manifesto



To set an example in the responsible transformation of the Earth's resources.

The future is being built before our very eyes, faster than we can imagine. From the augmented human to green mobility, smart interfaces and hyperconnected cities, the digital revolution is changing how society operates, while artificial intelligence is opening up infinite horizons. At the same time, humanity is facing an unprecedented challenge: to succeed in an essential energy transition. To transform, industry needs increasingly advanced raw materials. These natural resources are vital, and we need to learn to use them even more responsibly.

At Eramet, we have decided to tackle these huge challenges head-on. We are developing innovative processes, working on major projects and learning to bring together industrial activity and respect for our planet. Through our civic engagement, we are contributing to the development of our employees and communities alike.

Entrepreneurial spirit, openness and pragmatism – these are the values that inspire the women and men of Eramet each of their projects. As a Group, our sights are resolutely set on the future, with one leitmotiv: developing sustainable and value-creating performance, to help preserve a world that benefits the many.

Eramet today is...

A key player in
metals extraction
and recovery and in
the production and
processing of high
performance alloys

€3,671M

2019 sales

2nd

Eramet is the world's second largest **producer of high-grade manganese ore** and the world's largest producer of refined manganese alloys.

4th

Eramet is the world's fourth largest **producer of zircon** and the world's fifth largest producer of titanium-containing raw materials.

1st

Eramet is the world's largest **producer of ferronickel** and one of the world's leading producers of high-purity nickel salts.

2nd

Eramet is the world's second largest **producer of high-power die-forged parts**. The Group is also one of the world leaders of gas-atomised powder metallurgy and a major European producer of high-performance special steels.

€630M

EBITDA 2019

13,000

Employees

-35%

Reduction of accident
frequency rate (FR2)* in 2019

-26%

Carbon intensity reduction
target as from 2023



*Data including Eramet + temporary workers + external companies

A rapidly changing eco-system

The global eco-system is undergoing major changes. Businesses have to thoroughly rethink their interactions with all their stakeholders. These stakeholders' expectations are changing, driven by demographic, societal, environmental, economic and technological megatrends. The Eramet Group's mining and metallurgical businesses are at the core of these changes.



Societal megatrends

- Rapid population growth and accelerated urbanisation
- Creating ever more inclusive, shared and sustainable value to combat polarisation and social inequities
- Focusing more and more on sustainable investment strategies (Environmental and Social Governance) and on the societal role of businesses
- Imperative need for transparency and responsibility of private operators
- Increasing need for traceability, in particular in terms of responsible purchasing



Economic and technological megatrends

- Political instability, growing protectionism and challenges to sovereignty
- Increased trade globalisation and international mobility
- Acceleration of technological and digital transformation
- Growth of new mobility solutions
- Rising power of China in terms of raw materials requirements

These megatrends offer responsible growth prospects and opportunities to the Eramet Group

Responsible extraction of industrial metals and minerals, recyclability, mining 4.0, development of urban centres, electric mobility: these are factors underpinning Eramet's vision.



Environmental megatrends

- Climate emergency and the need for collective climate actions
- Initial impacts of the energy transition: new mobility solutions, development of renewable energies requiring energy storage
- Depletion of natural resources (mineral, water, biodiversity, etc.)
- Increased awareness among stakeholders about industries' environmental footprint

OUR STRATEGIC VISION



Sustainable value creator



Business partner of choice



Committed & contributive corporate citizen



Home for best talents



Entrepreneur

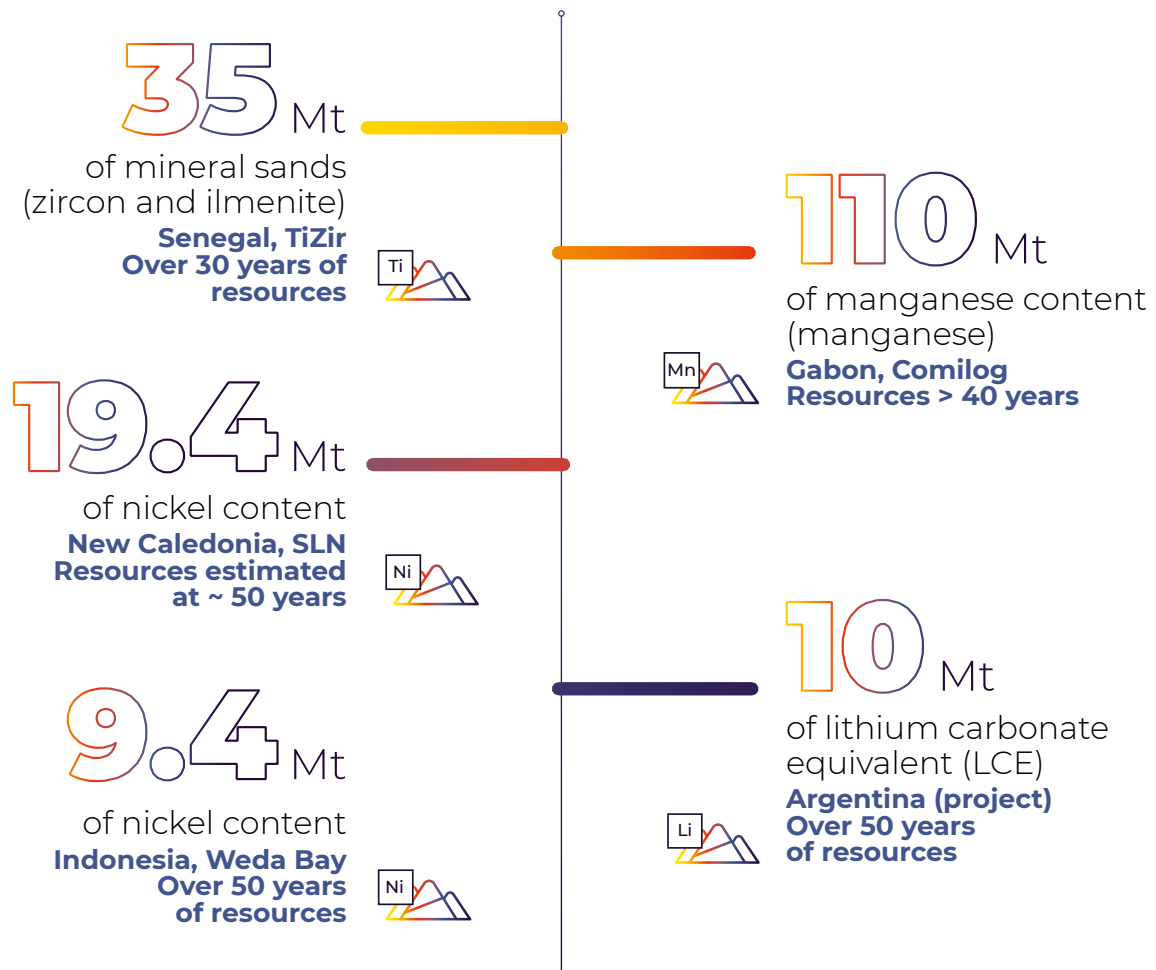


Mining and Metals DIVISION

The Mining and Metals Division extracts metalliferous minerals, which it sells or transforms into alloys or metal salts applying the highest standards in terms of corporate and environmental responsibility. Its clients are core industries, such as high-tech companies across the globe. It has specific expertise in geology, mining and ore processing (pyrometallurgy and hydrometallurgy).

World-class deposits:

resources with operation prospects of several decades, positioned in the 1st quartile of the mining industry cost curve.





Manganese BU

Eramet is the world's second largest producer of high-grade manganese ore, thanks to its Moanda mine in Gabon, and the world's largest producer of high value-added manganese alloys, the “refined alloys”.

Resources and activities

- 1 highly competitive manganese mine in Gabon operated by Comilog, a subsidiary of the Group, with a very high grade ore (44%)
- 3 processing units in Gabon, 5 pyrometallurgy plants in Europe and the United States for the production of agglomerate and manganese alloys.
- Transportation of ore from the Libreville port on ore-carrying trains operated by Setrag, a subsidiary of Comilog.

Markets

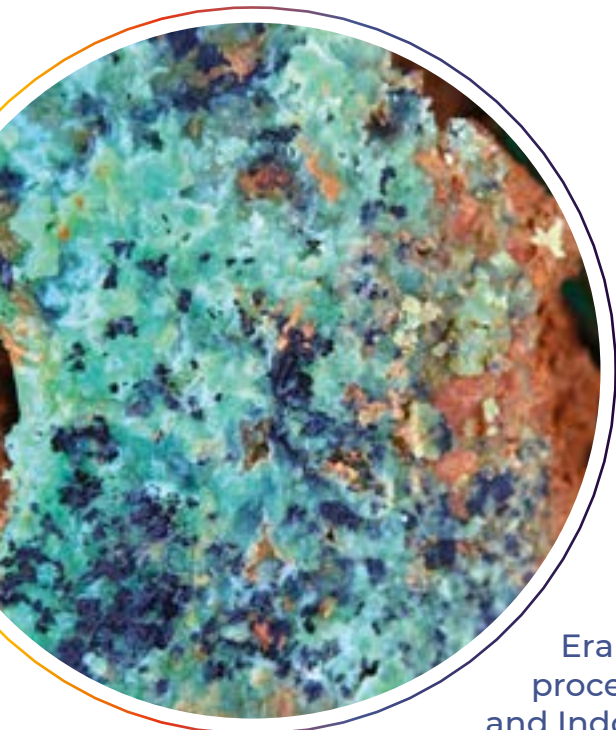
- The extracted manganese ore is transformed into manganese alloys, which are essential to the production of carbon steel (approximately 90% of the market) used in particular in the construction and automotive industries.

4.8 Mt
of manganese
ore produced

Key figures

- ~4,000 employees
- €1,765 million of sales
- 740 kt of manganese alloys produced





Nickel BU

Eramet, world's largest producer of ferronickel, processes ore from nickel mines in New Caledonia and Indonesia. It is also one of the world producers of high-purity nickel thanks to the Sandouville refinery in France.

Resources and activities

- Highly competitive nickel mines in New Caledonia and a pyrometallurgy plant for ferronickel production operated by SLN (Société Le Nickel).
- Rapid growth in nickel ore exports thanks to the implementation of SLN's new business model.
- Start of operations in 2019 of Weda Bay mine in Indonesia, whose purpose is to supply several units processing ore into nickel alloy.

- Start of operations in 2020 of the Weda Bay plant, supplied by the mine, under a joint-venture with Tsingshan, the world's largest producer of stainless steel.
- Rapid growth of the pure nickel refinery in France.

Markets

- Nickel ore is extracted for processing into nickel ferroalloys, mainly used for producing stainless steel (68% of the market) as well as pure metal and nickel salts.



Key figures

- **~2,200** employees
- **€778 million** of sales
- **47 kt** of ferronickel produced

47 Mwmt

**of nickel ore produced
of which 1.6 Mwmt
exported**



Lithium BU (project)

In Argentina, the Group has perpetual mining rights over a major lithium concession, in the form of brine, located in the province of Salta on the Andean highlands. Lithium is a critical metal essential to energy and digital transition.

The project consists in extracting brine from the salt lake and processing it into lithium carbonate, the base compound for the energy storage industry (51%). Demand for lithium for the Li-on battery market is expected to increase three-fold by 2025.

Mineral Sands BU

Eramet is a major player in mineral sands. The Group is the world's fifth-largest producer of titanium-containing raw materials and the world's fourth-largest producer of zircon.

Resources and activities

- Production of titaniferous ores (ilmenite, rutile, leucosene) and zircon in Senegal operated by GCO (Grande Côte Operations).
- Transportation of ore by rail from the mine to the Dakar port operated by GCO.
- Processing of ilmenite and production of titanium dioxide slags and high-purity pig iron at the pyrometallurgy plant Titanium and Iron (TTI) in Norway.

Markets

- Minerals Sands are extracted and then separated to produce zircon (used in ceramics, chemistry, etc.) and titanium-containing raw materials, transformed into titanium slag (90% of which is used for pigment production).

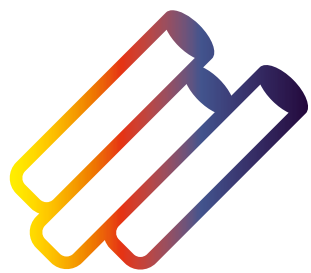
735 kt

mineral sands concentrates produced in Senegal



Key figures

- **~1,000** employees
- **€286 million** of sales
- **189 kt** of titanium dioxide produced



High Performance DIVISION

The High Performance Alloys Division has a unique know-how dedicated to strategic industries. It supplies high-tech aeronautics, energy and defence industries with parts, semi-finished products or metal powders, with superalloys, high-performance steels, high-speed steels, aluminium alloys and titanium alloys.



Aubert & Duval

Aubert & Duval is one of the world leaders in high performance steels, superalloys and titanium and one of the world leaders in large closed-die forgings and the world's second largest producer of high-power closed-die forgings in titanium, steel, superalloys and aluminium.

Activities

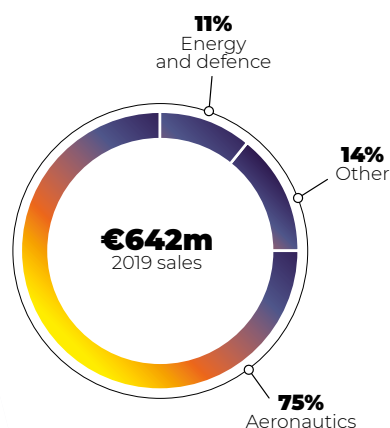
- For over 100 years, Aubert & Duval has been developing metallurgical solutions to support projects in the most exacting industries: long products, open-die forgings, closed-die forgings, powders for additive manufacturing, etc.

Markets

- Aeronautics/aerospace
- Energy
- Defence
- Automotive
- Tooling
- Powders for additive manufacturing

Key figures

- **+4,000** employees
- **€642 million** of sales
- **14** industrial sites





Erasteel

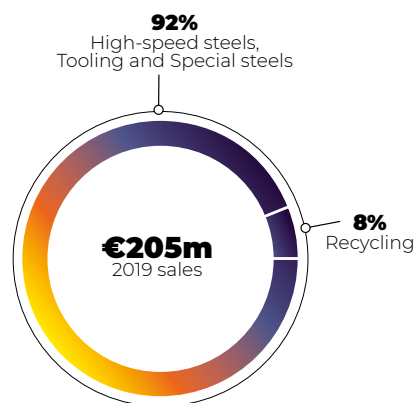
Erasteel is a world player in conventional high-speed steels and the leader in gas-atomised powder metallurgy with ASP® powder metallurgy high-speed steels and PEARL® metallic powders. The company is also a European player in the recycling of catalysts, metal oxides and batteries.

Activities

- Erasteel offers a wide range of steel grades and alloys from powder metallurgy or conventional metallurgy. Products are in the form of powders, round and flat bars, wires and strips.

Markets

- Cutting tools
- Cold work tools
- Saws and knives
- Components and replacement parts
- Stainless steel industry (recycling of used catalysts and batteries)



Key figures

- ~900 employees
- €205 million of sales
- 8 industrial sites





Innovation

Eramet Ideas,
an integrated innovation centre across
the entire value chain: mining operations,
semi-finished products, digital transformation.

Innovation centres
for the High Performance Alloys Division



Expertise

- **Extractive metallurgy** (mineralogy, mineral processing, geometallurgy, hydrometallurgy and pyrometallurgy)
- **Metallurgical processing of alloys and high-performance steels** (including powder metallurgy)
- **Thermomechanical processing of alloys by forging and closed die-forging**

Eramet Ideas: open innovation approach

- **Benchmark**
- **Leadership/Partner** in European projects
- **Partnerships with universities, grandes écoles, industry, start-ups, SMEs**
- **Challenge Open Innovation:** promotion of a global network of researchers and experts on scientific subjects relevant to the Group
- **Creation of a shared laboratory with CNRS, "LILAB",** on metals critical for energy transition

Key figures

- **~300 experts and technicians** (in-house R&D)
- **€60 million** dedicated to innovation, or 1.5% of sales
- **25 ongoing European collaborative projects**, of which 11 concern extractive metallurgy
- **First microscope in Europe** equipped with QEMSCAN mineralogy software

25

collaborative projects

2019

KEY FIGURES

€3,671M

Sales in 2019

77% Mining and Metals Division

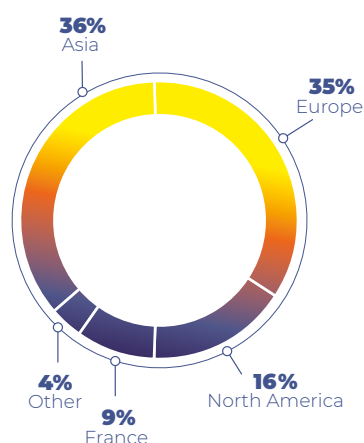
48% Manganese BU

21% Nickel BU

8% Mineral Sands BU

23% High Performance Alloys Division

Breakdown by geographical area



€630M

EBITDA

€341M

Current operating income

13,000

Employees

Breakdown by geographical area

40% France

10% Europe (excluding France)

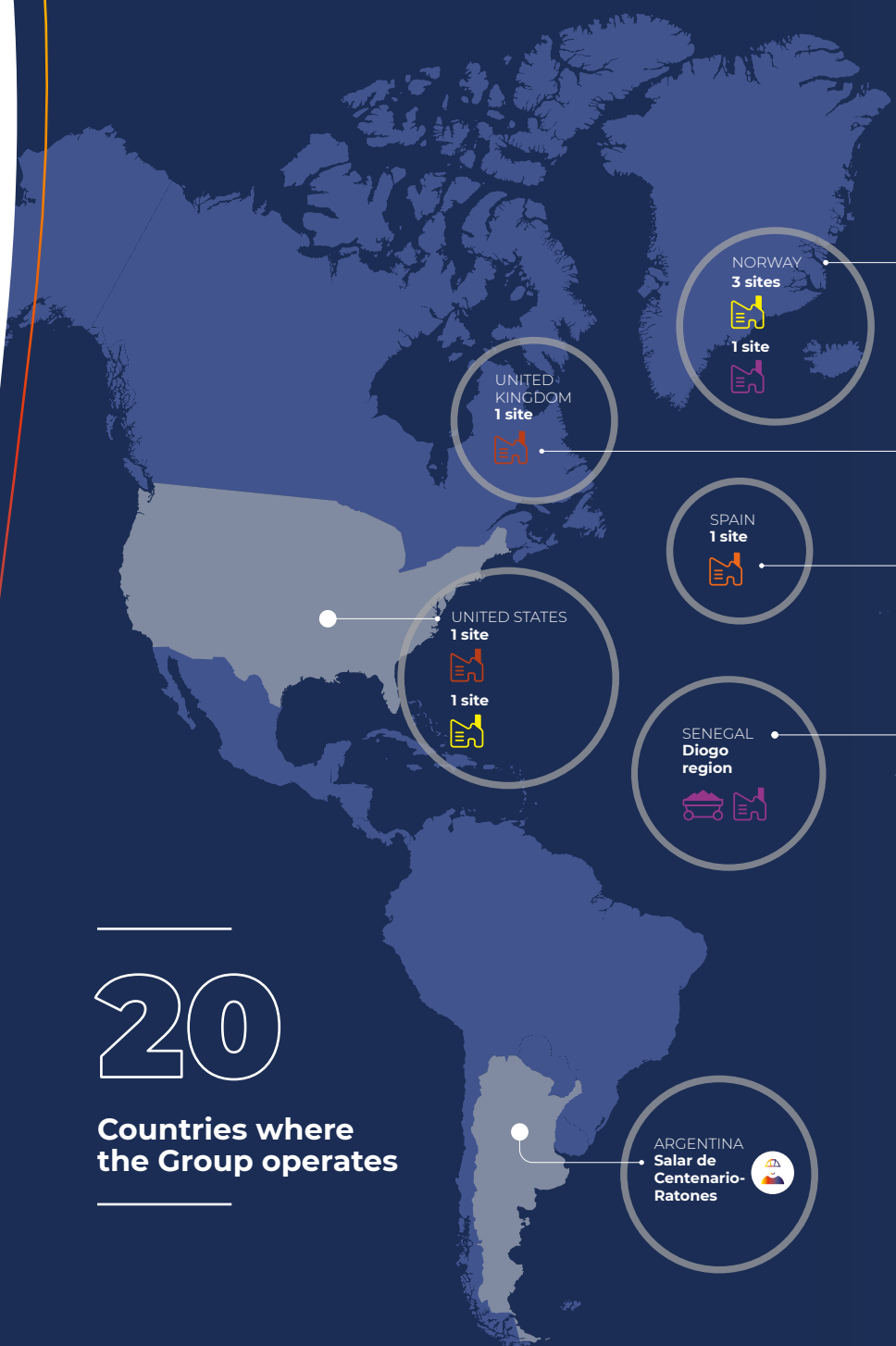
3% Americas

30% Africa

2% Asia

15% Pacific

Our operations on the five continents



20

Countries where the Group operates

THE GROUP'S SITES



PROJECTS



MINING SITES



PROCESSING

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

SWEDEN
3 sites



FRANCE
12 sites

2 sites

1 site

1 site



INDIA
1 site



GABON
Moanda



INDONESIA
(Halmahera Island)
Weda Bay



CHINA
1 site



NEW
CALEDONIA
Kouaoua, Népoui,
Poum, Thio,
Thiébaghi



39

mining and
industrial sites

Our business model

Eramet is a global leader and a diversified mining and metallurgical group

OUR AMBITION

Developing a selective portfolio of value-creating mining and metallurgical activities.

To be among in each of our businesses profitability

Our assets and resources

Natural capital (resources)

110 Mt of manganese content (Gabon)

19.4 Mt of nickel content (New Caledonia)

35 Mt of mineral sands (Senegal)

10 Mt of lithium (LCE**) (Argentina)

9.4 Mt of nickel content, 43% owned by Eramet (Weda Bay, Indonesia)

Industrial capital

39 mining and metallurgical industrial sites worldwide

€455 million industrial investments

Financial capital

SBF 120 listed company

€630 million EBITDA

€2.3 billion financial liquidity

Human capital

13,000 employees in 20 countries

23.8% of female managers

Intellectual and innovation capital

€60 million R&D spend

300 employees (in-house R&D)

Societal capital

Local territories as shareholders of our main subsidiaries:

34% New Caledonia (SLN),

29% Gabon (Comilog),

10% Senegal (GCO)

Long-term relationship with customers



* The presentation of Eramet's resources is in line with the recommendations of IIRC.

** LCE: Lithium Carbonate Equivalent

the best
in terms of performance,
and innovation.

To be admired for our strategic model,
our management system
and our societal commitment.

Developing projects
that deliver high
value added

Improving
performance

STRATEGIC TRANSFORMATION

Our value creation

Shareholders

12% ROCE*** (2019)
€0.60 per share paid
in 2019

Customers/ Suppliers

€3.7 billion of sales

Communities/ Regions

€257 million€ paid by
our companies active in
the extractive industry to local
governments (mainly taxes
and royalties in 2018****)

€20.2 million investments
in local communities
and sponsorships

87% of decarbonated power
purchased in 2019

Employees

- 35% of FR2 in recordable
accidents

84% of employees trained

R&D and innovation partners

25 ongoing European
collaborative projects

Where we want to be in 2023



Sustainable
value
creator



Business
partner of
choice



Committed
& contributive
corporate
citizen



Home
for best
talents



Entrepreneur

*** ROCE: current operating income/capital
employed.

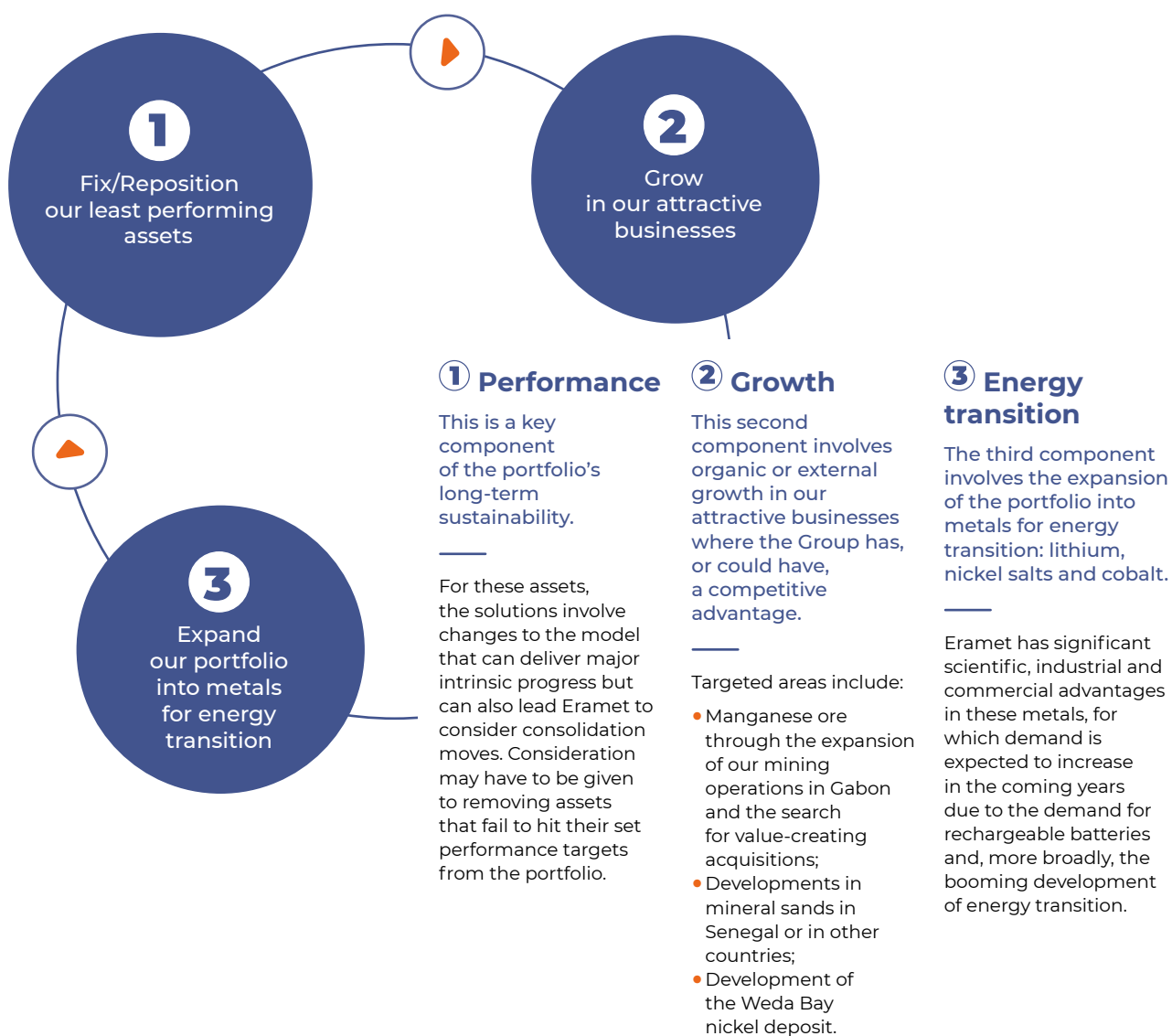
**** yearly update issued in June.

Acceleration of the strategic transformation

Increase Eramet Group's cash generation and diversify its asset portfolio.

Launched in 2018, the Group's in-depth strategic and managerial transformation programme aims to reposition it in order to ensure competitiveness in a changing environment and sustainable value creation.

The strategic transformation focuses on three areas:





► PERFORMANCE

SLN rescue plan

In New Caledonia, faced with numerous internal and external challenges, a rescue plan for SLN was outlined at the end of 2018. Its success requires the involvement of all stakeholders. This plan is based on the effective implementation of a new business model, including an increase of exported ore quantities, progress in improving internal performance, and the short-term reduction in energy prices.

The new business model is rebalanced on two activities, mining and metallurgy, allowing an increase in the

company's revenue through improved valuation in its current mining deposits and a reduction in cash-cost accordingly. The success of this model is based on a target volume of 4 Mt ore exported per year by 2021. The rescue plan is targeting an intrinsic improvement in cash-cost of USD 1.30/lb by 2021.

To achieve this, SLN is in constant dialogue with all concerned stakeholders, particularly local authorities and social partners.

► PERFORMANCE

Industrial restructuring of A&D and Erasteel

Since 2018, the strategic review conducted in the High Performance Alloys Division has made it possible to:

- Focus the division's operations on six major strategic market segments: aeronautics, land-based turbines, defence, nuclear, high-speed steels from powder metallurgy and additive manufacturing;
- Define a project for structuring the operations of Aubert & Duval and Erasteel into three separate business units (BU), responsible for their own performance: Closed-die forgings BU, Rolled and Forged products BU and High-speed steels and Recycling BU;
- Revamp processes and the quality culture;
- Focus employees on the improvement in sales and customer satisfaction.

The objective of each business unit is to improve performance in a more agile structure, acquire new market shares in strategic segments. This is the case in particular in the aerospace industry for mono-corridor programmes, both for engine and structure parts and for long products.



GROWTH

Increase in the production of manganese ore in Gabon

In view of the reserves of the Moanda mine in Gabon, a manganese ore production capacity of about 7 Mt in the long term can be envisaged.

An alternative process involving the dry processing of part of the ore started at the end of 2018 in order to extend the life of the Bangombé plateau currently being exploited. This process allows for flexibility in the operation of the mine, and an increase in volumes produced in the short term. On this basis, production in 2019 stood at 4.8 Mt of manganese ore, reflecting major progress in Comilog's organic growth.

In 2019, Eramet continued to study the "brownfield" extension of the Moanda mine aiming to develop the Okouma plateau, in parallel with that of Bangombé. The project has been reviewed based on a new modular approach.

The modular approach optimises industrial investments and is conditioned on starting production at the Okouma plateau in 2020 and more intensive use of the dry processing alternative for the entire mine.

This growth dynamics is supported by the railway renovation programme with a doubling of the transportation capacity of Transgabonais, operated by Setrag, a 100% subsidiary of Comilog. Since the start of the programme in 2016, capacity has increased by over 70%. In 2019, a new milestone was crossed in the renovation programme, particularly in terms of digital transformation, with the implementation of a new control centre equipped with digital communication with rolling convoys.



GROWTH

Growth in mineral sands

In 2018, Eramet also reinforced its portfolio in the attractive mineral sands industry. The Group thus took 100% control of TiZir on 1 July 2018, following the successful takeover bid for MDL (Australian company which then owned 50% of the joint-venture). The quality of mine in Senegal and the enrichment capacity of part of the ore at the plant in Norway make it a major player in the mineral sands industry. The Group is looking into de-bottlenecking options in the medium-term for the Senegal production.

In 2019, Eramet also obtained a mining exploration licence in Cameroon for the Akonolinga rutilifere block.

GROWTH

Development of the Weda Bay nickel deposit

The Weda Bay project in Indonesia, is based on world-class deposits, developed in partnership with the Chinese company Tsingshan, the leading producer of stainless steel. The mine, which will supply several plants, started operations in 2019. In 2020, there are plans to produce nickel ferroalloy from the Weda Bay deposit (NPI), with a targeted capacity of 30 kt nickel content per year eventually. NPI is enjoying strong demand from the stainless steel industry. Eramet is highly involved in the development of the mine. The start of operations is scheduled in 2020. Eramet will have an off-take right of 43% of volumes produced, equivalent to its stake in the holding company controlling this asset.

** Nickel Pig Iron (NPI)*





ENERGY TRANSITION

Nickel and cobalt for batteries

The study of diversification of the development of the Weda Bay deposit for the production of nickel and cobalt salts is an opportunity to expand the Group's product portfolio into critical metals for the energy transition.

The development into Li-ion (lithium, nickel, cobalt) batteries recycling with the launch of the R&D programme, is also a part of this dynamic.

ENERGY TRANSITION

Lithium project in Argentina

The aim of this project is to allow the Group to diversify its asset base, both geographically and financially, via lithium, a critical metal for energy transition. Since the discovery of the Centenario-Ratones deposit, geological works have increased the quantity of drainable resources to 9.9 Mt LCE (lithium carbon equivalent), making it a world class resource. Technical and financial studies were finalised in 2019. The targeted production capacity is 24 kt LCE per year.



From top to bottom

View of the Moanda manganese mine in Gabon

Manganese ore transportation

Transportation of mineral sands to the Port of Dakar in Senegal

Quinoa crop in Argentina's Puna region.

The ambition and vision of the Eramet Group are also based on managerial transformation and digital transformation, which is a cross-cutting growth and performance driver.

Managerial transformation

In-depth managerial transformation, a key condition for properly executing the current strategy, is in progress.

Its aim is to deploy managerial and operational excellence at all levels of the organization: upward revision of the level of ambition; light, flexible and responsive organizations; skills enhancement in leadership, empowerment and performance management; rigorous approach to execution; focus on results. This transformation should improve performance and make it easier to realise our strategic ambitions; Eramet has been strengthened with the addition of new skills, a key factor in this transformation's success, with close to half of positions on the senior management team in the last two years held by new recruits from both inside and outside the Group.

Digital transformation

Today, thanks to the exponential increase in computing power,

digital technologies make it possible to rethink the ways we operate, both in mines and in plants, and even transform business models. Digital transformation is a major component of value creation for Eramet. Mining and Factory 4.0 are becoming a reality: IOT coupled with predictive or conditional maintenance algorithms, drones in mines, artificial intelligence in geology or metallurgy are some of the areas where rapid progress is being made.

Our CSR commitment

“We create sustainable value by combining operational performance with a positive impact on our environment and society.”

Eramet's CSR approach is an integral part of its strategic vision. Implemented in each of the five pillars of the strategic vision, it is embodied most specifically by its ambition to be a committed and contributive corporate citizen and a home for best talents.

3 thematic thrusts

Serving as a meeting point between its businesses, its strategy and the global challenges to which Eramet is confronted, the 2018-2023 Roadmap provides a framework for the Group's organised, defined and measurable approach to progress in terms of corporate social responsibility.



- 1 Ensure the Health and Safety of employees and subcontractors
- 2 Build skills and promote talent and career development
- 3 Strengthen employee engagement
- 4 Integrate and foster the wealth of diversity
- 5 Be a valued and contributing partner of our host communities

- 6 Be an energy transition leader in the metals sector
- 7 Actively contribute to the development of the circular economy
- 8 Be a company of reference in terms of respect for Human Rights in our field of activity
- 9 Be an ethical partner of choice
- 10 Be a responsible company of reference in the mining and metallurgy sector



Be a responsible economic player in daily life



- 11 Reduce our atmospheric emissions
- 12 Protect water resources and accelerate the rehabilitation of our mining sites by fostering biodiversity
- 13 Reduce our energy and climate footprint

+ MORE INFORMATION
For more information on Eramet's CSR commitment and its achievements in 2019 refer to the Group's Non-Financial Performance Statement (chapter 6).

Each of the above commitments is associated with a public objective, which Eramet aims to achieve by 2023. All of the targets and the progress made in 2019 by the Group are presented in chapter 6.

CSR



Contribution to Agenda 2030

Through its economic and productive activities, Eramet directly meets the United Nations' Sustainable Development Goals (SDGs) 8, 9, 12 and 13. Eramet's CSR Roadmap, based on these goals, particularly contributes to the human, ethical and environmental issues.

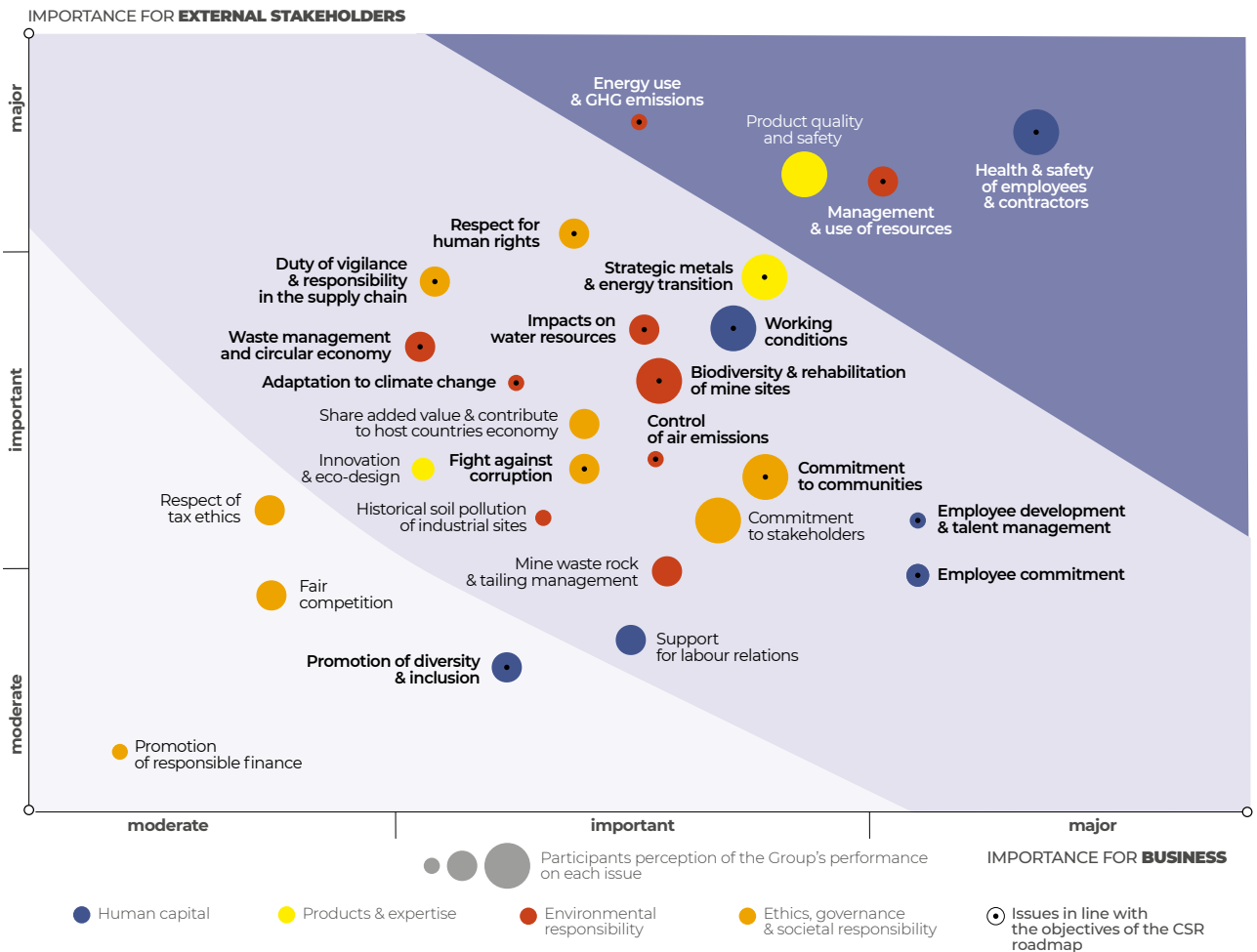
- Eramet committed to people
- Eramet committed to economic responsibility
- Eramet committed to the planet

Materiality matrix

As a cross between the importance of CSR issues to the company and stakeholders' expectations on these issues,

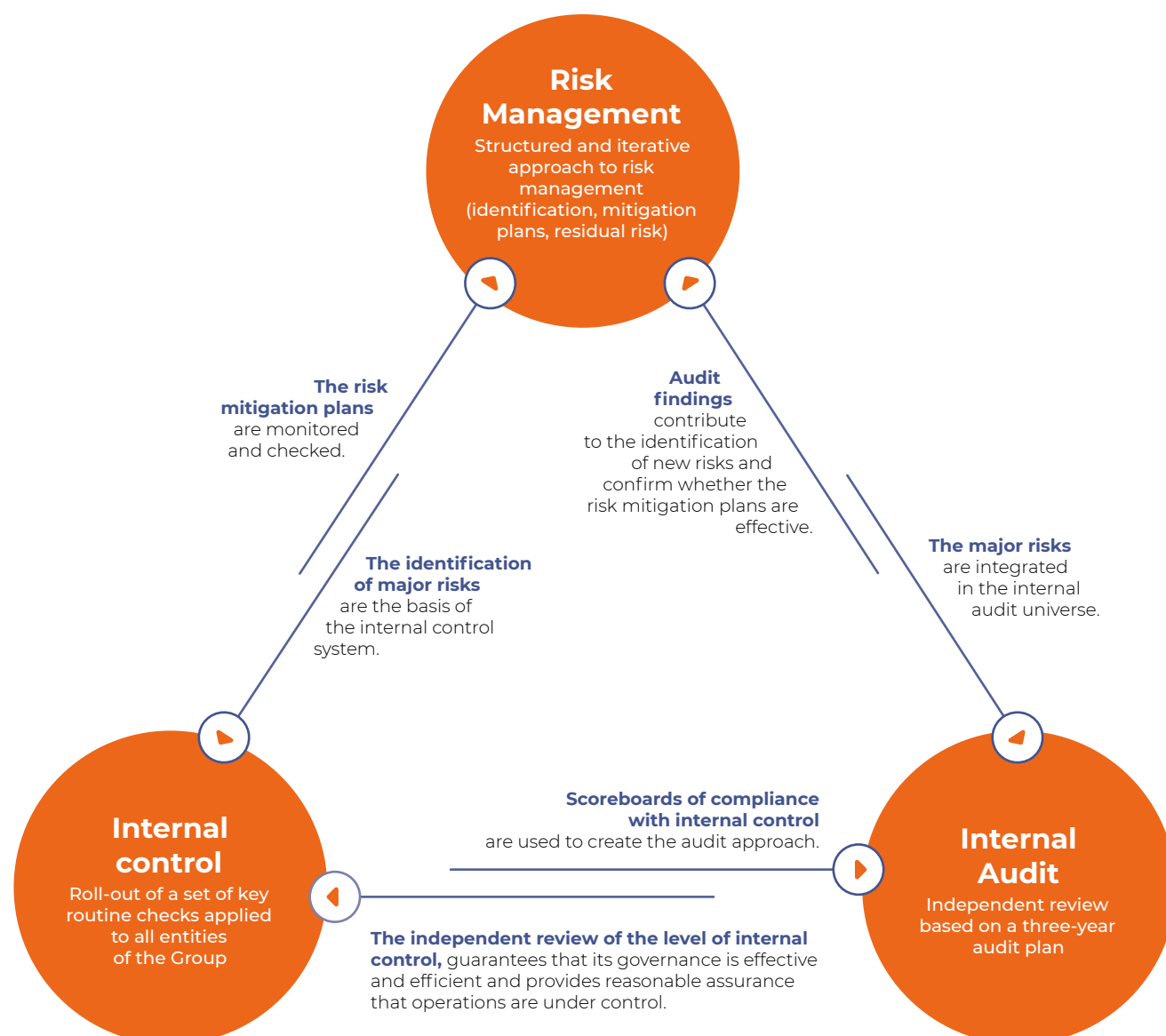
the materiality analysis leads to the management of an open and dynamic CSR strategy.

The exercise conducted in 2019 clearly indicates the relevance of the issues that make up the CSR roadmap. For more information on this initiative, refer to chapter 6.



Risk Management

To fully realise its strategic objectives and develop its activities, Eramet put a risk management system in place built on an integrated approach and a dedicated governance.



+ MORE INFORMATION
For more information on Eramet's risk management, refer to chapter 5.

Governance dedicated to risk management with a stringent action plan

The Eramet Group is committed to a risk management approach that provides a better understanding of its risks and engages in calculated risk-taking to increase its performance and enable it to take better advantage of opportunities. In this respect, risk management is considered by the Eramet Executive Committee to be a key component of the Group's governance system.



Risk mapping

The 2019 update of the Group risk mapping shows the following risks.

CATEGORY	RISK FACTORS	NET SIGNIFICANCE LEVEL
• Strategic	Geopolitical risks	High
	Risks that the Group's portfolio assets which have not been sufficiently profitable will not be recovered, or inability to reposition certain Group entities in terms of competitive costs	Average
	Risks of social and environmental acceptability	Average
	Risks related to non-execution of the chosen strategy of profitable growth with a diversified portfolio of activities	Average
• Operational	Risks related to the Supply Chain – Manganese ore	High
	Risks of breakdown in delivery to a strategic client of Aubert & Duval	High
	Risks inherent to production reliability and the development of new metallurgical products	Average
	Risk of failure of information systems, protection of information and cyber attacks	Average
	Risks related to security	Low
	Risks related to industrial and environmental safety	Low
	Risks to the health and safety of persons	Low
• Legal	Risk of legislative and regulatory changes	Average
	Risk of non-compliance with regulations and ethics	Low

Our governance

Board of Directors

Eramet shares are traded on the Euronext Paris market. At 31 December 2019, the number of shares owned by the group formed between Sorame and Ceir, on the one hand, and FSI Equation (subsidiary of Agence des Participations de l'État, acting on behalf of the government) represented 62.51%

of the share capital. Eramet refers to the principles of corporate governance of listed companies set out in the Afep/Medef code, which can be consulted on Medef's website. The Board of Directors exercises the powers conferred by law to act in all circumstances in the name of the company.



Christel Bories
Chairperson and CEO
French nationality



Michel Antseleve
Director
Gabonese nationality



Emeric Burin des Roziers
Director
French nationality



Christine Coignard
Independent Director
French and Canadian nationality



François Corbin
Independent Director
French nationality



Jérôme Duval
Director
French nationality



Sorame, represented by Cyrille Duval
Director
French nationality



CEIR, represented by Nathalie de La Fournière
Director
French nationality



Frédéric Gaidou
Director representing employees
French nationality



Jean-Yves Gilet
Director
French nationality



Philippe Gomes
Director
French nationality



Manuelle Lepoutre
Independent Director
French nationality



Jean-Philippe Letellier
Director representing employees
French nationality



Miriam Maes
Independent Director
Dutch nationality



Louis Mapou
Director
French nationality



Catherine Ronge
Independent Director
French nationality



Sonia Sikorav
Independent Director
French nationality



Claude Tendil
Independent Director
French nationality



Bruno Vincent
Director appointed by the Government
French nationality

19
MEMBERS

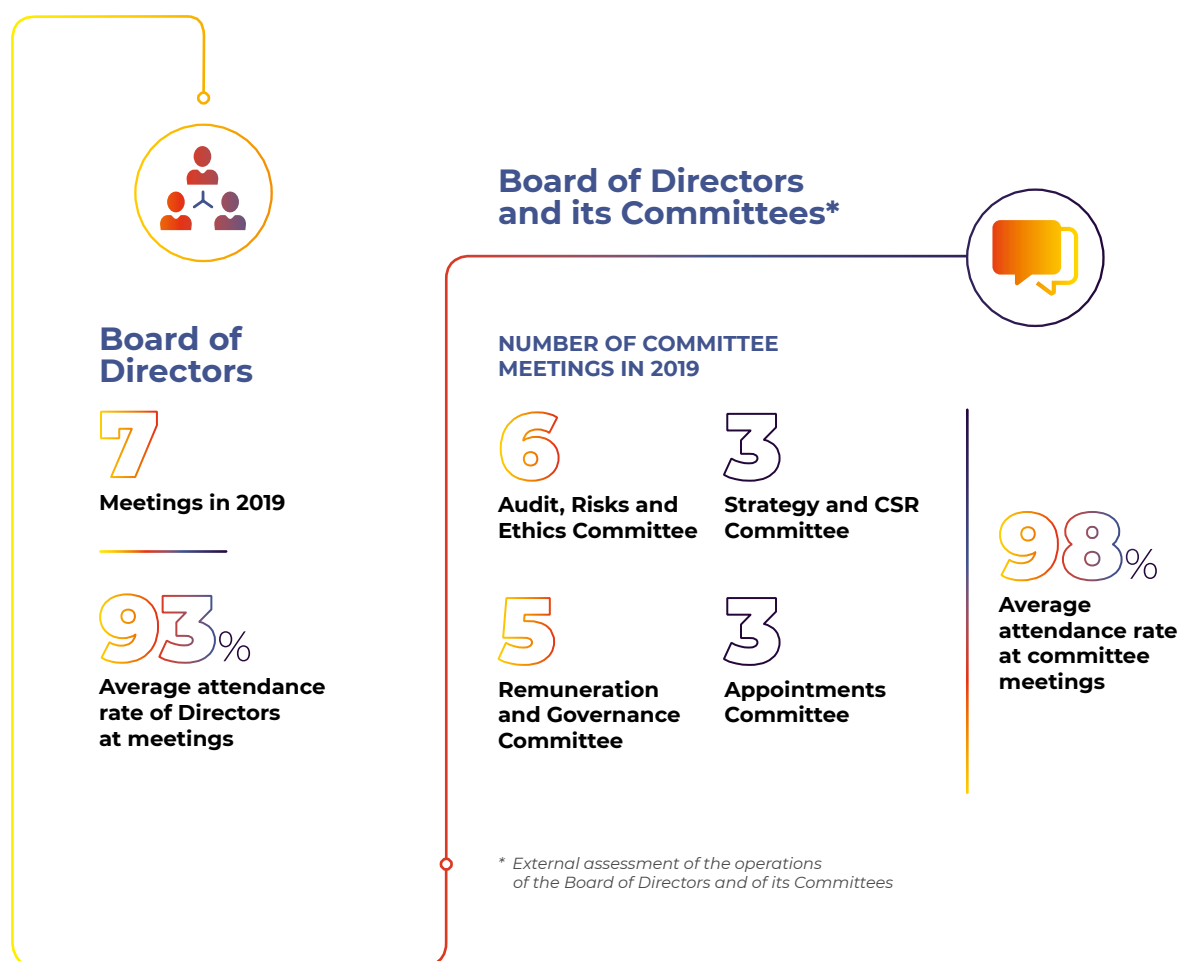
Proportion of independent directors (7/17):

41%*

Parity level on the Board of Directors (7/7):

41%*

* These ratios do not include directors representing employees.



Executive Committee

This Committee consists of Operational Departments as well as Support Departments. As at the date of this Universal Registration Document, the Executive Committee has three women members and is made up as follows:

• Christel Bories	Chairperson and CEO
• Virginie de Chassey	Communications and Sustainable Development Director
• Thomas Devedjian	Deputy CEO in charge of Finance and Digital Transformation
• Jérôme Fabre	Deputy CEO in charge of the High Performance Alloys Division
• Philippe Gundermann	Director of Strategy, Innovation and Investor Relations
• Jean de L'Hermite	Group Legal Director
• Anne Marie Lemaignan	Human Resources, Health and Security Director
• Kléber Silva	Deputy CEO in charge of the Mining and Metals Division

Financial performance

EBITDA at €630 million in 2019, reflecting good operating performance, in a deteriorated manganese price environment.

N.B.: all the commented changes in FY 2019 are calculated with respect to FY 2018, unless otherwise specified.

CHIFFRES CLÉS D'ACTIVITÉ

The Group's FY 2019 sales totalled €3,671 million, down 4%. At constant scope^{1,2}, and exchange rates², the change in sales declined 8%, mainly owing to the decline in manganese ore prices, in addition to the logistics situation at Aubert & Duval, due to bringing quality processes into conformity.

Group EBITDA ended at €630 million, down -€213 million, impacted by a -€268 million manganese price effect and -€49 million due to logistics difficulties at Aubert & Duval. Operating improvements (+€39 million) were also penalised by the strikes in H2 2018 and H1 2019 at SLN, which affected ore supplies and operations at the Doniambo plant, as well as by an increase in transport costs at Comilog. These effects hindered the operational breakthroughs made in 2019, specifically production records in the mines.

The Group's current operating income ended at €341 million, down 41%.

Income before tax amounted to €89 million, after recognition of -€118 million in non-operating income and expenses, including a provision for an asset impairment at Erasteel (-€25 million), and -€134 million in financial result.

Net income, Group share reported a loss of -€184 million, including a -€227 million tax charge. This charge is largely owing to taxes in Gabon (-€147 million).

Investments have been focused on modernising industrial tools and preparing strategic projects. Related cash outflow totalled €423 million, of which €132 million in preparation work for the two strategic projects in Gabon and Argentina.

Free Cash-Flow (FCF) ended at -€358 million at end-December 2019, of which -€274 million in non-recurring items. This includes the -€160 million non-recurring effect related to logistics difficulties at Aubert & Duval, of which -€80 million due to the strong increase in work-in-progress inventories. FCF was also penalised by a -€114 million payment made to the Gabonese government related, on the one hand, to the advance and exceptional payment of corporate income tax, and on the other, to the payment of a tax audit. Finally, dividends paid to Eramet shareholders and Comilog minority shareholders in respect of the 2018 financial year amounted to €20 million and €86 million respectively.

Net debt stood at €1,207 million, excluding the IFRS 16 impact. Eramet has applied IFRS 16 since 1 January 2019 with a simplified retrospective application, resulting in an increase of €97 million, with no impact on cash, and total recorded net debt of €1,304 million.

At December 31, 2019, **Eramet's financial liquidity** remained high at €2.3 billion, including available cash of €848 million in the balance sheet.

The evolution in the **Group's financial ratios** (gearing at 74% excluding IFRS impact and gearing at 63%³ within the meaning of the financial covenants) drove management to start an action plan. The Group took measures to maintain cash position, including strict industrial capex control, with the aim of controlling the level of net debt and preserving gearing. The Group might also plan initiatives to strengthen its financial structure such as disposals or partnerships.

Moreover, a proposal not to pay out any dividends in respect of the 2019 financial year will be made at the Shareholders' general meeting held on 26 May 2020.

¹ The scope effect corresponds i) to the 100% consolidation of the Mineral Sands activity in the Group reporting beginning on July 1, 2018, following the acquisition of the shares of Mineral Deposits Limited, an Australian company which owned 50% of the capital of TiZir, and ii) the equity consolidation starting January 1, 2019 of UKAD (High Performance Alloys Division).

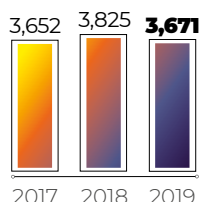
² See Financial Glossary on page 394.

³ Excluding IFRS 16 impact and excl. French government loan to SLN.

FINANCIAL PERFORMANCE

SALES

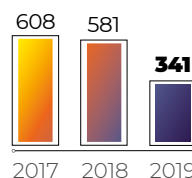
(€ millions)



Sales down by **4%** compared with 2018.

CURRENT OPERATING INCOME

(€ millions)



The Group's current operating income is down by **41%**, compared with 2018.

€630M

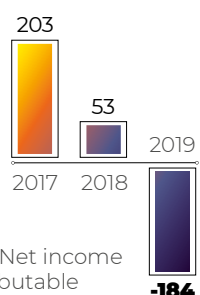
EBITDA 2019

€2.3bn

of financial liquidity
(at 31 December 2019)

NET INCOME GROUP SHARE

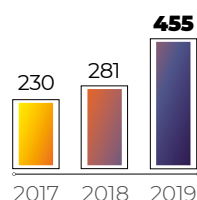
(€ millions)



The Net income attributable to the Group is down **-€184 million**, after recognition of non-operating result and expenses (-€118 million), financial result (-€134 million) and a tax expense (-€227 million) mainly due to taxes in Gabon.

INDUSTRIAL INVESTMENTS

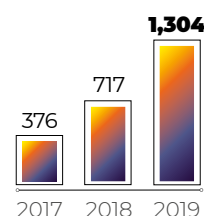
(€ millions)



Industrial investments stood at **€455 million** and were dedicated to the modernisation of industrial tools and the preparation of strategic projects.

NET FINANCIAL DEBT

(€ millions)



Net debt at **€1,207 million** (excl. Impact of IFRS 16 – non-cash) at 31 December 2019.

BREAKDOWN OF CURRENT OPERATING INCOME

(by business sector)

	2019	2018 ²
• Mining and Metals Division		
Manganese BU	459	699
Nickel BU	-58	-111
Mineral Sands BU ¹	64	35
• High Performance Alloys Division	-68	-8
Holding	-56	-34
Total	341	581

¹ Mineral Sands activity fully consolidated in the Group's accounts as of 1st July 2018, versus 50% previously.

² See note 2 of "Summary consolidated financial statements" table.

BREAKDOWN OF INDUSTRIAL INVESTMENTS

(by business sector)

	2019	2018
• Mining and Metals Division		
Manganese BU	234	140
Nickel BU	35	57
Mineral Sands BU	13	12
Lithium BU	101	0
• High Performance Alloys Division	53	63
Holding	20	9
Total	455	281

FINANCIAL PERFORMANCE

SUMMARY OF THE CONSOLIDATED FINANCIAL STATEMENTS

(€ millions) ¹	2019	2018 ²	Change (€m)	Change ³ (%)
Sales	3,671	3,825	-154	-4 %
EBITDA	630	843	-213	-25 %
Current operating income	341	581	-240	-41 %
Net income - Group share	-184	53	-237	N/A
Free Cash-Flow	-358	-211	-147	-70 %
Net debt (Net cash), excl. impact of IFRS 16	1,207	717	490	+68 %
Gearing excl. impact of IFRS 16 ⁴	74%	38%	+36 pts	N/A
Gearing incl. impact of IFRS 16 ⁴	80%	38%	+42 pts	N/A
ROCE (ROC/Capital employed ⁵ of year n-1)	12%	22%	-10 pts	N/A

1 Data rounded to the nearest million. 2019 figures after application of IFRS 16 on 1 January 2019, except for net debt and gearing. The comparative tables are presented in chapter 3 (3.1, Note 3) of this document, with a non-significant impact on EBITDA and COI.

2 Until 2018, restated data from the Group reporting in which joint ventures are accounted for using the proportionate consolidation method. Reconciliation with the published financial statements is presented in chapter 3 (3.1, Note 4) of this document.

3 Data rounded up or down to the nearest %.

4 Ratio of net debt to shareholders' equity.

5 Sum of equity, net financial debt, provisions for restoration of sites, provisions for restructuring and other social risks, less non-current financial assets, excluding capital employed at Weda Bay Nickel.

NON-FINANCIAL PERFORMANCE

ACHIEVEMENT OF TARGETS IN 2019

In 2018, Eramet outlined its CSR Roadmap, which establishes a link between its priority environmental and societal issues and the Group's strategic vision. This 2018-2023 CSR Roadmap is structured around three core components: A committed player for women and men, A responsible economic player and A committed player for the planet.

For each of the thirteen objectives that make up the Roadmap, Eramet has defined quantitative and qualitative targets, with progress assessed every year.

In order to assess the overall progress of its Roadmap, Eramet measures its CSR performance index based on the year's achievements. For 2019, this index reached 112 (with 100 indicating achievement of all targets). Most of the targets set for the year were achieved. More than half of them even exceeded the set targets. This is particularly the case for three of the environmental targets, relating respectively to rehabilitation of mining sites, dust emissions and recovery of industrial waste.

112

2019 CSR performance index (target 100)

80%

of industrial sites ISO 14001 certified in 2019

€20.2 MILLION

invested for the benefit of communities*

1.2

ratio of rehabilitated/cleared areas at mining sites (target ratio 1)

87%

of low carbon footprint electricity bought

* Expenditure for the benefit of local populations and for sponsorship, including Comilog's exceptional contribution this year for financing road rehabilitation works in Moanda (€5 million).

• The Group's outlook in 2020

At the date of publication of this Universal Registration Document and in the current context of the Coronavirus pandemic marked by the uncertainty in the global economy, Eramet is fully committed to tackling developments in the situation.

THE GROUP HAS TWO PRIORITIES:

- **Protecting the health of all its employees as well as their family, and contributing to containing the pandemic, while complying with all health safety measures imposed by relevant authorities**
- **Ensuring, to the extent possible, business continuity by adapting organizations, working closely with employees, suppliers and customers.**

A crisis meeting is held on a daily basis to coordinate actions in all the Group's locations. A health protocol compliant with authorities' recommendations is being rolled out across all sites.

Considering the uncertainty surrounding the length of the pandemic as well as its scale and impact on the Group's supplies and markets, Eramet is currently not in a position to accurately measure its impact on production and performance targets for 2020. As a result, the Group decided to suspend guidance for 2020 production and EBITDA as communicated to the market in its press release of 19 February 2020. Once there is more visibility on the impact of the pandemic, Eramet will provide an update on its outlook for the current financial year.

The Group's liquidity level - €2.3bn at 31 December 2019, which includes lines of liquidity that had not been drawn down at that date for €1.5bn - remains high. All credit lines have since been drawn down as a precaution. Cash preservation measures have also been strengthened and accelerated in order to preserve Group liquidity and financing capacity; main levers include cost and capital expenditures cutting to a strict minimum, as well as new measures put in place to closely control invoicing flows and cash collection processes.

As regards the Mining and Metals division, in a fast-changing environment, it is still too soon to assess the pandemic's overall impact in the quarters ahead. There is still considerable uncertainty about how the pandemic will affect the outlook for end-markets, notably the carbon steel and the stainless steel industries and the entire value chain. Some countries, including South Africa and India, have temporarily suspended their mining and metallurgy activities. Parallel to this, business activity is gradually resuming in China, the main global consumer

of manganese, nickel and raw materials overall. Nonetheless, Chinese producers have built up large carbon and stainless steel inventories that are likely to weigh on demand for raw materials eventually. In Europe, steel industry players have announced a number of slowdowns and temporary suspensions in production, especially impacting products in the automotive sector.

Mining and metallurgy production have not been significantly impacted to date (Gabon, New Caledonia, Senegal, mainland France, Norway and the United States). However, the situation could change rapidly. First-quarter order intakes are still at a normal level, particularly in Asia, which accounts for more than half of the division's sales. As it stands, the division's mines and metallurgical plants are in a position to provide the volume ordered.

In Indonesia, as announced end-February, the low-grade nickel ferroalloy (NPI) plant that the Group is developing in a joint venture should start operations in first-half 2020.

Moreover, manganese ore market prices⁽¹⁾ observed since early 2020 are above those of fourth-quarter 2019 on average. Conversely, nickel prices at the LME are down approximately 17% on average since the start of the year versus fourth-quarter 2019.

Regarding the High Performance Alloys division, as a result of the health protocol being rolled out across all sites, the division is currently reorganising its plants' production lines to ensure continuity in its industrial operations. This adaptation results in a temporary shutdown or suspension for some activities in France. With half of its activity driven by the aerospace sector, the division expects to start operations again gradually in line with the rebound in business for large accounts in the sector.

Moreover, the Group has set up a systematic teleworking system for service functions.

(1) Eramet estimations.





Non-financial performance statement

Eramet Group's CSR challenges and approach	38
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6.1 ERAMET GROUP'S CSR CHALLENGES AND APPROACH

6.1.1 Group business model

Eramet, a global mining and metallurgical group, is a key player in the extraction and recovery of metals (manganese, nickel, mineral sands) and the production and processing of high value-added alloys (high-speed steels, high-performance steels, superalloys, aluminium- and titanium-based alloys). The Group supports the energy transition by developing high growth potential activities such as extraction and refining of lithium and recycling. Eramet is positioned as its customers' preferred partner in the steelmaking, stainless steelmaking, aeronautics, pigments, energy and new-generation batteries industries.

Relying on operational excellence, high-quality investment and the know-how of its employees, the Group has a virtuous

business, management and societal model that creates value. As a corporate and fiscal citizen, Eramet works to achieve a sustainable and responsible industry. Eramet has close to 13,000 employees in approximately 20 countries and has generated turnover of around €3.7 billion in 2019.

The infographics presenting the Group's business model can be found in Chapter 1 of the Registration Document (Part 1.2). This graphical representation shows the Group's strategy, resources, activities and the value created for its various stakeholders.

Chapter 2 further develops the activities and markets in which the Group operates.

6.1.2 CSR risk assessment

In addition to its risk mapping exercise that takes into account CSR risks (risk management is described in Chapter 5), Eramet has developed, with the support of its internal stakeholders, specific risk maps in three particular areas: the Environment, Human Rights and Anti-Corruption. This comprehensive work on risk assessment provides the Group with a precise view of the challenges it faces.

The table summarises the main CSR risks that have emerged from the various risk mapping exercises⁽¹⁾. The order in which the risks are presented has no relation to the impact or occurrence of that risk.

Overview of the Eramet Group's CSR risks

Main CSR risks	Stakeholder expectations	Information in Non-Financial Performance Statement	
ENVIRONMENTAL CONTINGENCIES		SECTION 6.2	
Atmospheric emissions	OO	6.2.3.1	Airborne emissions
Historical soil pollution	O	6.2.3.3	Rehabilitation of closed industrial sites
Production of waste (hazardous and non-hazardous)	OO	6.2.4.1	Optimisation of the consumption of primary raw materials
		6.2.4.2	Waste prevention and recovery
Water consumption	OOO	6.2.4.3	Optimisation of water consumption
		6.2.6.3	Water management
Emissions into water	OOO	6.2.3.2	Aqueous waste
		6.2.6.3	Water management
Climate change – energy consumption and GHG emissions	OOO	6.2.5	Fight against climate change
Production of waste rock and tailings	OO	6.2.6.2	Responsible resource management
		6.2.6.4	Tailings and mine waste management
Erosion	OOO	6.2.6.3	Water management
		6.2.6.5	Rehabilitation of mining sites
Biodiversity	OOO	6.2.7	Preservation of biodiversity
SOCIAL RISKS AND HUMAN RIGHTS		SECTION 6.3	
Security, health and safety of employees	OOO	6.3.2.1	Employee safety
		6.3.2.2	Employee health
		6.3.2.3	Employee security
Attracting/retaining talent	OO	6.3.2.4	Promotion and development of employees
Industrial relations	O	6.3.2.4.3	Social dialogue close to the reality on the ground
Discrimination/harassment	OO	6.3.2.4.4	Equal opportunities, measures to foster non-discrimination and diversity
Impacts on human rights of communities	OO	6.3.3	Commitments to communities
ETHICAL RISKS (IN BUSINESS RELATIONS)		SECTION 6.4	
Risk of corruption in relations with customers and suppliers	O	6.4.1	Ethics, Compliance and Anti-Corruption
Risk of potential conflicts of interest	O	6.4.1	Ethics, Compliance and Anti-Corruption
Non-compliance with ILO conventions in the supply chain	OO	6.4.2	Responsible value chain

Legend: OOO = regarded as a major issue by stakeholders; OO = regarded as a major issue for internal or external stakeholders and O = regarded as a moderately important issue.

(1) As matters relating to societal commitments to combat food waste, food insecurity, respect for animal welfare and responsible, sustainable and fairly traded food are not significant for the Group, they are not included in a specific report.

The measurement of stakeholder expectations shown above has been estimated on the basis of the materiality analysis carried out by an external third party for the Group in 2019. 27 issues, grouped into four categories (Human Capital, Products and Know-How, Environment and Ethics, and Governance and Societal Responsibility), were thus submitted to stakeholders for consultation.

The selected panel comprised Group directors, managers and site directors and employee representatives (from inside the Group), and customers, suppliers, public authorities, NGOs, civil society associations, professional associations, banks, investors and shareholders, and researchers and universities (from outside the Group). The consultation was based on a questionnaire, as well as individual interviews, with anonymous and equally weighted consolidation.

6.1.3 Group CSR approach

Eramet's societal responsibility approach is based on a platform of reference legislation, a progress plan and integrated organization of Group governance.

6.1.3.1 Group policies

Due to the nature of its mining and industrial activities, and aware of its strong interaction with the local areas in which it operates, Eramet is resolutely focused on all matters related to sustainable development (SD) and corporate social responsibility (CSR). The Group is committed to a responsible approach and continuous improvement. It aims to be a company recognised for its strategic model, management system and social commitment.

There are two key commitments underpinning Eramet's sustainable development and CSR approach: the Sustainable Development Policy and the Ethics Charter.

In a spirit of continuous improvement that creates shared value, Eramet's Board of Directors adopted a Sustainable Development policy in 2010.

This policy is structured around four priorities:

- the protection and development of Group employees;
- the management of risks to and impacts on health and the environment;
- the integration of sustainable development into product policy and innovation;
- and finally, maintaining a relationship of trust with stakeholders.

Implemented in 2015, the Group's Ethics Charter sets out the rules and principles of action and behaviour that are applicable to and binding on all Group employees. It relates to the Group's commitments and those of its employees in many areas, including but not limited to development, stakeholder relations, employee safety, protection of the environment, security, customer engagement, social dialogue, combating harassment, transparency, anti-corruption and compliance with competition rules.

All the information arising from the materiality analysis is provided in the form of a matrix (please see Chapter 1). In addition to sharing a Group vision of stakeholder expectations, this approach has also enabled Eramet to confirm the pertinence of its CRS roadmap and the Group's targets.

In order to facilitate the reading of Eramet's Non-Financial Performance Statement, a themed approach has been adopted: environmental protection (6.2), the Group's social and societal commitments (6.3), in particular respect for human rights and the social consequences of its activities, and business ethics (6.4), focusing in particular on anti-corruption and tax evasion.

These two documents have been translated into the 12 languages of the countries where the Group operates and are the subject of e-learning courses for employees.

Finally, specific policies enable the Group to make further commitments on certain issues, such as the environment, safety, climate change and human rights. These will be addressed in the relative sections.

All of these texts are available on the Group's website (www.eramet.com).

6.1.3.2 Group commitments

Faced with global challenges, the Group works in line with shared, recognised international approaches to achieve sustainable development.

This is notably the case of the United Nations Global Compact, a reference international initiative for voluntary commitment to societal responsibility. Open to all kinds of organizations, it promotes four areas of action: human rights, labour law, the environment and anti-corruption.

Eramet, in keeping with its CSR approach and its day-to-day actions, joined the Global Compact in 2019, confirming its support for the fundamental values it abides by. With the aim of continuously improving its level of societal responsibility, Eramet, by adhering to the Global Compact, has committed to continuing to incorporate these principles into its strategy, organizational culture and operations.

As a signatory to the Global Compact, one of the Group's commitments is to publish an annual Progress Report. Eramet communicates its contribution to the four Global Compact challenges through its Non-Financial Performance Statement and its Vigilance Plan. Eramet uses these two annual publications to report on Group policies, actions and results as part of its CSR approach. A reconciliation table is provided at the end of the Universal Registration Table.



The Group has also undertaken to contribute to the UN Sustainable Development Goals (SDGs), in order to build a more sustainable, inclusive world.

The SDGs continue to be incorporated into the global and national political scene and the economic and financial spheres. They thus appear to be a pertinent framework for action, constituting an agenda by 2030 through which all players (public, private, civil) can commit to sustainable development.

Four SDGs stand out, to which Eramet makes a particular contribution through its economic and production activities:



- **SDG 8 Decent work and economic growth**, for the creation and provision of decent work and economic growth, created directly by the Group's entities and with local communities (local content);



- **SDG 12 Responsible production and consumption**, particularly through sustainable development targets for natural resources, reducing waste and corporate social responsibility;



- **SDG 9 Industry, innovation and infrastructure**, by working to establish a sustainable and modern industry in different countries, and through its products to assist the development of the required infrastructure, particularly in terms of construction and mobility;

- **SDG 13 Climate action**, with its initiatives regarding its energy and climate footprint and its positioning on the metals of the energy transition.

This contribution meets the expectations expressed by Eramet's stakeholders. An analysis based on the Group's materiality matrix shows that the SDGs to which Eramet's strategy specifically contributes are in line with the SDGs regarded as a priority by the stakeholders surveyed by the Group.

These major global objectives are an external reference framework used by businesses to structure their CSR strategies. They are what Eramet referred to when it was designing its CSR Roadmap. Other SDGs are positively impacted by the Group's activity, such as SDG 3 Good health and well-being, and SDG 4 Quality education. Details of this contribution, presented in Chapter 1, which covers Eramet's CSR strategy, are provided in each section of the Non-Financial Performance Statement.

Eramet is also committed to other industry-specific or themed initiatives, such as the Extractive Industries Transparency Initiative (EITI) and the Responsible Minerals Initiative (RMI), presented throughout the Non-Financial Performance Statement.

6.1.4 Management of the CSR strategy

6.1.4.1 CSR Roadmap 2018-2023



The Eramet Group has adopted a CSR Roadmap to effectively manage its CSR performance. This Roadmap, which links the CSR priorities with the pillars of the Group's five-year strategic vision, covers the period 2018-2023. The Roadmap also provides a framework for the Group's contribution to the United Nations SDGs.

The CSR Roadmap comprises 13 goals, divided into three areas:




- commitment to people;
- commitment to economic responsibility;
- commitment to the planet.

The Roadmap has been shared and validated by the Strategy and CSR Committee and the Board of Directors, which review it periodically. The Committee, made up of directors with recognised expertise, is tasked with assisting the Board and, in particular, evaluating the consistency between the Group's strategy and the CSR principles to which the

Group adheres, ensuring that management performs an analysis of internal or external factors related to CSR issues (risks and opportunities) impacting the Group, ensuring that the Vigilance Plan is implemented in accordance with legislative requirements, taking note of the main findings and observations of the work of the independent third-party body in the context of CSR regulations, assessing them and examining the management action plans, including the Roadmap.

The Executive Committee also closely monitors the progress of the commitments made, during interim reviews carried out based on careful internal management and organised on a quarterly *ad hoc* basis, the CSR Steering Committee. This Committee comprises representatives of the Departments in charge of the CSR Roadmap objectives and experts from the individual businesses (Finance, Operational Divisions). It also generates proposals and initiatives for the Group, with the aim of continuously improving its CSR approach. Actions pertaining to the Group's Vigilance Plan, incorporated into the Roadmap when it was designed, are also monitored in this context.

For each of the 13 goals, a specific action plan and monitored annual objectives have been developed. The table below shows the 13 Roadmap objectives, the 2023 KPIs, the results achieved in 2019 and the progress made towards the 2023 target.

Focus area	Objective	KPI 2023	2019 results	Annual performance
 COMMITMENT TO PEOPLE	1 - Ensure the Health and Safety of employees and subcontractors	Zero fatalities Workplace accident frequency rate with and without work stoppage FR2 < 4	FR2 = 5.4 12 serious accidents (4 fatalities)	
	2 - Build skills and promote talent and career development	100% of employees participate in at least one training course per year	84% of employees	
	3 - Strengthen employee engagement	Group employee engagement rate > 75% (barometer)	No survey in 2020	
	4 - Integrate and foster the richness of diversity	30% of managers are women	23.8%	
	5 - Be a valued and contributing partner to our host communities	100% of sites have established a mechanism for dialogue with local stakeholders 100% of sites have implemented an investment programme to contribute to local development, with a focus on actions in favour of young people	Group inventory + Formalisation of the "Community Relations" Group programme with focus on Mines	
 COMMITMENT TO ECONOMIC RESPONSIBILITY	6 - Be an energy transition leader in the metals sector	Committed diversification of Eramet's business portfolio in relation to the supply chain for electric mobility batteries	Lithium Initial Project Validation	
	7 - Actively contribute to the development of the circular economy	Quantities (t) of additional materials recovered through the circular economy action plan 2 Mt of low-grade incidental ores and tailings recovered over the period 2019-2023 10 kt of waste recovered in the period 2019-2023	34 kt recovered 1.7 kt recovered	
	8 - Be a reference company in terms of respect for human rights in our field of activity	Recognition for our application of the United Nations Guiding Principles, measured by reaching a mature level according to the UNGP Reporting Framework (Shift-Mazars)	Formalisation of Group approach and policy adoption	
	9 - Be an ethical partner of choice	100% of sales and purchasing teams trained on anti-corruption every year	100% of Purchasing and Trade Directors and persons reporting directly to them trained	
	10 - Be a responsible company of reference in the mining and metallurgy sector	100% of the Group's suppliers and customers identified as high-risk are in line with Eramet's CSR/Ethics commitments ⁽¹⁾	58% of high-risk suppliers and 99% of customers assessed are compliant	
 COMMITMENT TO THE PLANET	11 - Reduce our atmospheric emissions	Tonnes of ducted dust emitted by industrial facilities: -80% in 2023 compared to 2018	-35% compared to 2018	
	12 - Protect water resources and accelerate the rehabilitation of our mining sites by fostering biodiversity	Ratio of rehabilitated areas to cleared areas 1.2 ≥ 1 over the period 2019-2023 ⁽²⁾		
	13 - Reduce our energy and climate footprint	KPIs: Reduction of t CO ₂ /t outgoing product (ref. 2018) -26% in 2023 compared to 2018 ⁽³⁾	-14%	

Performance legend:

- Performance without progress and less than the annual milestone set.
- Performance with progress compared with the previous year but less than the annual milestone set.
- Performance in line with the annual milestone set.
- Performance exceeding the annual milestone set.

(1) Identified as "high-risk" refers to parties evaluated as critical and/or sensitive (in terms of importance to Eramet or CSR risk - depending on the business activity or country concerned), which must be compliant, verified on the basis of a CSR/Ethics evaluation. If they do not comply following the evaluation, the Group encourages dialogue and support, but reserves the right to terminate the business relationship.

(2) Excluding long-term infrastructure.

(3) Of which 16.5% is due to the business mix effect related to the Group's strategic choice to develop its mining activity, which is lower in emissions than its processing activities.

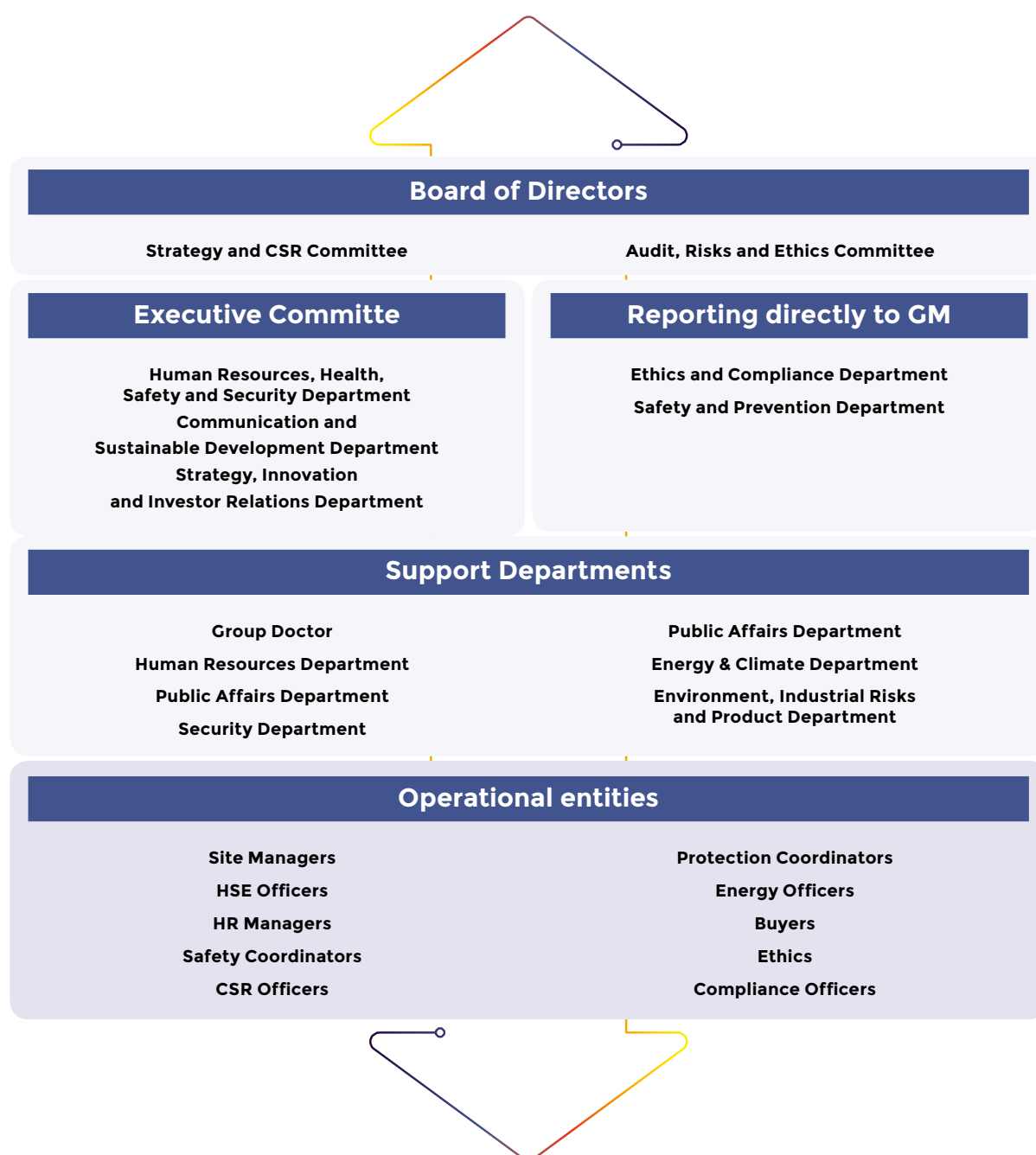
To assess the overall progress of its Roadmap, Eramet measures its CSR performance indicator based on the year's achievements⁽¹⁾. For 2019, the indicator reached 112 (100 indicating validation of all targets). Most of the objectives set for the year were achieved. More than half of them even exceeded the milestones set. This was particularly

the case for three of the environmental targets, regarding the rehabilitation of mining sites, particle emissions and industrial waste recovery. Lastly, although the 2019 milestone for low-grade incidental ores and tailings has not yet been fully achieved, at this stage this does not mean that the target will not be validated at the end of 2023.

6.14.2 CSR organization

Eramet's commitment is reflected in the Company's involvement at the highest levels and the fact that the Group's highest priority CSR issues are addressed at each level of management.

Group organization



(1) The method used to calculate this indicator is described in the methodological note provided in section 6.5.

The objectives and action plans of the CSR Roadmap are implemented across all the Group's Divisions and operational entities. Successful implementation thereof has been strengthened by the establishment of working groups and cross-functional committees focusing on various themes (CSR, biodiversity, mining environment, responsible purchasing, responsible sales, human rights, ethics).

Furthermore, the Group pays particular attention to the integration of social, environmental, health and safety, cultural and societal criteria in the design and development of its projects. By referring to the most demanding international standards, the Group is committed to building long-term relationships with its stakeholders wherever it operates, in accordance with specific rules and cultural norms as well as current scientific knowledge. The Communication and Sustainable Development Department is systematically represented on the Project Steering Committees. Section 6.4.4 of this chapter details the application of these general principles to all the Group's projects.

Eramet has put in place monitoring and control measures and tools to ensure the concrete implementation of CSR objectives throughout its scope of activity. These tools include dedicated information systems that collect and consolidate data and indicators for all Group companies. Details of the standards and tools used to produce this information are provided in the methodological note in section 6.8.

The Group also relies on an internal audit system for the performance of its entities in terms of Environment, Health, Safety, Energy and Ethics, which is detailed in section 6.2.1.3. The data from these audit and control systems is used to feed the Group's continuous improvement approach.

The Eramet Group's Vigilance Plan and its update report, referring to the Non-Financial Performance Statement, are attached to this Universal Registration Document.

6.2 PRESERVATION OF THE ENVIRONMENT

6.2.1 Challenges, objectives, organization and resources for the prevention of environmental and industrial risks

6.2.1.1 Environmental issues and risks for Eramet industrial sites

The Group's industrial and mining sites carry out activities that are sometimes very different from each other in geographical areas that are themselves diverse. Therefore, environmental issues and risks vary greatly from site to site. 40 sites are more closely monitored because they are considered as representing significant environmental challenges (the distribution sites or sites with tertiary activity only not included in this category).

The environmental issues and risks specific to the Group's mining operations are described in detail in the section dedicated to the mining environment (6.2.6).

The following table aims to give an overview of the major environmental issues and risks for the major categories of the Group's industrial sites. The purpose of this summary is to help the reader in their understanding: it is necessarily macroscopic and schematic and cannot completely reflect the diversity of the issues and risks for each site taken individually. Some sites also include activities in several of the categories presented here. Moreover, the majority of the industrial sites located in France fall under the ICPE (classified facilities for environmental protection) regime and some are under SEVESO status.

TABLE SUMMARISING THE ENVIRONMENTAL ISSUES AND RISKS AT ERAMET'S INDUSTRIAL SITES

Challenges/Risks	Pyrometallurgical sites ⁽¹⁾ (furnaces)	Hydrometallurgical sites ⁽²⁾	Development and processing metallurgical sites ⁽³⁾ (rolling mills, forging, die-forging, heat treatment, etc.)	Comments
• Water consumption	***	***	**	Except for hydrometallurgical sites, the vast majority of the Group's water consumption is linked to industrial equipment cooling loops. The water consumed in these processes does not undergo any transformation. In addition, the vast majority of sites work in closed loops, which greatly reduces the demand. In other cases, water is returned to the natural environment.
• Emissions into water	**	***	*	Hydrometallurgical sites are the sites that present relatively the most significant risks of water pollution, due to the use of chemicals and an aqueous process. All industrial waters are managed in accordance with applicable regulations.
• Atmospheric emissions	****	*	**	Sites that have metallurgical furnaces or electricity generation plants are the sites that amass most of the Group's atmospheric emissions (dust, nitrogen oxides or sulphur). The main sources of emissions from installations are equipped with capture and treatment equipment, in accordance with applicable regulations and the best available technologies.
• Energy consumption/ greenhouse gas emissions	****	*	**	Sites that have metallurgical furnaces and/or electricity generation facilities are the sites that amass the bulk of energy consumption and greenhouse gas emissions.
• Production of hazardous waste	***	***	**	Pyrometallurgical activity produces dust, sludge and slag, which, depending on their intrinsic characteristics and locations of operation, can be considered hazardous waste.
• Impact on biodiversity	*	*	*	The Group's industrial sites are mainly located in urban and industrial areas.
• Risks of historical soil pollution	***	***	***	The production sites are generally designed on soil protection slabs and the storage of hazardous products is equipped with retention systems, which reduces the risk of soil contamination. However, as industrial practices have evolved, the oldest sites may present risks of historical soil pollution

Legend:

* Low. ** Moderate. *** Significant. **** Major.

(1) Comilog Dunkerque (France), CIM and CMM (Gabon), Eramet Marietta (United States), Eramet Norway (Kvinesdal, Sauda and Porsgrunn in Norway), SLN Centrale B and Doniambo (New Caledonia), TTI (Norway), Aubert & Duval Les Ancizes (France), Erasteel Commentry (France).

(2) Eramet Sandouville (France), CMM (Gabon).

(3) Brown Europe, EcoTitanium, Forges de Monplaisir, Interforge, UKAD (France), Aubert & Duval sites in Firminy, Imphy, Issoire, Les Ancizes and Pamiers, TAF in Gennevilliers (France), Aubert & Duval in Irun (Spain), Erasteel Champagnole, Erasteel Commentry (France), Erasteel Boonton (United States), Erasteel Kloster (Langshyttan, Söderfors and Vikmanshyttan in Sweden), Erasteel Stubbs (UK), EIML (China), SQUAD (India).

Note that the noise or light pollution does not represent a significant environmental impact. The various sites concerned respect the noise levels stipulated in their operating licences, and the subject does not appear as important in the assessment of litigation made by the Group.

6.2.1.2 Environmental objectives

Eramet has four key environmental objectives:

1. strict compliance with the laws and regulations applicable to its activities.
2. the implementation of environmental management systems certified in accordance with ISO 14001 for all industrial and mining sites with significant environmental issues.

The indicators and results relating to these first two objectives are detailed in section 6.2.2.
3. incorporating environmental issues as comprehensively as possible into the design of industrial and mining projects, as set out in the Group "Incorporation of HSE/CRS factors in projects" in 2018.

4. and finally, the voluntary and continuous reduction of the Group's environmental footprint. Four key objectives for reducing the environmental footprint corresponding to the Group's major challenges have been defined for the 2018-2023 period as part of the CSR Roadmap, and are set out below.



CIRCULAR ECONOMY	7 – Actively contribute to the development of the circular economy	Indicator: Quantities (t) of materials recovered through the circular economy action plan Objectives: <ul style="list-style-type: none"> • 2 Mt of low-grade incidental ores and tailings recovered over the 2019-2023 period • 10 kt of reclaimed waste over the 2019-2023 period
AIR	11 – Reduce our atmospheric emissions	Indicator: Tonnes of ducted dust emitted by the pyrometallurgical industrial facilities Objective: -80% in 2023 compared to 2018
BIODIVERSITY/MINE REHABILITATION	12 – Protect water resources and accelerate the rehabilitation of our mining sites by fostering biodiversity	Indicator: Ratio of rehabilitated areas/cleared areas Ratio objective: ≥ 1 over the 2019-2023 ⁽¹⁾ period
GREENHOUSE GASES	13 – Reduce our energy and climate footprint	Indicator: t CO ₂ /t outgoing product Objective: -26% in 2023 compared to 2018

(1) Excluding long term infrastructure

The interim results for these targets as at the end of 2019 are detailed in the remainder of the document.

The Group's goal to reduce its environmental footprint is in line with its ambition to develop an industry with sustainable practices compliant with the UN's SDG 9 on Industry, Innovation and Infrastructure and 12 on responsible Consumption and Production. With its circular economy, waste reclamation and emissions reduction goals, Eramet has made a specific commitment to targets 12.2 on "Sustainable management and efficient use of natural resources", 12.4 "Environmentally sound management of chemicals and all wastes" and 12.5 "Reduce waste generation through prevention, reduction, recycling and reuse".

The measures taken by Eramet to limit its impacts on biodiversity, ecosystems and water resources around its sites contribute directly to SDG 6 "Clean water and sanitation" and 15 "Life on land".

Lastly, conscious of the urgency of climate issues, Eramet contributes to SDG 13 Climate action and its target 13.1 "Strengthen resilience and the capacity to adapt to climate-related hazards and natural disasters in all countries", on the one hand by reducing its Energy and Climate impact, and on the other, through the development of projects to promote energy transition, such as the Lithium project, a critical metal for electric mobility.

6.2.1.3 Organization and instruments for the prevention of environmental risks

To implement its objectives, the Group relies on a network of internal experts and on a structured organization:

- the Environment, Industrial Risks and Product Liability Department (DERIP) defines the Group's benchmarks, coordinates the general dynamics of continuous improvement, implements the control mechanisms of internal standards and provides expert technical support to the sites and projects;
- more than 60 people make up the network of HSE functions at sites, with a reporting line to their senior management for the vast majority of them;
- once a year, the Committee of Occupational Hygiene, Health and Safety (HS & S) and Environment (E) analyses the skills available within the Group with regard to requirements and concerns. This proactive approach is conducted in coordination with the Human Resources Departments of the Group Divisions and the Safety Prevention and Environment Departments.

Monitoring and control systems constitute one of the key strengths of the Group's environmental management.

In this respect, a dedicated environmental IT system (EraGreen) has been fully deployed in all industrial and mining sites, allowing for the collection and consolidation of environmental and energy performance indicators.

The Group also relies on a demanding internal audit system for the performance of its entities in the areas of Environment, Health, Safety and Energy. The common audit guidelines are structured according to three pillars: human involvement, operational control and prevention. They fully take into account the requirements of ISO 14001, OHSAS 18001 and ISO 50001. Joint teams comprised of Internal Auditors (Corporate, Divisions and Sites) conduct these audits over several days to provide a detailed overview of the environmental performance of sites. Sites may also be subjected to targeted audits on specific issues (containment of atmospheric emissions, mine tailings management or environmental management system in 2019 for instance). During the period 2015-2019, 30 out of 40 sites with significant environmental issues were audited in accordance with these methods.

Corrective action plans are defined at the end of each audit, and for all risks considered significant, a quarterly report on the implementation of corrective actions is consolidated at Group level.

6.2.1.4 Organization and instruments for the prevention of industrial risks

The main industrial risks to which the Group's sites may be exposed are fire, explosion (including, for certain sites, related to the risk of contact between water and molten metal), machine breakdown on critical, geotechnical (tailings stockpiles or tailing dams) equipment, and natural events (floods, storms/cyclones, etc.).

Eramet focuses specifically on preventing these risks as early as possible in its industrial and mining projects, by identifying major accident scenarios and their causes and impacts, and by setting up prevention and/or protection safeguards (important components of safety) that reduce the probability or severity of an event. In 2019, this mainly concerned the Lithium projects in Argentina, and extension of the manganese mine in Gabon.

For sites in operation, the industrial risk control system is based primarily on the programme of insurance engineering visits (insurance prevention audits) to industrial sites with a two-year cycle, in close collaboration with insurers, brokers and the Group Insurance Department.

Any significant risk detected during these audits results in a corrective action plan implemented by the site concerned. The monitoring of corrective actions agreed as a result of these visits is documented in a semi-annual summary report

covering compliance with Eramet's industrial risk standards (revised in 2016) and the progress of recommendations made by the insurer during its prevention visits.

In addition, Eramet carries out regular third-party audits of its waste rock stockpiles and tailing dams to ensure the control of associated geotechnical risks (see section 6.2.6.4 "Tailings and mine waste management").

In addition, Eramet performs audits on other target risks or on the maturity of industrial security management systems: two audits were carried out in 2019 on the French sites Commentry and Sandouville.

Finally, the Group has implemented crisis prevention and management procedures. These procedures focus on three action areas:

- crisis prevention: identification of weak signals and operational response thereto, crisis simulation exercises so that each person knows their role and in order to continually improve emergency planning (in conjunction with the Group industrial risk standards);
- serious incident management: definition of a serious incident, Group reporting, feedback;
- crisis management: the sites define their own emergency plans (contingency plan, ERP or other), the corporate crisis management system includes procedures for escalation of alerts, assessment of their severity, organization into crisis units if required and feedback.

These procedures were deployed across all sites. As in 2018, special attention was paid to crisis simulation exercises across all sites: out of the 34 sites monitored, more than 90% conducted one or more exercises in 2019, some of them in cooperation with the fire brigade.

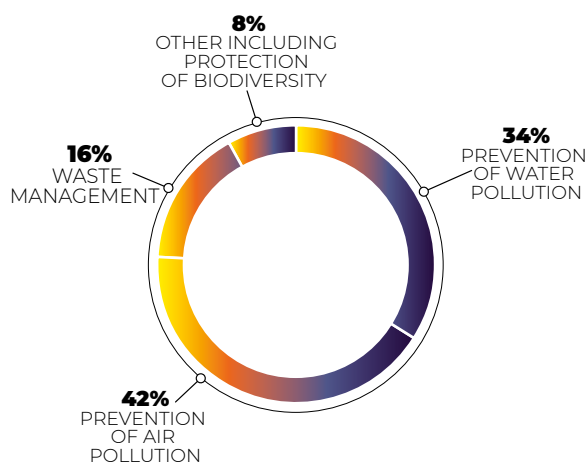
6.2.1.5 Financial resources devoted to environmental preservation

Environmental expenditures are estimated at nearly €17.5 million in 2019, and approximately €65 million for the last three years.

The expenditures considered here relate strictly to environmental prevention and protection. For example, they include the installation of new equipment or work performed in order to minimise impacts. They also cover certain investments made for new activities with an exclusively environmental dimension.

The chart below provides the breakdown by theme of these resources over the 2017-2019 period.

Expenditures for the environment



80% of 2019 environmental expenditures are linked to the prevention of air pollution and water pollution in equal proportion.

With respect to air pollution, the most significant investments in 2019 concern the SLN plant site of Doniambo (New Caledonia), where several actions intended to limit the production of particulate dust have been implemented, as well as the Kvinesdal site (Norway).

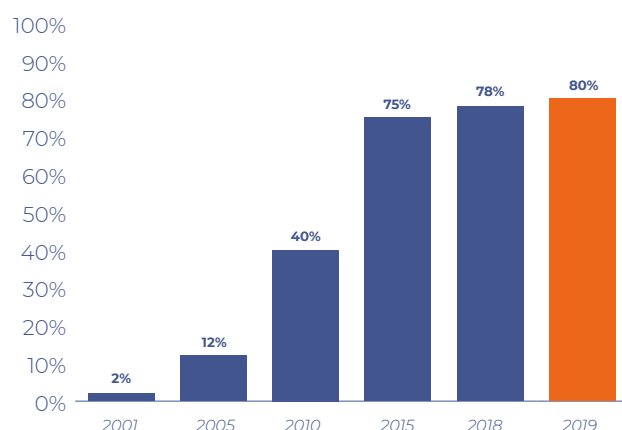
In relation to the prevention of water pollution, the most significant investments in 2019 relate to water management and anti-erosion actions on SLN mining sites, and to continuing rehabilitation operations on the segment of the River Moulili downstream from the Comilog mine (Gabon).

6.2.2 ISO 14001 certifications and environmental compliance indicators

It should be noted that since 2013, the Group measures the progress of its ISO 14001 certification target for sites likely to have a significant impact on the environment. All industrial and mining sites in operation are concerned.

As at the end of 2019, sites that had obtained ISO 14001 certification now represent 80% of the target objective. In 2019, the Moanda Metallurgy Complex was incorporated into the Comilog (Gabon) environmental management system and received a favourable notice for its certification. While waiting to receive official certification, the plant is recorded in the accounts under certified plants.

Evolution of ISO 14001 certified sites (including mines)



"Zero dispute" goal (environmental compliance)

The Eramet Group promotes a policy of strict regulatory compliance, transparency and dialogue with the supervisory authorities in all circumstances, particularly in the event of temporary difficulties or special operating conditions. The objective is to achieve zero formal notices or legal proceedings arising from a breach by Group sites of binding regulatory requirements.

To measure the achievement of this objective, the Group monitors four indicators:

- **Type 1 – Weak signals:** Written warning by the authorities as a reminder of a deadline which, if not observed, could lead to formal notice: (known in the US as a "notice of violation"), a third-party claim against the plant or in the media;
- **Type 2: Declaration of a non-compliance** and notice by the authorities to take action by a specific deadline in order to avoid a fine; for example, in mainland France, New Caledonia, Gabon: formal notice; in the US: "notice of enforcement" or "consent agreement" between the authorities and the operator, or an "administrative order";
- **Type 3 – Legal action:** Legal proceedings by the public prosecutor or any other public authority following a notice of violation or a claim brought before the courts by a third party. Legal claims by employees or third parties for damages arising from the breach of an obligation or environmental damage. Legal claims by third parties against an administrative permit issued pursuant to environmental legislation;
- **Type 4 – Actual sanction:** An administrative sanction (fine, suspension of permit), unfavourable legal ruling or criminal conviction.

The indicator trend in recent years is shown below:

	2017	2018	2019
Type 2 – Observations of non-compliance	4	1	6
Type 3 – Legal action	0	2	1
Type 4 – Actual sanction	0	1	1

In 2019, a minimum fine (€1,700) was levied against Aubert & Duval, following contamination of the Allier river by its Issoire (France) site in 2015.

The only legal action related to environmental issues in 2019 against Group subsidiaries concerns the suit against

SLN (New Caledonia) filed by an environmental protection association on the issue of air quality.

The type 2 events identified in 2019 concern the Eramet sites in Sandouville (France), Erasteel in Commentry (France) and Mouyabi for Setrag (Gabon). Corrective action plans have been systematically implemented.

6.2.3 Emissions reduction

6.2.3.1 Airborne emissions

Airborne emissions		2017	2018	2019
Sulphur oxides (SOx)	tonnes	13,072	14,379	13,249
Nitrogen oxide (NOx)	tonnes	6,910	7,623	7,992
Total dust channelled	tonnes	1,519	2,535	1,617
Nickel	tonnes	8.9	11.1	11.2
Manganese	tonnes	276	529	506

The main contributors to airborne emissions are pyrometallurgical activities with their fusion plants, heat treatment furnaces and energy production plants. CO₂ emissions are discussed in section 6.2.5.

Airborne emissions may vary as a function of the nature of raw materials and ores used, the transfer and loading technologies in place, the installed capacity of the equipment and especially the sites' activity level.

In pyrometallurgy, channelled emissions are generated in the handling of materials, furnaces, grinding and milling operations, as well as operations involving molten liquid metal and slag. In hydrometallurgy, channelled dust emissions most often occur during the handling, grinding, drying or transfer of materials.

The air effluent treatment systems generally used in the Group's plants are electrostatic precipitators, baghouse dust collectors, scrubbers and washing towers. Specific treatment systems for certain pollutants can also be used, such as activated carbon filters. The different items of equipment are installed according to the characteristics of the effluent and the industrial processes, the target purification performances and regulatory requirements.

The sulphur oxide (SOx) emissions are mainly generated at SLN (thermal power station and Doniambo plant). The drop in emissions in 2019 is mainly linked to the site's lower production and therefore to the oil-fired power plant being called upon to operate less.



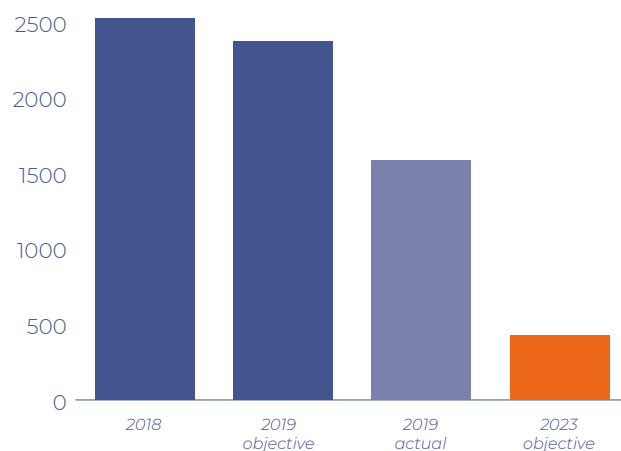
In the context of the CSR roadmap, Eramet is committed to a performance indicator that monitors ducted dust discharge from pyrometallurgical sites. 80% reduction has been set as the target for the 2018-2023 period, and an initial reduction of 6% was targeted for 2019.

At the end of 2019, the results far exceeded the goal with a reduction of more than 35%.

This improvement is the result of the action plan set up on the sintering chain of the Moanda Industrial Complex (CIM) in Gabon, the first remedial actions were implemented in early 2019, then completed in June during the annual interruption of the line. Since then, emission levels have stabilised thanks to the preventive measures taken to ensure that this work continues.

It must also be stressed that a lower production of certain units in 2019 has also contributed to this decline.

Ducted dust emissions (in tonnes/year)



6.2.3.2 Aqueous waste

Aqueous waste		2017	2018	2019
Suspended solids (SS)	tonnes	10,944	8,084	6,970
Chemical oxygen demand (COD)	tonnes	126	155	243
Nickel	tonnes	6.7	3.6	4.4
Manganese	tonnes	37.5	29.9	34.7

As with its atmospheric emissions, Eramet is committed to reducing its aqueous waste. Industrial sites are working to improve treatment processes to ensure a better quality of discharged water.

In addition to preventive systems, such as basins and double-walled storage tanks, curative mechanisms, such as effluent treatment plants using physico-chemical processes or hydrocarbon separators (separation by decantation), are used to allow discharges that are in accordance with the statutory limit values.

Discharges of suspended solids fell by 14% thanks to the lower discharges from the Doniambo site. The reported value for COD (chemical oxygen demand) type of discharges has risen sharply; this is due solely to the environmental monitoring advances at the Tyssedal (Norway) site which includes since 2019, a new parameter (total organic carbon, i.e. TOC). By extrapolating, TOC can be used to evaluate the COD that cannot be directly measured in a seawater context. The security factor used for this extrapolation will be subsequently improved.

Finally, the Group's sites also closely monitor the quality of groundwater and the impact of the activity on soils and subsoils. Several hundred piezometers are distributed

throughout the Group's various sites, both within and outside of the Company, to support the initial phases of any new project (characterisation of the initial state) and also to monitor any impacts on ground and surface water.

6.2.3.3 Rehabilitation of closed industrial sites

The Group exercises the utmost vigilance against potential impacts on soils and subsoils resulting from its past, current or future activities, both in the area of its industrial and mining activities.

Over several years, the Group has developed expertise to support the cessation of activity of certain industrial sites. This expertise concerns the investigation, monitoring and management of potentially impacted land through various projects, such as the rehabilitation of industrial land, the end of life of landfills, or former mines. This expertise is also consulted in the context of internal audits or in advance of acquisitions and disposals. It is important to mention the implementation of a policy of systematic characterisation of soil conditions before any new project is undertaken. Finally, the Group is taking action to strengthen its knowledge of the state of the soils and subsoils of the various sites at which the Group operates.

The main recent advances in the management of closed industrial sites include:

- Aubert & Duval Gennevilliers (France): After completing the rehabilitation of the "B/C" site, the project continued on the "A" site where the rehabilitation work will be prepared in 2020 in accordance with the administration's instructions;
- Valdi Feurs (France): the site notified the authorities of the winding up of its business in 2013. On the land

belonging to the Group, the remediation work, which began in 2015, was completed in 2016. The inventory report (administrative clearance) was obtained in 2017. The land was sold in 2019. The restoration of leased buildings began in 2019 and will continue in 2020.

Rehabilitating mining sites is a major focus of the environmental policy; it is described in the Mining environment section (6.2.6) and in section 6.2.7 on biodiversity.

6.2.4 Circular economy

The circular economy can be defined as a system of trade and production which, at all stages of the product life cycle, aims to increase the efficiency of the use of natural resources and virgin raw materials and reduce the impact of economic activities on the environment.

Eramet has a long-standing commitment to such a model. This model applies to all the resources used: water, energy, raw materials. Given its business activities, Eramet is particularly active in optimising the use of primary metal resources. Metals are particularly ideal for growing the circular economy because they are infinitely recyclable.

Eramet's contribution to the circular economy is expressed in four main ways:

1.	DEVELOPING NEW ACTIVITIES DEDICATED TO RECYCLING	<p>The Group has developed two recycling activities since 2017:</p> <ul style="list-style-type: none"> • transforming the Erasteel Commentry steel mill (France), now equipped with a new recycling line which uses pyrometallurgy to reclaim industrial waste (oil catalysts, scalings and other metalliferous waste) by recovering several strategic metals such as cobalt, molybdene and nickel; • in Auvergne, the EcoTitanium plant, which began operating in 2017. EcoTitanium is Europe's leading recycling business for aviation-grade titanium alloys. It produces alloys from massive titanium scrap and chips collected from major aircraft manufacturers and their subcontractors. Furthermore in 2019, the lithium-ion battery recycling project, known as ReLieVe, led by Eramet in collaboration with BASF and SUEZ, was selected by the European Union. The project seeks to develop an innovative "closed loop" process, used to recycle lithium-ion batteries in electrical vehicles.
2.	PARTICIPATING IN INDUSTRIAL AND TERRITORIAL ECOLOGICAL INITIATIVES	<p>Wherever possible, Eramet industrial sites take part in territorial industrial ecological initiatives that provide local residents with the heat, energy or fluids produced by their activities, or conversely, use the fluids produced by nearby plants.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • the Porsgrunn plant (Norway) which every year provides the equivalent of 200 GWh of thermal energy in the form of carbon monoxide (gas discharge) to the nearby chemical plant which produces fertiliser; • the excess steam produced by the Eramet Norway site in Kvinesdal (Norway) is used to heat numerous local infrastructures, and the hot wastewater is reused by several external customers including a fish farm; • part of the energy used by the Sandouville plant (France) comes from a local waste incineration plant.
3.	FOR THE GROUP'S MINING ACTIVITIES: RESPONSIBLE MANAGEMENT OF MINING RESOURCES	<p>By recovering as much so-called low-grade incidental ores as possible in order to optimise recovery from deposits, and by recovering as much mining tailings from ore concentration processes as possible. This makes it possible to recover more resources with an almost constant environmental footprint (mining operations have already been carried out). Eramet mining subsidiaries are historically also involved in these steps. The actions undertaken in this area are described in section 6.2.6.2 "Responsible management of resources".</p>
4.	FOR THE GROUP'S INDUSTRIAL SITES: MAXIMISING RECYCLED FLOWS	<p>By incorporating as much secondary raw materials as possible into inputs, or by maximising the (internal or external) recovery of the waste generated by activities.</p>



Through its CSR roadmap, the Group has decided to further strengthen its commitment to the circular economy. Hence the two new goals that have been set, corresponding to the last two priorities of the previous table.

The general idea is to encourage actions that enable the recovery of material flows that were not previously recovered.

For the 2019-2023 period, the targets are:

- **2 Mt** of waste and low-grade incidental ores recovered

The goal is to be able to recover materials without significantly enlarging the environmental footprint during the extraction phase, in other words, recover materials that have already been handled, for which the environmental impact of the extraction phase has essentially already taken place.

- **10 kt** of waste recycled over the period

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.

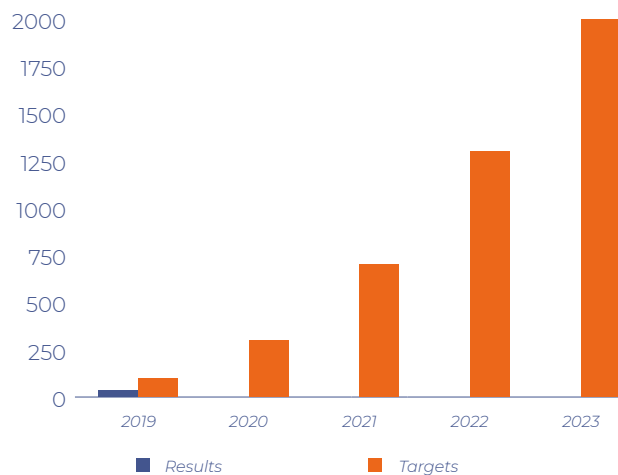
A special Circular Economy Committee has been created. The Committee's role is to identify and validate the actions and projects that fall within the scope of the above definitions.

At the end of 2019, ten actions were certified by the Committee. Most of them are innovative R/D projects which will produce results in one or two years' time. However, four projects are already productive and contributed in 2019 to indicators with the following results at the end of 2019:

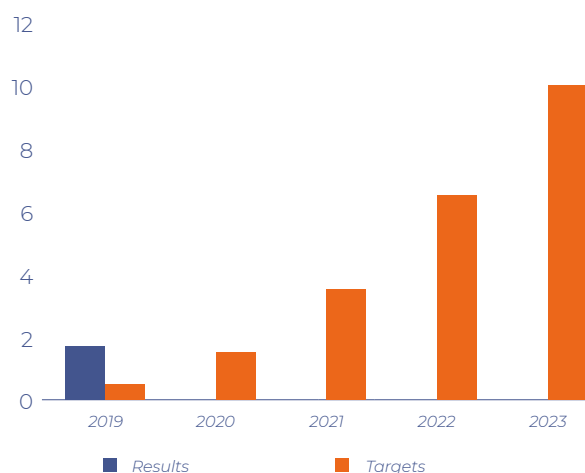
- 34 kt of recovered mine waste;
- 1,700 tonnes of recovered waste.

Results at the end of 2019 are illustrated by the following charts which also show the progress made with respect to the intermediate target set at the end of 2019, late for the first goal (at this stage, this is not an obstacle to achieving the goal at the end of 2023), and early for the second.

Kt of recovered additional ore/mine waste (total)



Kt recovered additional waste (total)



6.2.4.1 Optimisation of the consumption of primary raw materials

Approximately 9 million tonnes of raw materials are consumed by the Group's plants, of which about 75% is ore (produced overwhelmingly by the Group's mines) and 7% is reducers (coal and coke). The rest of the consumption consists mainly of metals used in alloy factories, and various additives.

Eramet is prepared to optimise its different input consumptions as much as possible. Furthermore, wherever possible, the Group prioritises the use of secondary raw materials over primary raw materials.

In this respect, the steel mills of the High Performance Alloys Division (Les Ancizes, Commentry and Soderfors) are true circular economy champions: their secondary raw material use rate varies between 85 and 95%, by adding the internal recycling flows and the processing of secondary raw materials purchased externally (scraps, etc.).

6.2.4.2 Waste prevention and recovery

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.

Thus, historically, special efforts have been made at all sites to reuse the waste as permitted by their physical-chemical properties; for example, slag from SLN (New Caledonia) and the depleted slag from Comilog Dunkerque are homologated and integrated for applications in road technology.

As explained in section 6.2.4, Eramet is committed through its CSR Roadmap 2018-2023 to further improve waste recovery (both hazardous and non-hazardous). At the end of 2019, 1,700 tonnes had already been recovered thanks to the following new projects and actions:

- re-using wooden pallets for the Pamiers plant (France);
- recycling in the filtered dust process at the Dunkerque plant (France);
- slag recovery from the SLN plant in Noumea (New Caledonia) on new markets outside Caledonian territory.

Waste production		2017	2018	2019
Amount of non-hazardous waste	thousands of tonnes	4,509	4,676	4,266
Amount of hazardous waste	thousands of tonnes	64	64	65

The concepts of hazardous and non-hazardous waste are defined in accordance with the regulations of the host countries. Indeed, to date the measures regarding waste are very disparate from one country to another.

Non-hazardous waste

The mining activities and their related industrial operations are the main source of non-hazardous waste. A significant tonnage of these is stored in industrial basins in Gabon.

These are the fine fractions of manganese ore collected after the washing step which serves to isolate the grained fraction intended for the market. In terms of nickel activity, the Doniambo plant generates another important tonnage of non-hazardous waste through pyrometallurgical activity

corresponding to the smelting of slag. The three major contributors – the SLN plant (New Caledonia), the Moanda mines and the Moanda Industrial Complex (CIM) (Gabon) – account for 99% of the total amount calculated for 2018.

At much lower tonnages, industrial activities of the steelworks and of the smelting-reduction or of the ferro-alloys production sectors of the Group generate non-hazardous by-products or waste. They are in the form of slags or inert slag mainly stored in an internal landfill or are subject to some external recovery.

Finally, although quantities are still much lower, local initiatives are also being implemented at many sites to reduce food waste: accurate forecasts of the people present on site each day (absences, holidays, visitors, etc.) to inform the catering service, the composting of plant-based food waste or redistribution to neighbouring farms as animal feed.

Hazardous waste

The activities that generate hazardous waste are mainly derived from the pyrometallurgical processes of the Group Mines and Metals Division. The High Performance Alloys Division's major sites, such as the plants in French plants Pamiers and Les Ancizes, also generate significant quantities of hazardous waste.

These activities produce dust recovered by filtration systems, sludge and sodium-calcium slag which, depending on their intrinsic properties and the location of the operation, can be considered hazardous waste.

The hazardous waste is treated through specific, authorised channels. Controls are put in place to ensure the proper management of this waste throughout the process (transport of waste, delivery to approved centre and final treatment).

The amount of hazardous waste produced has remained stable over the last three years.

6.2.4.3 Optimisation of water consumption

Consumption		2017	2018	2019
Total water consumption	millions of m ³	44.5	42.4	43.2

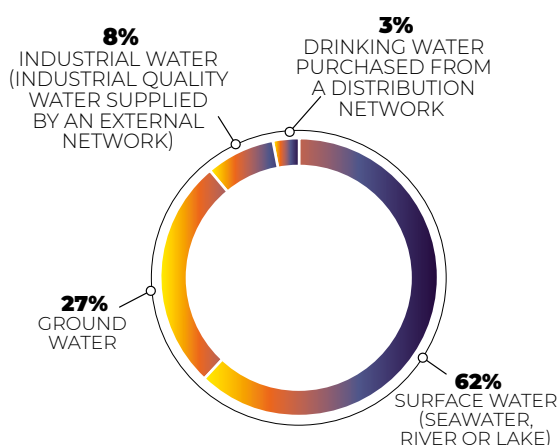
Before any comment on the water consumption of Eramet Group sites, it is important to point out that none of the Group's industrial sites are located in a country confronted with "water stress" according to the definition adopted by the UN, that is to say, whose water resource per inhabitant, for all uses combined, is generally less than 1,700 m³ per person per year. Although this water resource is often substantial or abundant on its sites, the Group attaches

real importance to its preservation. Multiple actions are taken to use only the required amount.

In Norway, controls carried out in 2019 on reporting showed that records of water quantities obtained from the fjord for the TTI site were not accurate. This mistake has been corrected, including for 2018 and 2017 values for the sake of consistency.

Total water consumption breaks down in 2019 as follows:

Breakdown of the source of the water used in 2019



Mining, metallurgy and hydrometallurgy activities consume water in several ways:

- processes for cooling furnaces and other metallurgical installations;
- washing of ores, raw materials and by-products;
- hydrometallurgical processes: solubilisation and reaction media.

Water resources are essential for running some of the processes used within the Group. The cooling of electric furnaces, for example, must be perfectly managed and optimised. In some cases, a lack of water supply may lead to risky situations in which safety must be ensured before any other consideration.

Whenever technically possible, the sites:

- encourage internal recycling of the water consumed. The cooling of furnaces and other metallurgical facilities, as well as other high-consumption uses, are mainly done in a closed circuit. This is the case, for example, of the washing of ores in Gabon, or the mining facilities in Senegal. The water consumption is then essentially supplemented in order to compensate for evaporation or losses in the system;
- prioritise the use of water from a nearby industrial site such as Eramet Norway Porsgrunn.

Water management on mining sites is broken down in section 6.2.6.3.

With respect to water consumption in 2019, consumption has been relative stable over the last three years.

6.2.5 Fight against climate change

In light of rapid Climate change and recognising the anthropogenic cause of this change, Eramet is conscious of its duty to prevent, adapt and communicate transparently with its employees, its partners and all of its co-citizens in general.

Eramet has therefore made a commitment to increasingly integrate the recognition of climate challenges into both its strategic decisions and reporting. For reporting, Eramet relies on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) which is one of the best international practices in the field.

6.2.5.1 Eramet recognises climate issues

The transition to a low-carbon economy is a systemic issue and Eramet has chosen to broaden the perspectives of climate change impacts beyond the matter of its direct carbon footprint by assessing the impacts on the entire value chain in which it operates. Global demand to reduce emissions among Eramet's customers (due to regulations or as a consequence of carbon recovery, for example) is a

source of risks, and at the same time provides opportunities for the Group's activity.

In addition to the Group's essential contribution to energy and climate transition, Eramet is increasingly including in its strategy, the physical and non-physical impacts of climate change on the Group's assets, productivity and the markets on which its products are sold.

6.2.5.1.1 Analysis of climate risks

Eramet's growing efforts to optimise its global performance is particularly reflected in the deployment of continuous improvement tools. The methodology used to implement these tools incorporates analyses of the Group's risk and opportunities, which include climate challenges even if they are not always explicitly addressed as such.

Eramet's risks and opportunities in light of climate change are classified based on their time horizon, which considering the Group's activities (ore recovery and metallurgical transformation) are as follows:

- short term (ST): less than two years;
- medium term (MT): between two and eight years;
- long term (LT): more than eight years.

Risks	Title	ST	MT	LT	Implemented actions
PHYSICAL	Flood, cyclone, hydric stress, fire	X			Methodology during the update
ECONOMICS	Market trends towards metal requirements different from those produced by Eramet, in quality or quantity.			X	Analysis according to climate change scenarios + 2°C Implementation of strategic projects (including R & I) to address these needs
	Growing customer demand for low-carbon labelled products		X		Integration of lifecycle analyses in development project review processes, in particular through low-carbon products
REGULATORY	Regulatory change towards more restrictive Carbon taxation	X			Establishment of an internal carbon price for investments and development project analysis
TECHNOLOGICAL	Growing need to invest in low-emission technologies		X		Investment in the Group's digital transformation Establishment of energy efficiency improvement programmes External and proprietary funding of R & I
REPUTATION	Association of Eramet's high carbon-emission energy-intensive activities	X			Benchmark on the Carbon content of our products
UPSTREAM DOWNSTREAM FLOWS	Non control of CO2 emissions associated with these flows		X		Development of scope 3 CO2 assessment tool

PHYSICAL IMPACT RISKS	Risks related to the physical impacts of climate change include those related to extreme weather events and long-term changes in climate patterns (rising sea levels, water stress, fire, etc.). Eramet is conscious of the particularly close horizon of these phenomena, some of which are already visible. The Group has decided to consequently adapt its risk analysis to explicitly include the direct impacts of climate modifications on its activity as from 2020. Specific questions are addressed to the sites through the EraGreen environmental reporting tool on their risk assessment and the adaptation measures envisaged. In 2019, slightly in excess of one in two sites reported that they could be affected by the consequences of climate change in the very long term. Most of them have already begun considering how to limit the impact on their business.
ECONOMIC RISKS	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. As a result of the processes implemented, energy bills represent a significant portion of the Group's production costs in the operation of its mines and industrial sites. The Group's competitiveness is therefore sensitive to energy prices and the control of its energy use.
REGULATORY RISKS	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. Indeed, there is currently no globally applicable carbon market, 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 for the evaluation of its strategic options, on the basis of an internal price of €30 per tonne of CO ₂ . The provision is also applicable to the investment projects developed in the geographic areas that do not have the incentive of a 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 with all Eramet employees.

6.2.5.1.2 Study of climate change-related opportunities

Opportunities	Title	ST	MT	LT	Implemented actions
UPSTREAM DOWNSTREAM FLOW	Availability of energy transition critical materials		X		Reinforcing Li and Ni assets
COMMERCIAL	Strong growth on energy transition and digital transformation markets necessitating metal products by Eramet		X		Development projects for the products concerned (Lithium, Nickel)
PHYSICAL	No opportunity identified to date, continued watch	X			N/A
REGULATORY	Tax breaks to European electro-intensive players	X			Coordination of aid application initiatives
TECHNOLOGICAL	Productivity gains associated with the roll-out of lower-emission (more efficient) technologies	X			Deployment of an energy efficiency action plan
REPUTATION	Positive image associated with assisting the energy transition	X			Regular communications on Eramet product applications in the energy transition sectors
	Positive image associated with low carbon products	X			Communications on the robust performance of the products concerned
UPSTREAM AND DOWNSTREAM FLOW OPPORTUNITIES	In addition to its historic position on manganese and nickel ore, Eramet's strategy is clearly positioned on metals critical to the energy and digital transition: lithium, nickel salts and cobalt. These markets are changing rapidly due to the demand for metals for batteries, particularly for electric vehicles, solar panels and electronics. Battery development will lead to a sharp increase in demand for certain critical metals: demand for lithium is expected to increase threefold by 2025, for pure nickel salts and cobalt twofold. It is clear that securing access to critical metal resources is a structural competitive advantage in the supply chain. Eramet is the only European player to have secured significant resources of critical metals in this fast-growing market. The Group's current mining assets offer key advantages: very rich geological resources allowing long-term mining.				
COMMERCIAL OPPORTUNITIES	These strategic developments are conducted in accordance with the highest Western health, safety and environmental standards, as well as in compliance with the highest corporate social responsibility and ethical standards: high metal recovery yields, environmental footprint, harmonious and respectful relationships with stakeholders and local communities. It is essential to ensure full product traceability to ensure strict compliance with Western corporate social responsibility standards and customer requirements. Eramet is thus positioning itself as the supplier of energy transition critical metals produced to the highest social and environmental responsibility standards. This should enable the Group to diversify its asset base both financially and geographically: <ul style="list-style-type: none"> • lithium, particularly via the Eramet deposit in Argentina; • increased exposure to nickel salts and cobalt; • development of short loop recycling, with a view to optimising the circular economy. 				
REPUTATION OPPORTUNITIES	Eramet's manganese activity through Norwegian, French and Gabonese (C2M) plants has one of the lowest emission factors in the entire manganese industry, around 1.04 tCO ₂ /t, where the sector average is higher than 4.80 tCO ₂ /t according to the Mnl (Manganese institute). This performance is achieved in particular thanks to the energy mix of the hydro-metallurgy installations concerned (hydro-electricity in Norway and in Gabon).				

6.2.5.1.3 2°C scenario analysis

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 of opportunities for its business.

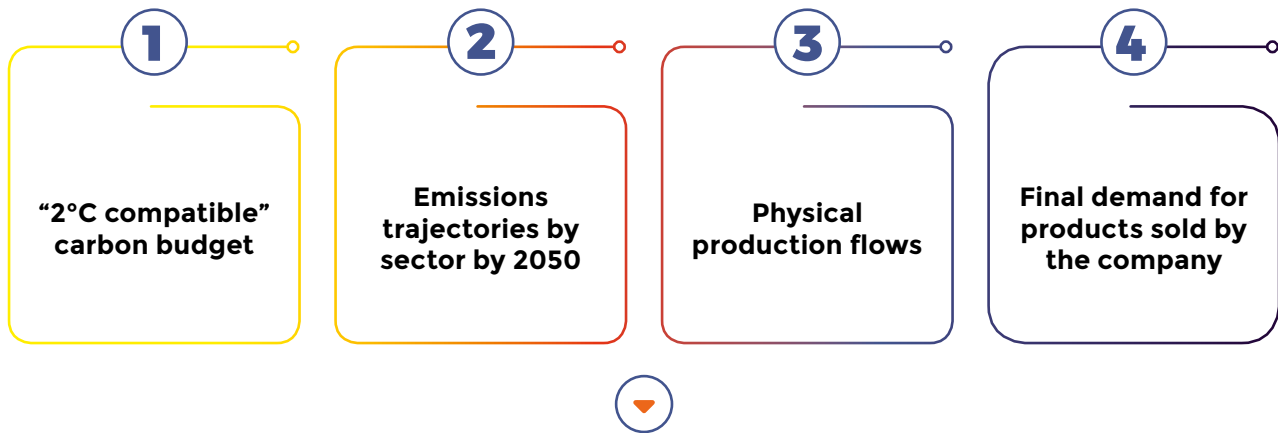
Scenario-based analyses is a powerful tool for managing this chapter of the strategic reflection. It entails a forward-looking review, projecting Eramet's current activity onto various possible worlds, in order to assess the consequences on business. This approach is efficient for building a comprehensive model of the complex changes and the

interactions between them, which is helpful for defining the transformations caused by climate change.

The Group conducted this 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 2°C⁽¹⁾ increase in temperature.

(1) In other words, a world where the future combined greenhouse gas emissions do not exceed the maximum carbon budget required to maintain a global average temperature increase below 2°C compared to the preindustrial era, namely ~800 GtCO₂eq. (vs. ~2,000 GtCO₂eq. emitted by humanity since the industrial revolution).

Principles of the physical flow-based approach



Identification and quantification of transition impact scenarios on demand yields the first major strategic recommendations for Eramet.

In four steps, this approach identifies the Company's risks and opportunities more precisely than a purely economic and financial approach, which would simply "distort" the economic figures (price, production cost, etc.), by for instance introducing a carbon price, to quantify the impact on demand without either evaluating or accurately translating the Company-wide micro-economic consequences of the adopted transition scenario.

Transition to a low-carbon economy clearly identifies its ultimate arrival point, i.e., achieving worldwide carbon neutrality between 2050 and 2100. The scenario adopted to perform this analysis is the International Energy Agency's (IEA) 2 Degrees Scenario (2DS) with Carbon Capture and Storage (CCS). This is based on the forward-looking Energy Technology Perspectives documents accessible to the general public. It is known here as "2°C with CCS".

The main outcome for the "2°C with CCS" scenario is that Eramet metals, in particular nickel, lithium 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.

For nickel demand is expected to increase by 3% by 2030 in the IEA's 2°C scenario.

This growth is driven in particular by lithium-ion batteries (which use nickel) to store electricity. Indeed, the quantity of nickel demanded in 2030 for the energy transition represents 25% of primary nickel production in 2017, illustrating the significant role played by batteries as a demand growth driver.

Manganese is a metal that accounts for more than 90% of metals in the steel industry and according to this analysis overall demand (primary and recycled) will increase by 5% to 10% between now and 2030.

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 fourfold by 2030.

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.

Outlook

In conclusion, 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.

Outlook for the demand for metals produced by Eramet is favourable by 2030 in the IEA's 2°C scenario.

6.2.5.2 Energy and climate governance

6.2.5.2.1 Reaffirmed policies

Eramet continues to implement its Climate Change and Energy policies, both in conducting its operations and in developing its strategy.

In the context of the 2019 edition of the French Business Climate Pledge, the Group reasserted its pro climate commitments and is part of the 99 companies that responded to the call launched by MEDEF to confirm and amplify their commitment momentum to invest in low carbon solutions and technologies.

6.2.5.2.2 Governance to address climate challenges

The Eramet Group takes climate issue to the highest level of its management bodies. Governance is organised at three levels:

- the Board of Directors which relies on the recommendations of its Strategy Committee and CSR. The latter specifically analyses the Group's progress in carbon emission reduction, e.g., the resilience and development of the sustainable business model. These

climate change efforts are carried out in accordance with the recommendations issued by the *Institut français des administrateurs*;

- the Executive Committee is backed by the Energy and Climate Department created in 2018, which reports to the Director of Strategy, Innovation and Investor Relations, a member of the Group's Executive Committee. The Committee meets every month. Moreover, the topics of Energy & Climate are periodically reviewed during the Executive Committee's Business Review;
- the Energy & Climate Department which relies on operations conducted on a network of energy and climate specialists and on the Divisions and Business Units Departments, and reports on the progress of Group-wide action plans.

More generally, the Energy and Climate Department contributes to the Group's performance and ensures consistency between the three fields:

- economic by controlling energy purchases;
- energy by controlling and reducing energy use;
- climate by controlling and reducing carbon emissions.

6.2.5.2.3 A network of supporting site energy contacts

In order to reinforce and improve the reliability of the operational deployment of the Energy & Climate strategy, the Group has decided to establish an efficient method of operation between the sites and the Corporate functions. Three types of interlocutors have been defined:

- the Energy & Climate Department guarantees the coordination of the approach, ensuring the methodological contribution (the Group specialist 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 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 in providing support;
- the sites' energy correspondents network, locally in charge of coordinating the continuous improvement of energy and climate performances.

6.2.5.3 Strategy to address climate challenges

As such, Eramet's answer to climate change is based on the following focus points:

- the reduction of CO₂ emissions on the 1 & 2 scopes;
- helping customers (scope 3 emissions) to 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".

6.2.5.3.1 Reducing CO₂ emissions on the 1 & 2 scopes

In 2018, the Group conducted a review to define a target for reducing scopes 1 & 2 CO₂ emissions, based in particular on technical and organizational levers. These include the conversion of the Doniambo oil-fired power plant in New Caledonia to LNG (liquefied natural gas), as well as investments in solar panels at certain sites. In addition to these large-scale operations, many operational levers have been identified that contribute to the reduction in greenhouse gas emissions at each site. These include innovative technologies to control the natural gas-powered heating furnaces of the High Performance Alloys Division and innovative systems to manage the variable speed of electric motors, etc.

This work has led the Group to include in its CSR 2018-2023 roadmap a significant reduction carbon target for the generated tonnes of CO₂ per tonne, i.e. based on how carbon-intensive the Group's production activities are:

Group Goal for 2023 vs. 2018	-26%	
Impact of energy efficiency levers and decarbonisation of the energy consumed	-9.5% ⁽¹⁾	tCO ₂ /t outgoing product ⁽²⁾
Impact of the business mix effect related to the Group's strategic choice to develop its mining activity, which is lower in emissions than the Group's processing ⁽³⁾ activities	-16.5%	

(1) With the level of mining and processing activity in the year of reference (2018).

(2) Tonne of product leaving the sites: ingots, powder, ores, etc.

(3) Mining activity is about 80 times lower in emissions per tonne of outgoing product than the Group's other activities.

One of the major levers identified is the switch to LNG (liquefied natural gas) by SLN's oil-fired power plant. A delay in the implementation of this lever would lead to a 20% reduction in tonnes of CO₂ per tonne of outgoing product instead of the target of 26%.

Eramet continues to reflect on defining a longer-term science-based target, which implies transformations of

processes that must necessarily be based on new R & D and Innovation levers.

To structure all these progress approaches, Eramet has set itself the objective of rolling out an ISO 50001 energy management system by 2020 across all sites using more than 200 GWh (~90% of the Group's total energy consumption).



6.2.5.3.2 Supporting customers through climate change

The Eramet Group makes a significant contribution to its customers' CO₂ emissions avoidance strategy by offering them innovative solutions that reduce emissions associated with the use of its products (scope 3).

This goes far beyond the production of metals essential for the energy and digital transition and relates in particular to the High Performance Alloys Division.

For example, by producing aluminium-lithium alloy forged parts for the aeronautics industry as well as titanium forged parts, the group makes a significant contribution to aircraft weight reduction, which has the direct consequence of reducing fuel consumption and associated emissions. A second example is the ML340 alloy, selected by customers for the turbine shaft of LEAP aircraft engines, and used in all new generations of single-aisle aircraft. This alloy significantly reduces fuel consumption compared to the current generation of aircraft. This result is linked, among other things, to the increase in combustion temperature that this innovative alloy enables.

The level of emissions avoided through these various activities has not been precisely quantified, but it is an order of magnitude of several hundred kt CO₂ per year.

Eramet is gradually developing scope 3 CO₂ emissions assessment tools that will enhance its ability to efficiently manage actions with a favourable impact on this scope.

6.2.5.3.3 Reducing emissions through the circular economy

Through its subsidiary EcoTitanium (France), the Eramet Group is committed to a circular economy and rational management of resources by recycling aviation-grade titanium off-cuts and shavings generated throughout the manufacturing process of the parts required by the major customers in the aeronautics industry. EcoTitanium, which was inaugurated in 2017, is Europe's first recycling facility for aviation-grade titanium alloys. A study conducted by an independent third party expert shows that EcoTitanium® avoids 26.4 tCO₂ per tonne of titanium produced by recycling compared to traditional methods. The volume of emissions avoided is expected to increase in the future as EcoTitanium® reaches its nominal production rate.

Another site of the Alloys Division, Erasteel Commentry (France), also recycles metalliferous waste materials and secondary materials as part of its activities. This mainly concerns the processing of used catalysts. The metals recycled in this way are mainly iron, molybdenum, nickel and cobalt. The contribution of these recycling operations is measured by the lower quantities of GHGs emitted per kg of recycled metal compared to the primary production chain. A study conducted by a third-party expert showed that around 2.8 kt of CO₂ were avoided in 2018.

6.2.5.4 Performance

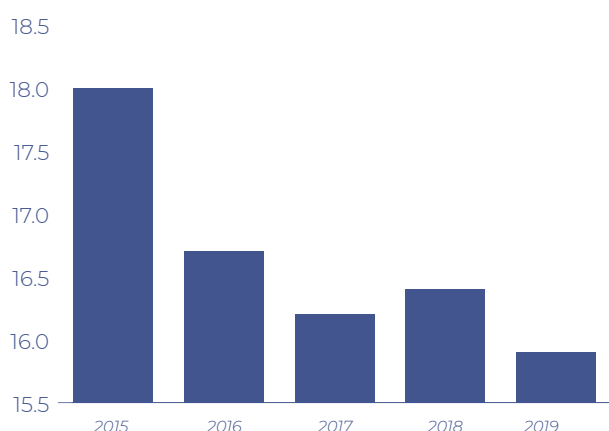
6.2.5.4.1 Energy consumption

Energy consumptions such as CO₂ emissions linked to the Group's activities are broken down by business category.

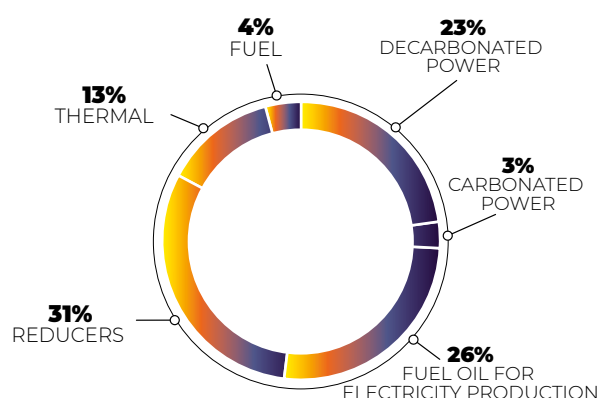
MINING	The energy consumed is mainly fuel for mining machinery and electricity for fixed installations. Consumption trends are particularly dependent on the structure of the deposit, its topology, the activity (volumes of ores produced) and especially stripping and preparatory work ratios (total volumes handled).
PYROMETALLURGY	Industrial installations are part of "extractive metallurgy" which consists of converting, through reduction reactions, the metallic oxides contained in the ores into metal alloys which are then marketed. These processes require an energy supply to reach the temperatures of the reduction or smelting reactions (around 1500°C), in the form of electrical energy and reducers that also contain carbonaceous energy. This consumption is directly dependent on the activity. Good process control also requires upstream monitoring of the water content of ores. The energy consumption for these uses is therefore also highly dependent on climatic conditions and varies depending on the season.
HYDROMETALLURGY	This industry consists of producing metal salts and is also part of extractive metallurgy. The types of energy consumed are mainly electricity, steam and natural gas. Consumption is mainly dependent on the activity and type of manufacturing process
INTERNAL LOGISTICS	It corresponds mainly to the Group internal rail transport between mines and ports. For Eramet, it therefore comes under scope 1 and is completely distinct from the logistics activities traditionally defined in scope 3. Energy consumption is mainly linked to the diesel locomotives operated in our mining territories.
ALLOY METALLURGY	The purpose of this industry is the production of alloys with high mechanical properties, their hot or cold processing and the associated heat treatments. These processes consume electricity and gas. Consumption is clearly dependent on the types of products delivered to customers and the complexity of the processes.
RECYCLING	This activity entails recycling metal waste by smelting it into alloys that can be used internally (concept of secondary mining) or directly by customers. The types of energy consumed are the same as for processing metallurgy.
RESEARCH & INNOVATION	Teams work upstream for all the Group's business lines.

Energy consumption in 2019 was 15.9 TWh, down 3.3% compared to 2018 and 3.5% compared to the average of the last three years (2016 to 2018). 86% of the Group's energy requirements are linked to the 14 pyrometallurgical plants.

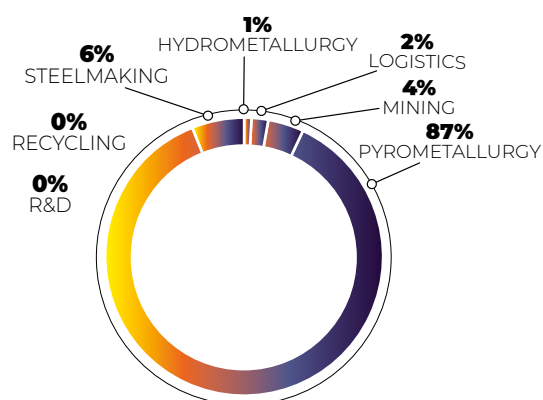
Annual consumption in TWh



Breakdown of consumption by use



Consumption by business lines



The energy purchased by the Group is used for the following purposes:

- Electricity (4.2 TWh): includes all of the energy required for furnaces, motive power (motors and electric machines), lighting and services. As far as possible, the Group supplies electricity from carbon-free sources (hydraulic, nuclear);
- Electricity generation (4.2 TWh): use of electricity generated by "proprietary" heavy fuel oil power plants;
- Reducers (4.8 TWh): chemical and thermal energy provided by reducers in fusion reduction operations. Their consumption is determined by the degree of oxidation of the ores and must therefore be constantly adapted;
- Thermal (2.0 TWh): uses including drying, heating and heat treatment operations, necessary to ensure the quality of products produced by alloy metallurgy and for pyrometallurgy inputs;
- Fuels (0.7 TWh): used for combustion engine powered machinery, mainly for mining operations.

Purchases of very low carbon electricity

87% of the electricity purchased by the Group is low carbon (65% hydroelectric and 22% nuclear).

6.2.5.4.2 Deployment of the ISO 50001 approach and energy efficiency

At the end of 2019, nine sites had already set up an ISO 50001 certified energy management system: the three sites -- Eramet Norway, Aubert & Duval Pamiers, Comilog Dunkerque -- in addition to the four sites certified in 2019 (two of the Comilog sites in Gabon, the SLN Doniambo plants and the Aubert & Duval sites of Les Ancizes).

The momentum continues and the Eramet Marietta, TiZir Grande Operation and the Moanda Industrial Complex are getting ready for certification in 2020.

Furthermore, Eramet participated in the ISO 50001 standard upgrade efforts with AFNOR experts and the Group is a member of the ENERGEST standardisation committee tasked with promoting and defining standards for energy efficiency practices.

The ISO 50001 approach, as with any continuous improvement approach, requires the implementation of relevant and efficient action plans. This year of work enabled in particular:

- deployment of a digital energy performance optimisation solution ("Brain Cube") at the Les Ancizes site. To date, 80% of the potentially affected installations are now monitored. It is gradually being deployed at the other sites of the High Performance Alloys Division;
- deployment at Gabon mines of a fleet management system which provides real-time monitoring and piloting of energy consumption and CO₂ emissions;

- deployment of a load management tool in Marietta enabling better performance of the national electrical network and, in turn, reduced use of fossil energies overall;
- the “Proof of Concept” validation of an artificial intelligence solution to optimise the electric mix control of SLN furnaces;
- control of energy consumption which leads to very rapid gains in numerous cases (SLN compressed air network: 50% gain this year, deployment of LEDs at the High Performance Alloys Division or Comilog Dunkerque, etc.).

6.2.5.4.3 Decarbonation of Eramet energy

The Energy & Climate Department and all Eramet players involved in the choice of energy sources necessary for the Group's activity ensure that decisions are always optimised based on economic and climate interests.

Thus in 2019, the Eramet Group continued its efforts to decarbonate the energy mix by:

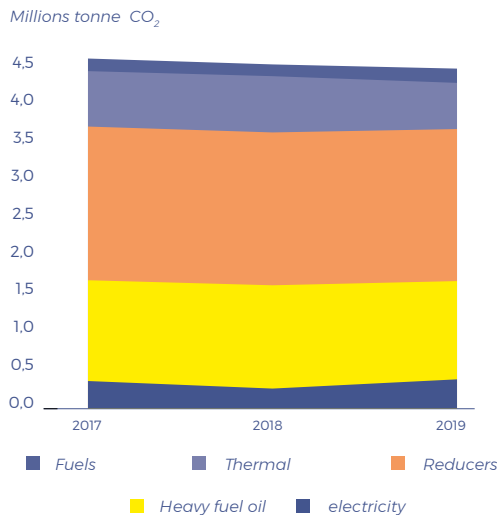
- modulating the power of SNL's oil-fired power plant in order to absorb renewable electricity production peaks for New Caledonia;
- setting up solar panels at the Les Ancizes sites thereby contributing to the development of renewable energies.

6.2.5.4.4 Greenhouse gas (GHG)

Since 2018 Eramet reports its GHG emissions under the CDP.

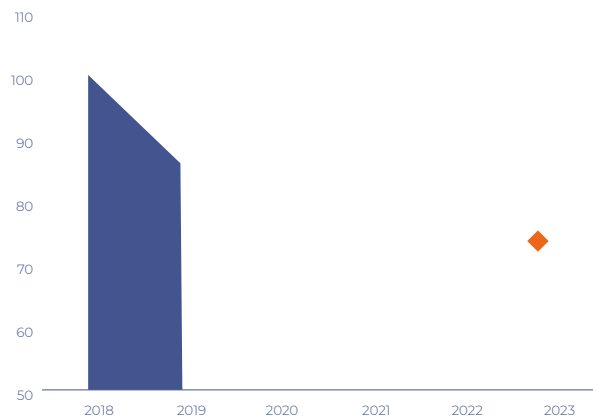
Change in emissions associated with Eramet activities – scopes 1 & 2

Change in CO₂ emissions by type



Change in the Group's specific emissions

(base 100 in 2018 – goal -26% in 2023)



In 2019, Eramet issued 4.07 million tonnes of CO₂, (3.71 MtCO₂ of scope 1 and 0.36 of scope 2), despite activity having increased by 1.3 million tonnes of finished product. The effects of improved energy efficiency are slightly higher than those of the activity increase.

There is therefore a 14% gain in specific CO₂ emissions (expressed in tCO₂/t produced) compared to the 2018 reference and approximately one year ahead compared to the target curve. This result was obtained thanks to the general mobilisation of teams working on the issue, against a backdrop of increased nickel ore exports.

Scope 1 emissions are mainly due to:

- the processing of ores using pyrometallurgy (32%), for which there is currently no economically viable alternative technological solution. The main focus of emission control would be to develop a method of capturing process gases for storage or sale as a precursor chemical. The development of such technologies would require extensive R & I and would therefore only be a long-term solution, as the technology is not yet available;
- electricity generation (27%). Studies are currently being carried out on facilitating the generation of electricity using lower-emission technologies (LNG and solar power plants);
- for various heating requirements (13%).

Change in emissions associated with Eramet Group peripheral activities – scope 3

Since 2017 Eramet has gradually been setting up the tools necessary for evaluating this scope. This is an exercise involving the cooperation of players upstream and downstream of the Group's activities:

- the shipping companies chartered by the Group are encouraged to communicate their issues;

- Eramet Norway received the financial support of Enova for setting up an innovative system by 2021 to supply decarbonated power to moored ships. Furthermore, Eramet Norway teamed up with its main shipping company Arriva to transition to the electrification of ships;
- DAHP land transports are monitored by a new flow management software that can be used to obtain an estimate of associated emissions in real time.

Eramet activities (Extraction and basic processing) place the Group far upstream in the lifecycle of products. To date, information available to Eramet is not sufficient to fully cover the whole range of scope 3 downstream. This part of the scope will be specified in upcoming years as the Group's customers report advances in this field.

Scope 3 which has been assessed by Eramet since 2017 covers:

- **for the upstream:** raw material supplies, fuels and reducers (carbon contained for the extraction, transformation and routing);
- **for the downstream:** transport to the product-purchasing country and transport between Eramet sites when they are made with own resources.

Eramet scope 3 on this scope is assessed at 750 kt. Emissions associated with the extraction and transformation of raw materials used by the Group account of 475 kt and the emissions corresponding to imported or exported freight account for 275 kt.

6.2.6 Mining environment

This section looks at environmental protection actions deployed at the mining sites in operation (with the exception of measures concerning biodiversity, which are detailed in section 6.2.7). Provisions for developing mining projects are included in section 6.4.4 Governance of Industrial and Mining Projects.

The Group's mining operations do not include underground mines and do not use any chemical product.

In Gabon, the mine operated by Comilog on the Bangombé plateau is one of the richest manganese deposits in the world, covered by a layer of 4 to 5 metres of waste rock⁽¹⁾. The properties of the deposit and the ore result in the production of very little mine waste.

SLN operates 15 nickel mines in New Caledonia; the seven largest are operated directly by SLN and the others are subcontracted to local operators. The mines are located in rugged terrain at altitudes between 250 and 1,000 metres. In this type of deposit, it is necessary to move about 7-9 tonnes of tailings to produce 1 tonne of ore that can be processed by the Doniambo plant. These ratios will improve in upcoming years with the introduction of the "4 million export tonnes" plan which will go hand-in-hand with improved mining

efficiency. Storing these tailings under conditions that guarantee safety and protection of the environment is, therefore, a key issue.

In Senegal, the Grande Côte Operations (GCO) mineral sands mine in Senegal produces zircon, ilmenite, rutile and leucoxene. The deposit is located in the sand dunes near the coast to the north-east of Dakar. The extraction operations take place in an artificial mobile basin of 12 hectares and about 6 metres deep and follow a route which is optimised to exploit the deposit. The mining process involves a dredge with a capacity of 7,000 tonnes per hour, connected to a floating concentration plant, where minerals are separated from the sand by a grading and gravimetric process. After extracting the recoverable fractions (around 1.5% of the treated sand), the sand is directly put back at the rear of the facilities to reform the dune. The resulting heavy mineral concentrate is transferred to separation plants located on land, where the commercial products are obtained by separation. The low volumes of products extracted and not processed in this stage are reincorporated into the reconstituted dunes. The water needed to run operations is pumped from the deep aquifer (Maastrichtian) and recycled as much as possible

(1) Tailings is the material that remains after the ores are extracted from rocks mined with no or very little desired metal content

The following table summarises the main environmental issues and risks for the Group's mining sites.

TABLE SUMMARISING THE ENVIRONMENTAL ISSUES AND RISKS AT ERAMET'S MINING SITES

	SLN Mines (New Caledonia)	Mining Comilog (Gabon)	GCO Mine (Senegal)	Comments
Pressure on water resources (quantity)	*	*	*	The high levels of rainfall at the sites in New Caledonia and Gabon make the issue of water consumption relatively low in sensitivity. Conversely, in Senegal, the two aquifers used by the mine are important reserves for local residents and for the country. Measures are being taken to limit the quantities taken from these aquifers.
Erosion	****	**	**	The nature of the soils and rocks, the topography of the deposits and the presence of fragile receiver environments make erosion a very sensitive subject in New Caledonia. In Senegal, protecting the dunes reconstituted after dredging against wind and water erosion is an issue, but outside the freshly reconstituted areas this subject is of minor importance. In Gabon, the recent extension of the deposit into a sloping area has increased the acuity of the issue somewhat, but it remains low in significance for the rest of the mine.
Acid drainage	○	*	*	Generally, Eramet mining sites are little concerned by the risk of acid mine drainage. In Gabon, only a horizon of tailings located in the current extension of the deposit is likely to present this risk in a localised way. In Senegal, a sandy horizon containing intercalated peat lenses may be encountered during mining operations and may potentially generate low acidification.
Production of tailings	***	*	*	The tailings from the Moanda mine are mostly returned immediately to the mining area. In Senegal, the sand is returned directly to the environment after extracting the recoverable fraction, which represents only 2%. By contrast, in New Caledonia, the production of tailings is much larger. The methods of exploitation used by SLN (New Caledonia) are increasingly changing from stockpiles to filling pits with tailings.
Production of residues	*	**	*	Only the Comilog mine (Gabon) and the Tiébaghi and Népoui mining sites (New Caledonia) produce significant quantities of mine tailings resulting from concentration steps by mechanical means. These residues are chemically stable and are not hazardous to the environment. In New Caledonia, residues from processing plants are, moreover, commercially processed as mining by-products. The characteristics of the small quantities of residues produced in Senegal allow their return to the natural environment during the reconstitution of the dune.
Impact on biodiversity	****	****	**	The biodiversity of the New Caledonian sites is recognised as remarkable due, in particular, to its very high endemism. The most recent studies conducted with regard to international standards in Gabon have shown that the Comilog mine is also located in an environment characterised by high biodiversity. The GCO mine (Senegal) does not have the same level of sensitivity. However, it should be noted that the Senegal mine is adjacent to major vegetable production areas.

Legend:

- * Low.
- ** Moderate.
- *** Significant.
- **** Strong.
- No acid drainage.

6.2.6.1 Mining environment management structures

Teams dedicated to the consideration of the environment in mining are present at the sites and subsidiaries concerned in Gabon, Senegal and New Caledonia.

In the last few years, as part of its Sustainable Development policy, Eramet has strengthened the structuring, formalisation and international coordination of tools for environmental management at mines. As part of this, the following actions have been carried out:

- A community of mining environment experts has been set up and meets regularly. Its role is to formalise good practices guidelines applicable throughout the Group and to encourage the exchange of expertise between sites.
- Environmental Management Systems compatible with the requirements of ISO 14001 have been deployed by the mining subsidiaries. In 2016, SLN became the first mining and metallurgical company to obtain ISO 14001 certification in New Caledonia. The certificate covers the mining activities of the seven main mines, which are operated directly by SLN.
- For its part, Comilog has been certified ISO 14001 2004 Version since December 2012 and obtained the renewal in April 2016. Since December 2018, Comilog has been certified ISO 14001 2015 Version. In 2019, the certification scope evolved by incorporating the activities of the Moanda Metallurgy Complex (CMM). Now, the application field covers Manganese ore extraction, preparation, storage and loading operations (Rocky, Fine and Sinter), production of Silico-manganese, metal manganese and other derivatives of Manganese ore, sold in the metallurgical and chemical industries.
- In Senegal, significant improvements are under way with the implementation of an environmental management system aligned with the requirements of ISO 14001 throughout the various functional units of GCO in collaboration with the Group's environmental team. In addition, in 2017, GCO updated its Environment, Biodiversity, Safety, Ethics, Quality and Communities charters and committed to a process leading to ISO 14001 certification. In 2019, the new Environment policy was updated and communicated throughout sites.
- All SLN mining sites (New Caledonia) have updated their environmental impact assessments in recent years as part of the reform of the Mining Code of New Caledonia. This considerable work allows each site to have comprehensive studies on the environment and the ecosystems in which they are located, and effective environmental management plans adapted to their specific characteristics.
- At the same time in Gabon, for the Comilog mine, numerous environmental studies have been performed that they have considerably improved the level of awareness of the site's environmental characteristics. The most recent include:
 - the environmental and social study aligned with best international standards performed for the Okouma deposit mining project and the construction of a new washing plant. This study was validated by the authorities on 3 May 2019.
- In Senegal, the Grande Côte mining site, following the audit and updating of its Environmental Management and Social Plan (EMSP), received its environmental compliance certificate on 24 October 2016 from the supervisory authorities, and then, in 2017, the joint ministerial decision granting definitive authorisation for all its classified establishments. In 2019, the site began efforts to obtain ISO 14001 certification following its 100% consolidation into Eramet Group.

6.2.6.2 Responsible resource management

The recovery of mining resources is one of the Group's core businesses and a key component of the Group's contribution to the development of the circular economy. Indeed, maximum recovery of the mineral profile, i.e. the mining of ores at the lowest possible grade, or the recovery of materials previously considered to be waste rock or residue, makes it possible to improve the environmental efficiency of mining operations by increasing the quantity of metal resources produced for the same environmental footprint.

In this respect, in New Caledonia, SLN has developed techniques for recovering ores initially considered marginal, thus significantly extending the life of the deposits while reducing the final environmental impact. These results have been obtained with the construction of ore washing plants which allow the ore to be concentrated without adding any chemicals. Since mid-2010, SLN has been recovering by-products from the ore washing plants, as well as selectively stockpiled products (laterites and low-grade saprolites). Since 2010, 8.8 million tonnes of low-grade saprolites and by-products from ore washing plants were recovered. With the "4 Mth Export" project, the SLN will ultimately recover old flat-top piles and will develop the recovery of very low-grade metals.

Other examples in Senegal: since 2016, more than 70,000 tonnes of sand containing zircon (medium-grade zircon sand), initially considered as a residue, have been recovered by the GCO teams (Senegal).



In 2018, the Group decided to strengthen this momentum to improve the recovery of mining resources by formalising a new circular economy action plan. The objective is, over the period 2019-2023, through a series of innovative actions, to recover more than 2 million tonnes of materials previously considered as residue or tailings. In 2019, five projects have been launched to contribute to this goal. One of them has already produced its first results, again in GCO (Senegal). A flow of ilmenites initially considered as waste can be recovered by creating a new commercial product known as ilmenite 56. 34,000 tonnes of this product were recovered in 2019.

6.2.6.3 Water management

At mining sites in New Caledonia, and to a lesser extent in Gabon, the major issue of water management is to prevent the entry of suspended solids (SS) into the receiving environment through run-off caused by erosion due to surface stripping.

To avoid this, SLN (New Caledonia) has long since equipped its sites with sedimentation basins that trap suspended solids in order to prevent their transport into the natural environment. Upstream of these works, many precautions are taken to minimise erosion: roofing of sites to prevent water entry, minimisation of open areas, conservation of natural embankments at the edges of stripping sites, organization of run-offs to reduce speed, implementation of hydraulic locks, etc. These measures are documented for each SLN mining site in a Water Management Plan that meets the regulatory requirements of New Caledonia. The implementation of these Water Management Plans as mining progressively evolves represents an ongoing commitment and considerable investment. Finally, monitoring of the proper functioning of the water management works is now carried out using drones. In total, investments dedicated to water management for these sites exceed €17.7 million over the last six years.

The special expertise of SLN on the topic of erosion prevention is compiled in a revised technical guide (the "Blue Guide"), which serves as an industry reference in New Caledonia and beyond for the Group.

In Gabon, the subject of erosion is less significant given the topography of the plateau deposit and the draining characteristics of the upper geological layers of the plateau. Nevertheless, operators are aware of the measures to be taken to limit erosion. Attention is still paid to the topic due to the ongoing extension of the deposit into the sloping part. A specific water management plan associated with the extension of the deposit has been developed. As part of this plan, in addition to the recommendations relating to the construction of safe slopes and the size of sedimentation basins, a specific environmental monitoring system has been put in place. This continuous monitoring confirms the effectiveness of the measures taken and makes it possible to verify that the very limited and localised phenomenon of acid mine drainage does not have a significant impact on the natural environment.

In addition, in recent years, major advances have been made at the Moanda site for the management of aqueous waste from the ore mill. Since 2010, discharges to the River Moulili were stopped with the installation of (ultra-fine) tailings ponds. These ponds were constructed in such a way as to be able to recover the overflow waters and redirect them to the concentration facility, thus eliminating any direct discharge into the river.

In Senegal, water management is a sensitive issue as the operation of the mine uses two aquifers, one of which is shallow and very important to local inhabitants (domestic consumption and irrigation) and the other deep, constituting the largest underground water reserve for drinking water supply to the inhabitants. Given this situation, every precaution is taken to ensure that the impact of the mine is controlled and minimised. GCO (Senegal) has an expert team dedicated to hydrogeology. In this respect, a doctoral thesis entitled "Updated knowledge of the North Coast water table and evaluation of potential impacts from Grande Côte Operations exploiting the mineral sands: hydrochemical, isotopic and hydrodynamic model approach -- SENEGAL" [*Actualisation des connaissances sur la nappe du Littoral Nord et évaluation des impacts potentiels de l'exploitation des sables minéralisés par Grande Côte Operations: approche hydrochimique, isotopique et hydrodynamique par modèle - SENEGAL*] was successfully defended at the Dakar Cheikh Anta Diop University (Senegal). In the context of the State/GCO partnership, the water ministry departments, in addition to their sovereign missions of monthly controls, contribute to the continuous improvement of underground water resources management process. As such GCO also pays the drainage tax levied on pumping water from the deep water table.

The water management system was designed by GCO and authorised by the competent department of the Senegalese Government to avoid additional pressure on the superficial water table used to supply water to local residents' agricultural crops. All mining installations are controlled to ensure minimal variations in the level of this water table. This aquifer is subject to twice-daily monitoring. More than 80% of the mine's net water consumption is used to ensure a constant water level in the basin in which the dredge and the facilities float. For this, the mine uses a deeper aquifer, for which limits on pumping rates have been set by the authorities and respected by GCO (Senegal) since the start of production. The water from this water table is recycled as much as possible (recycle rate of around 45%). In addition, this aquifer is also subject to continuous monitoring. To this end, three 500m deep piezometers are used to control the deep (Maastrichtian) aquifer.

"Water policing" and monitoring operations are carried out internally on an ongoing basis by the Environment Department of GCO (Senegal). Monthly reports on this matter are sent to the relevant authorities. Since the start of the operations, monitoring has demonstrated the effectiveness of the measures taken and the absence of damaging consequences on water resources.

6.2.6.4 Tailings and mine waste management

Mine waste

Given the considerable volume of tailings being handled at SLN operations (New Caledonia), the storage of tailings in appropriate structures and their revegetation is a vital environmental task in order to minimise erosion and the impacts on the ecosystem and landscape.

Thanks to its extensive experience, SLN (in New Caledonia) has developed effective techniques that have been validated by the authorities, one of which is to create tailings stockpiles. The works are carried out according to professional standards and their stability is guaranteed in the long term, even during exceptionally heavy rains. These tailings stockpiles are subject to continuous internal monitoring and regular audits by an external third party. In relation to water management techniques, SLN has published a technical guide, updated in 2012, which explains the construction methods of tailings stockpiles and their design rules. This guide applies to all SLN mining sites operated directly or by outsourcing. Moreover, in order to minimise land clearing and promote site rehabilitation, SLN prioritises the creation of flat-top piles in old mining pits, when the environmental conditions are favourable.

In Gabon, the problem is less sensitive since, on the one hand, the volumes of tailings being handled are much less, and on the other hand because the technique of exploiting by the successive opening/closing of "compartments" allows the majority of tailings to be placed directly into the "compartments" after extraction.

The Senegal mine is not at all affected by this problem, since the sand dune is reconstituted after passing the dredge and extracting the recoverable part.

Mining waste

One of the three Eramet mining subsidiaries uses tailing dams: SLN mining operations in New Caledonia and GCO in Senegal are not concerned by this type of structure.

In Gabon, mine wastes are clay ore fractions, obtained by a physical separation process by water scrubbing, without the addition of chemical products. This waste is stockpiled in 11 basins, consisting of closed dams with a maximum height of 16 metres, and a volume between 1 and 1.5 million m³.

These structures are not raised: a new structure is built every 18 to 24 months. Leaching tests showed that these are inert waste.

The CIM dam is used to stock two types of non-hazardous waste associated with the CIM beneficiation plant: sand (particle size matter between 1 and 20 mm) and finer ore particles (< 1 mm) in the form of sludge. The rough particles are used to raise the structure while continuously consolidating its external walls (downstream method). The structure is 30m high and contains 3.6 million m³ of sludge. The width of the dam is now 100m.

Even if the size of these structures is limited compared to those existing elsewhere in the world, Eramet is committed to operating these structures in accordance with best practices to guarantee the security of its employees and neighbouring communities.

The structures are continuously monitored and operated in accordance with specific guidelines. Annual reviews are performed by an external engineering team. In addition, in 2016, in the framework of its risk prevention initiative, the Group commissioned an audit of its structures by the Group's geotechnical and environmental experts. In 2019, a new audit was conducted by an external firm, by referring to the report on the best available techniques for the management of mining waste established in 2018 by the European Commission and the ICOLD (International Commission on Large Dams). These audits concluded at a good risk management level, while providing recommendations to better improve the safety level.

Eramet also participated in initiatives aimed at strengthening the safety of waste management by the mining industry, as those launched by The Church of England Pension Board aimed at improving the transparency of reporting on this sensitive subject. Follow the link below to read Eramet's statement on the issue in French: <http://www.eramet.com/fr/rse/environnement/gestion-responsable-des-residus-miniers-et-steriles>.

The GCO plant (Senegal) produces a very small amount of residues. The residual products have characteristics that allow their return to the natural environment when the dune is reconstituted.

6.2.6.5 Rehabilitation of mining sites

All mining sites are continuously rehabilitated.

In New Caledonia

The work includes land reshaping and revegetation operations, the methods and results of which are described in section 6.2.7 "Preservation of biodiversity".

As part of the implementation of the environmental management system for mines, over the past few years SLN has carried out a comprehensive review of its internal procedures and rehabilitation instructions and a formalisation of the expertise developed over the past ten years or so. The objective is to share best practices, ensuring greater consistency between sites, as well as better integration of rehabilitation operations in mine planning in the short and medium term. In this context, two Technical Guide references were published by SLN, one dedicated to the optimal management of topsoil (2015) and the other devoted to principles and techniques of mining redevelopment in 2016.

Of SLN's five mining centres, four have a formal rehabilitation master plan in place, and the plan for the fifth site is partially completed.

In recent years, major redevelopment work, allowing for definitive rehabilitation, has been carried out, continued or completed. In addition to the revegetation work carried out on a recurring basis (hydraulic sowing and planting, excluding topsoil spreading), other major redevelopment projects are also being undertaken by SLN. Some examples are:

- the massive project to redevelop the SM2E tailings stockpile on the Thio Plateau, which was completed in 2018;
- there are plans to launch in 2020 another remodelling worksite for the former "Sillon Nord" landfill, on the Plateau mine, which should represent some 400,000 m³ of materials to be remodelled;
- the redevelopment of the Rachel tailings stockpile in Népoui, which is the subject of administrative winding-up proceedings, and on which SLN is developing a seed field and seed orchard (80,000 plants on 3 hectares), in order to develop a site with easy access to seed for its future revegetation work.

In terms of remediation of liabilities, over-silted waterways are also the subject of clean-up operations by SLN. In 2019, the interventions focused on the Thio and Houailou region in partnership with local companies.

In Gabon

Revegetation is much easier than in the New Caledonian environment because vegetation recolonisation occurs naturally. The challenge of redeveloping the sites is also landscaping with the need to remodel the tailings stockpiles of a few metres in size created by exploitation:

- Since 2010, the mining procedure has been revised to incorporate land remodelling as it evolves. An effort to remodel the areas disturbed before this date was undertaken in parallel and is subject to an annual target in the mine's environmental management system. The results are detailed in section 6.2.7 "Preservation of biodiversity". Beyond these concrete actions, preliminary studies for the definition of a comprehensive rehabilitation strategy of the Bangombé mine plateau have been continued.
- In addition, operations to rehabilitate the River Moulili by extracting the ultra-fine deposits downstream from the mine's ore washing plant have continued since 2010. At the end of 2019, approximately 15 million tons of manganiferous sediments were excavated. These operations are carried out in strict compliance with the Environmental Management and Social Plan prepared after the impact assessment of this work. In a spirit of transparency and dialogue, Comilog also organised, in June 2014, a seminar dedicated to the rehabilitation of the downstream segment of the river. The seminar brought together all relevant stakeholders (government, civil society, NGOs, scientists, etc.). It helped define a consensus

and recommendations for the downstream segment, which were then proposed to the supervisory authorities. Such a consultation process was a first in Gabon.

- In the context of the rehabilitation of the downstream section of the Moulili river, 1,500 linear metres were excavated with the help of specialised equipment (amphibious hydraulic excavator).

In Senegal

The particular exploitation mode of this mine, with an enrichment plant moving progressively along the deposit, involves the clearing of vegetation consisting of grasses and thinly distributed trees in the area. The revegetation of the reconstituted dunes at the rear of the mobile mining facilities is a strong expectation of the resident populations, and also a challenge in the context of rainfall limited to a short rainy season.

After consulting the relevant authorities, local populations and their representatives, a participatory rehabilitation strategy with strong involvement of communities and local authorities was formalised in late 2013. The implementation of rehabilitation is accompanied by the creation of income-generating activities for the host populations participating in the emergence of a local entrepreneurial culture. Rehabilitation work is regularly monitored as part of a dedicated formal consultation framework set up in 2015 by the *sous-préfet* of Méouane, and consultations with local residents on their expectations regarding rehabilitation were renewed in 2016.

The success of the rehabilitation operations and the rigorous application of the rehabilitation strategy have been confirmed by regular audits by the Water and Forest Inspectorate as well as during the recent visit of the Minister of the Environment and Sustainable Development. Rehabilitation techniques are constantly being improved. With the implementation of a supplementary irrigation system in 2017, rehabilitation is now carried out continuously throughout the year, thus making it possible to cover increasingly large areas. Maintenance of the new plantations with the supplementary irrigation system has resulted in very high survival rates (over 90%) and faster plant growth. The dynamics of natural resources (soil, flora, fauna, etc.) in the sites being rehabilitated are good. A doctoral thesis entitled "Contributing to environmental monitoring and sustainable rehabilitation of mining sites: Case study for the exploitation of mineral sands in Senegal's Grande Côte" [*Contribution au suivi environnemental et à la réhabilitation durable de sites miniers: Cas de l'exploitation de sables minéralisés dans la Grande Côte du Sénégal*] was successfully defended at the University of Thiès (Senegal). Rehabilitation results are detailed in the following section 6.2.7 "Biodiversity".

6.2.7 Preservation of biodiversity

The locations of Eramet's various mining and metallurgical activities have enabled it to acquire solid experience in relation to biodiversity and to build a network of internal specialists. Based on this experience, Eramet decided to formalise its actions with the adoption of a Biodiversity Policy common to all mining and industrial sites, which was rolled out and communicated to Group employees in 2015.

The principles are to be adapted at sites in a manner proportionate to local issues. The full text of this Policy is directly accessible on the Eramet website at the following address: http://www.Eramet.com/sites/default/files/Eramet_politique_biodiversite_fr.pdf.

In application of this Policy, for several years now the Group has been committed to:

- participating in *ad hoc* discussions at local, national and international levels;
- developing skills within Eramet;

- developing methodological tools for coordinated management of biodiversity across Group sites.

The Group strives to reduce the impact of its activities on biodiversity on a daily basis.



In the context of its CSR Roadmap, Eramet is committed to preserving water resources and accelerating the rehabilitation of its sites by promoting biodiversity.

The Group seeks to achieve a ratio of rehabilitated areas to cleared areas ≥ 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.

2019 results stood at 1.2.

The contributions of each subsidiary to this overall result are detailed in the following paragraphs.

6.2.7.1 The challenges of biodiversity

Eramet, through its mining and metallurgical activities, may impact ecosystem species, habitats and services, which may be ordinary or remarkable biodiversity, depending on the location. As illustrated in the table below, the Group's most important biodiversity issues currently relate to New Caledonia, Gabon and Indonesia. Despite a moderate sensitivity to biodiversity at the operations site, Senegal is also the subject of specific focus given the significant rehabilitation and revegetation issues.

On the sites	New Caledonia	Gabon	Other
Number of species (flora and fauna) classified as CR ⁽¹⁾ on the IUCN Red List ⁽²⁾	4	1	0
Number of species (flora and fauna) classified as EN ⁽³⁾ on the IUCN Red List	24	8*	0

* These species may potentially be present, but they have not been observed on the Comilog and Setrag sites.

(1) CR: IUCN classification for Critically Endangered Species.

(2) IUCN: International Union for the Conservation of Nature.

(3) EN: IUCN classification for Endangered Species.

The Group does not have any mining or metallurgical site in operation in a protected area. It should be mentioned, however, that the Setrag railway track crosses the Ramsar⁽¹⁾ site of Bas-Ogooué (for 56 km), the Ramsar site of the Mboundou Badouma and Doume rapids (for 30 km) as well as the National Park of Lopé (62 km), a UNESCO⁽²⁾ World Heritage Site. The Ramsar sites and the National Park were

created between 2007 and 2009, that is to say, 30 years after the construction of the Trans-Gabon railway. Setrag is also engaged with the Gabonese Ministry of Water and Forests and the National Agency of National Parks in the fight against poaching by raising awareness among its staff and through its policy prohibiting the transportation of bush meat. The protocol agreement was renewed in 2018.

Number of sites within 10 km of a protected area	21
Average distance of these sites from the protected areas	2 km
Types of protected area	Nature Reserve, National Parks, ZNIEFF ⁽¹⁾ , ZICO ⁽²⁾ , Natura 2000 ⁽³⁾ area, Ramsar area, UNESCO World Heritage

(1) ZNIEFF: Natural area of ecological, faunistic and floristic interest.

(2) ZICO: Important area for the conservation of birds.

(3) The Natura 2000 network is a European ecological network made up of Special Protection Areas and Special Conservation Areas designated by the Member States.

6.2.7.2 In New Caledonia

Société Le Nickel (SLN) operates nickel deposits on various sites in the heart of a region renowned for its rich biodiversity and a high rate of endemism among its flora and fauna species.

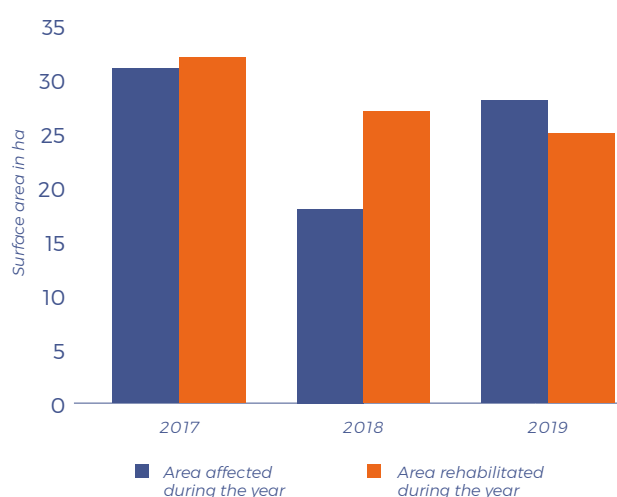
Since the 1980s, SLN has developed reliable and environmentally friendly rehabilitation methods. The naturally low fertility of the soils, rich in metals and poor in organic elements, as well as the extreme rainfall

conditions, make it difficult to see the results of this work in the short term because of the very slow growth.

In the field, revegetation can take different forms. It is carried out by spreading topsoil, planting or hydraulic sowing, having most of the time enriched the soil beforehand. The species used for revegetation are all local species, including some endemic species.

The revegetation effort has been maintained consistently since 2015 with about 30 hectares covered per year.

New Caledonia



At the same time, SLN is highly involved in terms of biodiversity preservation. It is working on the reintroduction of rare and threatened plant species through inventories of mining centres, as well as phenological monitoring to better control their reproduction. A partnership with the Institut agronomique néo-calédonien has enabled SLN to produce around ten production sheets that are now available for nurseries. The work and methods are also

shared and pooled in an *ad hoc* working group established within the Union of New Caledonia Mining Industries (SIM).

Finally, SLN continues to actively participate in the ongoing reflections on the territory, and relating to the compensation and implementation tools, with the SIM and the North and South Provinces, as well as the specialised firms that support them.

(1) The Ramsar List refers to wetlands of international importance.

(2) UNESCO: The United Nations Educational, Scientific and Cultural Organization

6.2.7.3 In Gabon

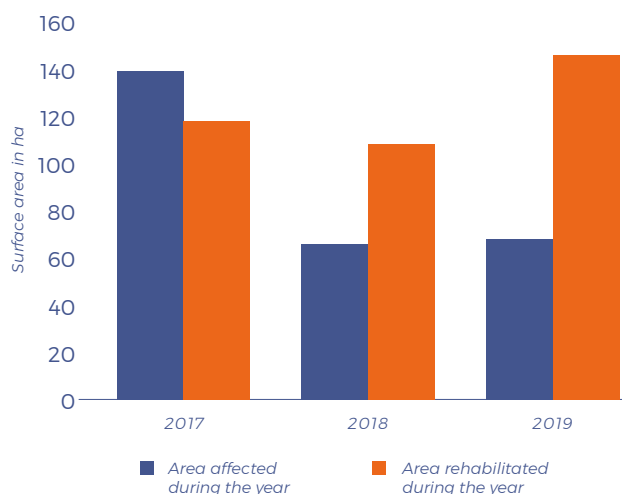
The Ogooué Mining Company (Comilog) has been exploiting manganese ore on the Bangombé Plateau in Moanda, Gabon for more than 50 years.

Although the manganese reserves of this plateau are still considerable and make it possible to envisage more than 10 or even 20 years of exploitation, part of the plateau has already been rehabilitated. The mining procedure has been revised to incorporate a remodelling step and

the progressive upgrading of the topsoil. Since 2010, the gradual reshaping of historically disturbed surfaces has also been completed.

In 2014, a mining Environment brigade was created, which contributed to the significant increase in rehabilitated areas: In 2019, members of this brigade joined the mining operation teams for better coordinated gradual rehabilitation. The original brigade is now focused on historic rehabilitation. Nearly 730 hectares were rehabilitated in six years.

Gabon



At the same time, Comilog continues to improve its rehabilitation strategy, taking into account the results of the latest environmental studies developed for the Bangombé plateau and the plan to expand the Moanda mine, as well as the recommendations and good practices of other Eramet mining sites. In June 2019, Comilog hosted the first part of an internal seminar fully dedicated to rehabilitation and biodiversity.

In addition to the mining activities, Lékédi Park (a subsidiary of Comilog), located 5 km from Bakoumba in the south-east of the Gabonese Republic, covers 14,000 hectares of savannahs, gallery forests, and bodies of water.

The park is dedicated to the preservation of protected species, the observation of animals and the reception of young orphans of poaching (mainly primates). It also conducts research on biodiversity and combating poaching in partnership with Gabonese and international scientists and organizations.

The park is mainly a rehabilitation centre for monkeys and primates; it is accredited by the Pan African Sanctuary Alliance (PASA - <https://www.pasaprimates.org>). Gabon's orphaned chimpanzees and gorillas are collected and raised in their natural environment.

Different groups of mandrill have also been introduced to the park and live in total freedom. They have been studied since 2012 by an international team of researchers: the Mandrillus Project. The aim is to answer fundamental questions about evolutionary ecology, anthropology, food ecology, animal communication (etc.), as well as more applied conservation and epidemiological questions.

A programme to reintroduce chimpanzees, gorillas and mandrills to the Batékés Plateaux National Park started in 2018 with the release of three gorillas in partnership with the Aspinall Foundation. Pending additional studies that will be used to validate the relevance of reintroducing chimpanzees into the National Park, a group of seven chimpanzees has been trained and will shortly be transferred to an island in the Lékédi Park for an initial re-acclimatisation phase. The plan to reintroduce mandrills in the Batékés Plateaux National Park was abandoned given the lack of certainty about whether or not this species is present in the area concerned. The group trained for this operation has already joined one of the two groups in the Lékédi park.

In addition, since 2013, the Park has also been involved with the Haut-Ogooué Regional Water and Forest Administration to carry out mutual awareness-raising and anti-poaching campaigns. In 2019, six major anti-poaching operations were carried out. A large scale region-wide operation allowed the seizing of about a dozen guns and nearly a hundred cartridges and the destruction of some twenty game animals. The different missions around and in the Park helped to destroy some ten or more illegal camps. Five illegal gold diggers were apprehended and handed over to the police. Four awareness raising missions aimed at people living near the Park were carried out with the collaboration of the Water and Forestry authorities. Awareness-raising and consultation missions were launched in 2019 to resolve conflicts between mandrills used to the Park and the village residents whose crops can be damaged. An ambitious capacity building and crop protection programme was launched at the end of 2019.

Since December 2019, the Park has welcomed a group of wild dogs from a European zoo as part of a Mega Wildlife restoration project for the Batékés Plateaux. Preliminary studies will be carried out regarding the abilities of this particularly endangered species – which had disappeared

from Gabon more than 50 years – ago to re-adapt to living in the wild. In 2020, this operation is expected to continue with the arrival of cobes defassa in the Lékédi Park and the transfer of buffaloes and bush pigs to the Plateaux Batékés national park.

6.2.7.4 In Senegal

In Senegal, the Grande Côte Operations began in 2014. The exploitation of mineral sands involves the clearing of vegetation as a floating dredge moves along the deposit.

Biodiversity is of medium sensitivity in the currently exploited areas. However, the mine is in an area where there is still significant plant and animal diversity despite the strong human impact. The three herbaceous species endemic in Senegal and identified in the mining pass of the five coming years have been studied thoroughly by researchers from the plant Biology department of UCAD on behalf of GCO. This study shows that out of the three species assumed to be endemic:

- two (2) in this case *Crotalaria sphaerocarpa* Perr. ex DC. subsp. *polycarpea* and *Spermacoce stachydea* var. *phyllocephala* are species reported as endemic to Senegal, but do not seem to be threatened (Noba K. et alii, 2019); furthermore, *Crotalaria sphaerocarpa* is identified in the sites under rehabilitation (study on site dynamics, in progress);
- one (1) *Polycarpaea linearifolia* (DC.) var. *linearifolia* (DC.) DC has not been reported as endemic to Senegal (Noba K. et alii, 2019).

As such, the issues are mainly related to the rehabilitation and revegetation of large areas, as and when the exploited sites are made available, as well as to the participative and inclusive management of biodiversity through an approach based on Avoiding-Reducing-Compensating sequence. It must be noted that the Senegal mine is also adjacent to very large vegetable production areas.

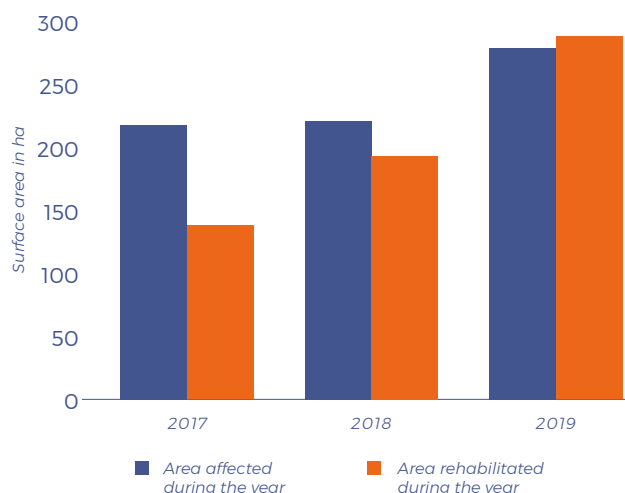
To best reflect the original landscape (dunes), rehabilitation will begin with the reshaping of the slag heaps. Then, nets will be installed to fight against wind erosion, and the soil will be improved with manure and revegetation.

The revegetation and soil improvement methods implemented in the field since 2014 are convincing. They include:

- the planting of woody species produced in the nursery;
- planting herbaceous seedlings from seeds harvested on site;
- the use of sheep and goat manure for soil improvement and indirect seed supply. Initially the soil was improved with additional topsoil, but this practice proved to be less effective than spreading manure during field tests.

Since 2016, GCO has put in place an additional irrigation system to allow the continuity of revegetation operations during the nine months of the dry season. The area planted in 2017 was thus increased by 50% compared to 2016, and it was further increased by 40% in 2018. In 2019, replanted areas increased threefold compared to 2016. Indeed, cleared surfaces totalled 279 hectares and rehabilitated areas 288 hectares, i.e., a factor of 1.03.

Senegal



GCO is also considering the services and products that the site will be able to offer after closure. A compendium of local biodiversity management practices is being developed in collaboration with the University of Dakar.

6.2.8 Responsibility for chemicals

6.2.8.1 Issues and risks

The Eramet Group is characterised by its dual role as a user and producer of chemical substances and mixtures.

Eramet is one of the world's leading producers of alloys, superalloys and high-performance steels. Some implemented processes generate a series of chemicals: hydrometallurgical, pyrometallurgical or recycling processes.

At the same time, the production of alloys requires the use of ores, minerals, recycled secondary materials and a series of metal inputs to adjust the right compositions of the desired grades. The use of chemicals as "commodities" (acids, bases, salts, etc.) is also significant. It is also necessary to manage the numerous products used at the laboratory level, as well as in maintenance of installations and for other specific purposes such as water treatment or the capture of vapours and aerial particles.

The Group pays particular attention to the management of the chemical substances and mixtures it uses or produces in order to substitute as far as possible the most dangerous substances and to ensure a high level of risk control, protection of human health and the environment.

The principles that guide the Group's action in this regard are as follows:

- characterise and be familiar with the products used;
- translate regulatory or normative constraints on the monitoring of occupational exposures and chemical risk assessment into a global approach for continuous improvement.

6.2.8.2 Improving technical and scientific knowledge of Group products

The complexity and diversity of Eramet's activities and products has led to the centralisation of the Group's toxicological and ecotoxicological expertise. This structure makes it possible to capitalise on the knowledge accumulated in the various business lines (nickel, cobalt, manganese, titanium, etc.) to improve the quality of available knowledge and reduce the investments and time spent on tests in order to obtain it. This knowledge is essential for defining appropriate and proportionate risk prevention measures.

Eramet is taking a proactive stance by pursuing research partnerships with Norwegian universities and official bodies to improve its knowledge of dust exposure in manganese alloy activities. Eramet also supports the scientific initiative by the Nickel Producers Environmental Research Association (NIPERA) in Europe and the US to establish methodological standards for linking the toxicity of a metal or alloy to its surface and solubility properties in biological liquids. The toxicity of an alloy does not simply result from the sum of the toxicities of its components. This last point was considered in 2018 by ECHA (European Chemical Agency), which appointed a group of experts to review the method for deriving a safe dose for a metallic carcinogen. Discussions continued in 2019 and the Eramet teams participated in the publication of scientific results in the "Regulatory toxicology and pharmacology" journal, under an article entitled "Bioaccessibility of nickel and cobalt in synthetic gastric and lung fluids and its potential use in alloy classification". K. E. Heim, R. Danzeisen, V. Verougstraete, F. Gaidou, T. Brouwers, A. R. Oller.

Knowing the products used also means having access to information quickly and clearly. Databases have been used – one for each site – which will include information from the Safety Data Sheets (SDS) and use a Group internal hazard scale. This makes it possible to group the classification according to five main categories and to simplify the identification of the product's hazard.

This continual support for the operational sites also applies to the traceability of the products used, from the receipt of raw materials to the delivery of the finished product to the customer. Being able to trace upstream products makes it possible to guarantee the source of supply of raw materials and anticipate possible regulatory changes, which could potentially impact the REACH registrations of our suppliers and supply deadlines.

6.2.8.3 Harmonising chemical risk management methods

Eramet Group production sites are found on five continents, and they must, therefore, follow and respect various regulations concerning hygiene and controls of chemical exposures in the workplace. In this area of regulation, there may be significant differences from one country to another for the same substance. Harmonisation and communication between sites is therefore important for exchanging, explaining and implementing practices and references, ensuring a level of protection that is greater than or equal to the regulations in force in the relevant country.

This harmonisation and synthesis action is based in particular on a Group document repository, which includes:

- a Group procedure for chemical risk prevention;
- a methodological guide for measuring exposure;
- 10 standard toxicological data sheets for the Group's main substances;
- a common chemical risk assessment method that allows each site to develop an improvement action plan, which can then be consolidated at Group level, to define common priorities.

At the end of 2019, this Group standardisation was deployed across 80% of the sites and was accompanied by more than 180 hours of training for HSE and occupational medicine teams. This standardisation approach was completed in 2019, with the construction of a group audit repository used to verify the application of best practices according to seven pillars: Identification of risks, performance monitoring, organization and training, operating control, replacement and management of modifications, special control of the most hazardous substances, leadership and looping.

The goals for 2020 include deploying the standards and applying the Group audit repository over 100% of sites.

As a result, the Group now has a centralised inventory of 3,500 chemicals used within the deployment area. 70% of the Group's sites have a synthetic statistical analysis of the exposure measurements carried out over the last three years, and nearly 650 biological measurements have been made by occupational medicine departments.

6.3 SOCIAL AND SOCIETAL COMMITMENTS OF THE GROUP

6.3.1 Commitment to Human Rights

6.3.1.1 Human Rights risk assessment

In 2017, Eramet formalised its mapping of the risks of violations of Human Rights and Fundamental Freedoms, with the support of external expertise.

A risk universe was established by matching the impacts of the Group's activities with the list of rights contained in the UN Universal Declaration of Human Rights of 1948, the two UN International Covenants of 1966 (International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights), as well as the European Convention on Human Rights of 1950. Sector benchmarks on the identification and management of risks of Human Rights violations were taken into account. The criteria for assessing these risks, in terms of severity of harm and probability of occurrence, were also defined. They involve an assessment of the severity of the impact, not directly for the Group, but for the potentially affected third party(ies) (employees, local residents or other people).

The assessment of the level of severity and probability of occurrence of these risks was carried out by a representative panel of the different Corporate functions and Group entities across all geographical areas.

The risk universe of Human Rights violations defined during this exercise for the Eramet Group can be broken down into the following three broad categories, and the main risks were assessed for each of them:

- the risks for Group employees, mainly those related to health, safety and security at work, and to a lesser extent those related to discrimination and harassment;
- risks for local communities related to potential impacts associated with the activities of Group entities;

- the risks generated by contributors to the supply chain, such as, for example, non-compliance with the fundamental conventions of the International Labour Organization.

This assessment, which is integrated into Eramet's risk management, will be updated every three years. Assessments of the situation of the sites and entities with regard to these risks also allow regular monitoring between each update. These assessments are updated based on Human Rights audits, four of which took place in 2019. Carried out by the Risk Management, Internal Control and Audit Department, they are administered on the basis of a dedicated internal audit framework, based on the Quick Check published by the Danish Institute for Human Rights.

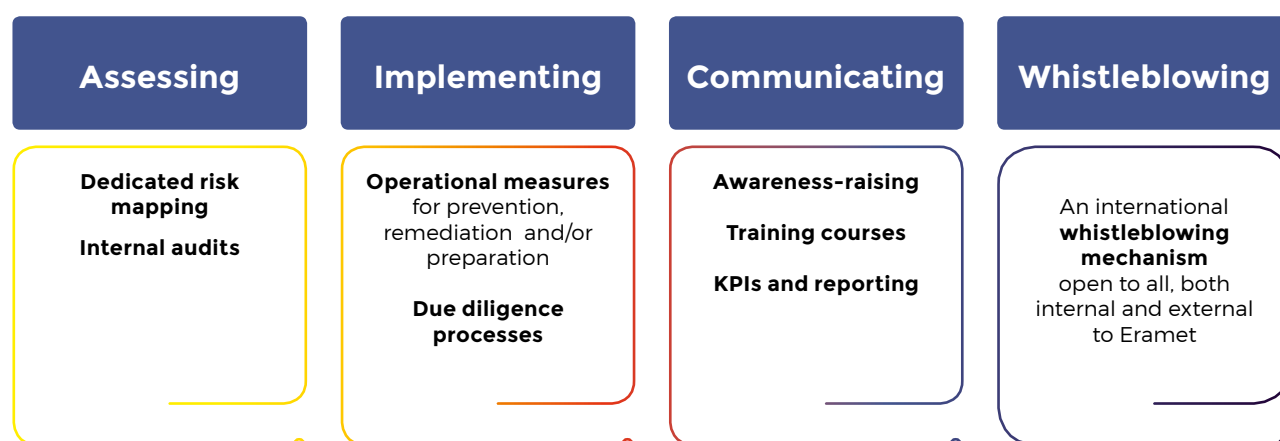
6.3.1.2 Organization of the Human Rights approach



Eramet has decided to strengthen its commitment in Human rights by including this concern in its CSR roadmap, through its eighth goal. Eramet aims to become by 2023, a benchmark in Human Rights compliance in its sphere of activity and measures this development through its application of the United Nation's guiding principles. The Group measures its maturity on the subject by using the Reporting Framework in line with the United Nations Guiding Principles which was developed by Human Rights Reporting and Assurance Frameworks Initiative - RAFI (Shift Project - Mazars), and it aims for a mature level of reporting by 2023. The deployment of the Human Rights approach is monitored on a regular basis within the CSR Committee.

The Eramet Human Rights approach

A set of procedures, tools and measures for:



In order to support the implementation of this new approach, Eramet adopted and published its Human Rights policy in April 2019. Through this specific declaration, Eramet reaffirms the essential place of this topic in its managerial and operational approach, as well as in its relations with both internal and external stakeholders.

It covers internationally recognised human rights and breaks down more accurately the commitments made by the Group on its salient issues, identified through the risk assessment exercises carried out by Eramet and classified into three areas:

- respecting the Human Rights of employees, in order to guarantee a safe, healthy and respectful work environment;
- respecting the Human Rights of commercial partners (customers, suppliers, subcontractors and partners), in order to develop a responsible value chain;
- respecting the Human Rights of communities, by reducing impacts and striving to make a positive contribution.

This commitment complements the Human Rights commitments already included in other Group universal reference documents and charters, such as the Ethics Charter and the Sustainable Development Policy. The policy is supported at the highest echelon of the Company and has been signed by General Management and by all members of the Group's Executive Committee. After the policy was adopted, Eramet launched an internal communication campaign on its websites, its social media pages and distributed an explanatory medium to roll out this new Group commitment in all the countries where it operates. Training and awareness-raising programmes will be gradually rolled out in 2020.

One of the key elements for preparing this commitment was the development of a partnership approach, the first of this kind at Eramet. The consultation had the dual purpose

of sharing Eramet's vision on Human Rights and gathering the observations of the internal and external stakeholders.

This collaborative approach, implemented until March 2019, consisted of consulting top managers, talking to employee representative bodies and distributing a special questionnaire to employees. As such, more than 600 people have helped to build the Group's Human Rights commitment. To measure the expectations of civil society with regard to the Group's commitments, the opinion of external Human Rights specialists was also taken into account during the consultation.

6.3.1.3 Risk management and implementation measures

The Eramet Group's risks of Human Rights violations may be broken down into three main categories of salient issues, specified during the risk assessment. The risk management measures and opportunities developed for each of these categories are extensively explained and presented separately in the Non-Financial Performance Statement.

The approach to managing risks related to employees' Human Rights (including in particular safety, health, security and non-discrimination) is explained in detail in section 6.3.2 "Commitments to employees", which also contains the Group's main social data.

Section 6.3.3 "Commitments to communities" details the measures implemented to manage the impact of the Group's activities on local communities, as well as the development of opportunities for them, in accordance with Eramet Group's approach to positively contribute to local areas.

Section 6.4.2 "Responsible value chain" presents in particular the risk management approach relating to the supply chain, and the due diligence measures developed by the Group.

6.3.2 Social commitments to employees

Eramet considers its employees as the first pillar of its performance.

The first four objectives of the CSR Roadmap are thus dedicated to employees, focusing in particular on health

and safety, professional development and employee engagement, as well as on diversity within the Group. The Group's progress on these priority themes is the subject of this section, which will focus on Social Commitments to Employees.



Focus area	Objective	KPI 2023
COMMITMENT TO PEOPLE	1 - Ensure the Health and Safety of employees and subcontractors	Zero fatalities Workplace accident frequency rate with and without work stoppage FR2 <4
	2 - Build skills and promote talent and career development	100% of employees participate in at least one training course per year
	3 - Strengthen employee engagement	Group employee engagement rate >75% (barometer)
	4 - Integrate and foster the richness of diversity	30% of managers are women

The interim results for these targets at the end of 2019 are detailed in the rest of the document.

Having created jobs in twenty or more countries, Eramet and its 13,000 employees contribute directly to the achievement of the UN's 8th Sustainable Development Goal "Promote sustained inclusive and sustainable economic growth, full and productive employment and decent work for all". This goal also covers all the actions undertaken by Eramet to ensure the safety of its employees, which is a priority for the Group and set out in target 8.8.

Eramet's actions to promote SDG 3 "Good Health and Well-being" include its prevention actions to protect the health of the Group's employees and users of its products, the workplace health programmes rolled out by the Group in the different countries where it operates, and health-specific community investments.

Lastly, the initiatives implemented to promote diversity, gender balance and gender equality on the one hand, but also the inclusion of the elderly, young people and people with disabilities on the other hand, contribute to the achievement of SDG 5 "Gender Equality" and SDG 10 "Reduced Inequalities".

6.3.2.1 Employee safety

6.3.2.1.1 Main safety issues and risks

Methodology

The prevention of risks of work-related accidents is based primarily on the Workplace Risks Assessment conducted inside plants. This highly operational analysis makes it possible to secure a specific operation by identifying all the risks to which the operators are exposed, and the means of control implemented to manage them.

These local analyses are compiled in the risk register of each site (known as the "single risk assessment document" for French sites). These risks are assessed according to a scale based on the Frequency x Gravity pair (FxG), taking into account the protection measures in place. This methodology makes it possible to identify the most critical risks and thus feed the site's Safety Improvement Plan. Risk registers make it possible to group the risks by standard activities specific to each site. For example, they include mechanical handling, machine driving, walking, etc.

At Group level, the risk analysis is based on this segmentation by type of activity.

Risk segmentation

The Group's risk analysis of workplace accidents allowed the risks identified to be grouped into three distinct categories:

- **Technological risks** associated with processes and facilities present the greatest potential severity: an explosion, a toxic gas leak, or equipment failure can impact several people in a single incident. The frequency of occurrence of this type of event is the lowest in our history.
- **Critical activities** are dangerous tasks that are carried out on a daily basis as part of the operation of our facilities. They include machine work, height work, vehicle traffic, working in confined spaces, working with liquid metal, etc. Failure to control these risks can lead to serious accidents. In 60% of cases, the consequence of lack of control of these critical activities is work stoppage and, in a little over 10% of cases, serious injury.
- Finally, the Group's operations involve many routine activities, such as walking, lifting and moving objects and using hand tools. About two-thirds of the Group's accidents involve these activities, but the severity of the accidents associated with them is statistically less serious than for critical activities. For these mundane activities, the serious accident rate is less than 3% (versus more than 10% for critical activities). Eramet groups these activities which are difficult to categorise under the heading "**non-standardised activities**".

6.3.2.1.2 Safety governance

The issues around Group employee safety are elevated to the highest level by the Group's Executive Committee.

Since October 2019, the Safety and Prevention Director reports to the Group's Chairman and Chief Executive Officer. He/she establishes and proposes the Group's Safety policy and guidelines to the Executive Committee (COMEX). Once validated, these guidelines are broken down in the Divisions by the Deputy CEOs, assisted by Safety Coordinators, and then by the Site Managers, who are themselves assisted by a site Safety Coordinator.

The prevention of accidents is at the heart of the system, and it concerns both Eramet employees and subcontractors who work on the sites. It is based on the analysis of risks in the workplace, which determines the actions and preventive measures to be implemented.

In relation to Safety, actions at Group level are coordinated within the framework of the "Group Safety Committee", which includes the Human Resources Director, the Deputy CEOs, the Safety and Prevention Director, and the Safety Coordinators of the Divisions.



The effectiveness of accident prevention is monitored on a monthly basis by measuring accident frequency rates (FR). The Group has established a reporting system that is used to monitor frequency rates on a monthly basis (FR1: frequency rate of fatal accidents and with work stoppage, FR2: frequency rate of fatal accidents, accidents with and without work stoppage, FR3: frequency rate of accidents with first aid), and to react in the event of deviation or non-achievement of objectives. Results and serious accidents are reviewed monthly by the Executive Committee.

In the event of serious accident, the Director of the site where the accident occurred presents to the Executive Committee, within weeks following the accident, the circumstances and the corrective and preventive actions. The Executive Committee validates them and requests that actions be deployed throughout the Group through Feedback.

6.3.2.1.3 Risk prevention strategy

The Eramet Group recognises that accident prevention tools must be adjusted to the types of risks: tripping is not prevented with the same tools used to prevent the rupture of a furnace in an industrial unit.

The **prevention of technological risks** is based on the implementation of barriers (technical, organizational and human) as a result of industrial risk analysis and hazard studies. The effectiveness of prevention depends greatly on the technical expertise of the teams that has been acquired over years of operations and their ability to identify and respond to weak signals.

The risks associated with **critical activities** are too important to leave the choice of method of operation to the stakeholders; these activities are also strongly governed by rules. Eramet has compiled a set of minimum essential rules – “Essential Safety Requirements” – that are required to be implemented by all sites.

Finally, **non-standardised activities** cannot reasonably be governed by simple rules. It is not practical to write rules on how to use a hammer or adjust one's pace depending on the condition of the ground. For these work situations, Eramet develops the situational intelligence of its teams so that the stakeholders learn to make safety-related decisions.

These prevention tools must be part of a broader safety management system, based on an internal reference system that was revised in 2018. Largely based on international standards (OHSAS 18001 and ISO 45000), it includes requirements that cover the following elements:

- regulatory compliance;
- risk analysis;
- action plans and progress loops;
- reception at the workstation and training of staff;
- monitoring, audits and inspections of field activities;
- the handling of safety events;
- and finally, leadership, objectives and safety management.

Roadmap – Safety objective

In 2019, the Group continued the roadmap established in 2018 to improve safety risk management with the objective of reducing the frequency rate of fatal accidents with and without work stoppage (FR2) to less than 6 in 2020. The following areas have been defined:

- make the barriers robust following the review of technological risks at all sites. The Group is implementing a programme to support the sites in reviewing the "hazard studies", which will allow them to formalise the barriers and identify their criticality. Each site will then be able to set up barrier monitoring actions;
- comply with the Essential Requirements for critical activities: the Group requires each site to implement a plan to comply with the Essential Requirements for the critical activities it has selected, with the objective of achieving 100% compliance by the end of the plan. The Group aims to achieve at least 80% overall compliance with the applicable Essential Requirements by 2021;
- work towards safe behaviour through coherent and repeated feedback, especially by using "safety interactions": this activity consists of observing a worker in a work situation, giving him/her feedback on his/her conscious or unconscious choices that impact his/her safety (positively or negatively) and finally, after listening to understand the reason for a dangerous choice, engaging in discussion with the worker to find another way to make it less dangerous. A "safety fundamentals" training course teaches this activity in a practical way to the Group's managers;
- address risks at their sources by updating risk analyses so that they match real-life situations on the production shops and by training employees to "Take 5" (think before action), a simple technique simple to implement before any intervention;
- implement "consequence management" in relation to safety. In addition to feedback from the field during interactions, the control and the willingness to apply the Group's prevention strategies must be an assessment and development factor both for operators and managers. The Group affirms that involvement in safety matters will have an impact on career development at Eramet.

Review of 2019 actions

Deployment of Essential Requirements

In 2019, each Group site self-assessed its compliance with all the Essential Requirements using Group-wide grids. This global overview makes it possible to improve the understanding and deployment of the requirements with cross-functional actions that are common to all these requirements.

45 Group audits (up 50% compared to 2018) were carried out to accompany the sites as they familiarised themselves with the requirements. Conducted by one or two Senior Auditors, whose adequate training was strengthened, these audits also allow exchanges between sites and internal benchmarks.

On all of the Group's sites, the average compliance rate with the Essential Requirements is close to 70%.

Among the Essential Requirements, those linked to lightweight vehicles, liquid metal work, train backflows, present the best assessments, with an average compliance rate above 85%. However, requirements linked to the consignment of equipment and external companies require more attention, with scores around 55% of compliance.

Implementation of interactions

Training on safety interactions continued to be rolled out in 2019. In total, since 2016, more than 2,500 supervisors have attended the one-day training at an industrial site with theoretical presentations and the practical application of safety interactions.

Once trained, managers must carry out these interactions between a manager and an operator within their site, according to an annual objective.

Formalisation and deployment of consequence management

The Group has formalised the classification of risk behaviours and clarified the violations that need to be penalised and the errors that need to be treated in a non-punitive manner. The behaviour of stakeholders cannot be analysed without simultaneously observing the behaviour of management. This systematic approach is implemented across the entire Group through the training of site management committees. In this respect, the Group has relaunched the level based "Safety Awards" (Bronze, Silver, Gold) to reward sites that reach two years, 0.5 or 1 million hours worked without any accident.

World Safety Day at Work

Since 2018, Eramet takes part in the World Safety Day at Work. This year, Eramet supported the World Safety Day at Work on 25 April on its sites by organising safety workshops, equipment demonstrations and awards for the best performers.

The topic adopted by the Group in 2019 was focused around Risk Analysis.

More than 9,000 employees will have actively participated in these events.

The following tables show the trends of these indicators:

FR2*	2016	2017	2018	2019
ERAMET GROUP	12.8	10.3	8.3	5.4
Mining and Metals Division	10.5	7.4	6.3	4.7
High Performance Alloys Division	20.2	17.7	13.3	7.5
Eramet Holding	4.9	0.8	8.6	1.2

* Data on the Eramet scope + Temp staff + External contractors.

Serious accidents*	2016	2017	2018	2019
ERAMET GROUP	15	11	15	12
Mining and Metals Division	9	7	6	10
High Performance Alloys Division	6	4	9	2
Eramet Holding	0	0	0	0

* Data on the Eramet scope + Temp staff + External contractors.

6.3.2.1.4 Safety performance

Three fatal accidents were sadly reported in 2019, leading to the death of four people, three at Setrag in Gabon and one at GCO in Senegal.

In May, two Setrag agents (a train driver and a driver's assistant) died after a head-on collision between two goods trains on the track between Libreville and Franceville.

In August, a female employee, passenger of a vehicle, died from the wounds sustained from a road accident in Owendo.

In November, a delivery truck driver on the GCO site was seriously injured in the legs when his truck crashed into the back of the truck ahead of it. He died at the hospital in December 2019.

The Group was profoundly shocked by these accidents, to the extent that one minute of silence was observed in all its entities worldwide.

Beyond these dramatic events, the Group measures its safety performance through the frequency rate and number of serious accidents performance indicators, which are defined as follows:

- FR2: workplace accident frequency rate of Eramet employees, temporary staff and sub-contractors. The accidents taken into account correspond to accidents where at least the victim receives treatment from a health professional (doctor) that is more than first aid (e.g. closing a wound with stitches, prescribing regulated drugs, applying splints, etc.). FR2 is expressed as the number of accidents per million hours worked;
- number of serious accidents: a serious accident (SA) at Eramet is generally defined as an event that led to death, permanent disability, or temporary inability to work with major complications (e.g.: any form of amputation, serious fractures, second- or third-degree burns requiring transplants, etc.).



The Group's FR2 fell to 5.4 in 2019, representing a 35% decrease over one year, and nearly 58% in four years. This significant decrease is the result of the progress made in the different Divisions but remains not quite satisfactory considering the recurrence of serious accidents, and in particular the fatal accidents in the Mining and Metals Division.

The Seriousness Rate (Eramet and Temp staff scope) improved, dropping to 0.23, a 28% decrease compared to 2018.

Control of critical activities measured by the frequency rate of these activities improved by 21% compared to 2018, while accidents linked to non-standardised activities dropped by 42%. Accidents related to critical activities represent only 28% of total personal injuries. Maintenance and mechanical handling activities are the main causes of accidents linked to critical activities but remain lower than accidents linked to walking and access to workstations (falls, slips, bumps and fingers jammed in doors) for non-standardised activities.

Finally, accidents related to technological risks are stable with frequency rates slightly below 0.2.

6.3.2.2 Employee health

6.3.2.2.1 Main health issues and risks

Methodology

The prevention of health risks is based on workplace risk analyses conducted by the health and safety teams.

Health professionals use the documents identifying these risks to build their action plans for the individual medical monitoring of employees and actions to improve working conditions.

The Group's Medical Advisor coordinates these actions and organises the network of health professionals.

Risk segmentation

Based on the analysis of workstations and safety risks, occupational health professionals identify risks that may have a lasting or deferred impact on the health of employees.

These risks are:

- either physical (noise, vibrations, awkward postures, repetitive movements, night or alternating work, electromagnetic fields, extreme temperatures, exposure to dangerous chemical agents, including asbestos);
- or have a risk of impact on psychological health (workload, organization of work, social support in the workplace, autonomy).

Deferred risks are risks of occupational diseases, which are reported separately based on reports sent to the employer or which result in investigations by internal or regulatory prevention services. In France, a Table of Occupational Diseases is regularly updated (Social Security Code).

In the other countries where the Group operates, there are regulations specific to each state.

The health risks of local populations are assessed by mapping the health risks of employees and the results of their assessment.

These risks may give rise to specific health risk surveys published to the various stakeholders: example of the Moanda epidemiological survey distributed to the Gabonese Ministry of Public Health and the local cooperation group.

6.3.2.2.2 Health governance

The Group Medical Advisor reports directly to the Human Resources Director. He/she establishes and proposes to the Executive Committee the Group's health policy and guidelines. Once validated, these guidelines are defined in the Divisions by the Deputy General Managers, assisted by Health and Safety coordinators, and then by the Site Managers, who are themselves assisted by a site Health and Safety coordinator.

Employee health is monitored by Occupational Health professionals. The Group's main French sites (Les Ancizes, Pamiers, Commentry, Interforge, Issoire, La Pardieu, Clermont and Gennevilliers) for Aubert & Duval, Eramet Sandouville, Comilog Dunkerque, all employees of 10 Grenelle (Paris), Eramet Ideas (Trappes) are now grouped together under the autonomous Occupational Health service, whose certification by DIRECCTE IDF was renewed for five years on 3 July 2019. This service consists of three centres:

- North Centre: one Occupational Doctor and two Occupational Health Nurses;
- Auvergne Centre: three Occupational Doctors and six Occupational Health Nurses;
- South Centre: one Occupational Doctor and two Occupational Health Nurses.

The Doniambo sites for SLN (New Caledonia), Moanda (Gabon) for Comilog and Owendo (Gabon) for Setrag have an Occupational Health Service with one or more occupational doctors and nurses.

Eramet's Gabonese subsidiary (Comilog) manages a level 2 hospital structure (according to the classification of the Gabonese Ministry of Public Health): Marcel-Abéké Hospital (HMA).

This facility provides first-level care (general medicine – general surgery – paediatrics – maternity) for all employees and their dependants and has a public service mission by treating external persons by agreement with Gabon's "Caisse nationale d'assurance maladie et de garantie sociale" (CNAMGS).

Various specialists provide care at the HMA: ophthalmology, cardiology, gynaecology.

6.3.2.2.3 Risk prevention strategy

Health strategy and prevention actions

The health prevention strategy is based on the Group's health policy, presented to the Executive Committee in August 2017.

The actions developed and measured in 2019 include:

- reducing and managing the effects and impacts of the Group's activities on the health of employees and local residents:

The Group has established eight standard sheets for products that constitute a health risk, and which are handled by Group employees (manganese – nickel – oil mist – polycyclic aromatic hydrocarbons – chromium 6 – carbon monoxide – crystalline silica – cobalt). The application of these standards has been audited since 2018 in the sites concerned and continued in 2019;

- continued employment for all employees during their working life, including when affected by poor health:

Occupational doctors periodically monitor employees with a health problem with the departments and HR services. The indicators concerned are the number of visits made by doctors and nurses, the number of posts adapted after a health event, the number of posts permanently adapted and the number of occupational diseases.

Management of asbestos risk

For the Group, the asbestos risk is divided into environmental asbestos at nickel mines and also the management of asbestos products at industrial sites.

In New Caledonia, specific operating procedures exist to control veins of asbestos-containing ores in the event that the mining activity uncovers them. The operators are trained in the precautions to be taken, and special medical monitoring has been set up, in consultation with the authorities, social partners and other mining operators.

None of the Group's industrial sites has ever produced or processed asbestos, nor marketed composite materials made up entirely or partially of asbestos. This material has never been used as a raw material by Eramet but rather only as a component of certain materials of thermal protection equipment. As an example, refractory materials containing

asbestos, used in the past at the Les Ancizes site, represented less than 1% of all refractory materials used at the site.

In accordance with applicable regulations, particularly in France, the Group has carried out asbestos technical diagnostics (DTA) on its industrial sites, by authorised firms, the conclusions and recommendations of which are then translated into detailed action plans.

The monitoring indicators for these actions are conveyed on a quarterly basis and analysed at the level of the General Management responsible for Health. These indicators specifically include declared and recognised occupational diseases (OD). In France, ODs are classified the form of tables. There are currently 99 of them. Each table has three criteria, namely:

- designation of pathology;
- care time limit (maximum time between the cessation of risk exposure and the first medical diagnosis of the disease);
- indicative or restrictive list (according to the table) of work likely to cause the disease.

Excluding exceptions, occupational disease is recognised by the CPAM when the three criteria are met.

In 2019 for the Group sites based in France, ten Occupational Diseases (ODs) were recognised by the CPAM and three Occupational Diseases were under investigation:

- **recognised ODs:** five tables 30 and 30 bis (Asbestos) and three tables 57 (musculo-skeletal disorders) and two tables 42 (noise);
- **ODs under investigation:** two tables 30 (Asbestos), one table 98.

6.3.2.2.4 Health performance

The indicators are included in the 2018 Registration Document. The analysis performed in 2019 is as follows:

	Q1	Q2	Q3	Q4	Total
Clinical examinations	2,495	2,040	2,013	1,787	8,335
Information and prevention visits	110	205	187	127	629
Aptitude restrictions >3 months	98	35	78	67	278
Definitive reclassifications	12	17	11	9	49
Recognised Occupational Diseases					10

The measurement of the indicator on the application of standards on products that are toxic to health showed a compliance rate of 85% for the sites concerned; the target set for 2019 was 80%.

The Joint Monitoring Committee for the Occupational Health Service for sites based in France met twice in 2019 to review the actions of the Occupational Health Service in terms of administrative organization and budget.

The other actions implemented in 2019 concern the Marcel-Abéké hospital in Moanda, Gabon.

Continued improvement in care processes and activity management continued in 2018:

- refurbishing of the medical analyses laboratory;
- implementation of a teleconsultation booth for specialised consultations requiring an opinion in a hospital centre in Libreville; the booth was installed at the Marcel Abéké Hospital in late December 2019; the implementation process with specialists in Libreville is currently being tested and deployment should be operational in the first quarter of 2020.

The teleconsultation booth will also be used for remote Workplace Health consultations between Libreville and Moanda (Setrag employees);

- implementation of the computerised management of activities and a monthly dashboard;
- continued improvement of technical services:
 - waste management process for healthcare activities,
 - sterilisation process,
 - hospital drug procurement process,
 - consultation and emergency reception process.

Under the Gamma programme, whose objective is setting up HIV-AIDS prevention and screening actions, more than 200 employees or beneficiaries continued to receive treatment in 2019. Other activities included the coordination of Awareness Day within Comilog and Setrag on 1 December with presentations by Doctors and Nurses from the Marcel-Abéké Hospital to deliver educational messages on the prevention of STDs and encourage people to get tested.

6.3.2.3 Employee security

6.3.2.3.1 Main issues and risks

The Eramet Group's mining, industrial and commercial activities take place in many countries on all five continents. Some of these countries may at times experience unstable political, security or climatic situations, even if only temporary in nature. The Group's Security approach is centred around the protection of people, installations, information and business intelligence to support the Group's development and economic efficiency.

6.3.2.3.2 Security governance

The Group's security policy seeks to achieve three main goals:

- a strategic objective that assesses the nature of the threats and measures the risks to the Group's people and assets;
- an operational objective that puts in place the resources and means necessary to prevent and protect;
- an educational objective that informs and raises awareness among Eramet Group employees about the reality of the risks, the means implemented to address them, and the behaviours to adopt.

This policy is supported by the Group's Security function which assists the Executive Committee and operational managers in the execution of their mission to protect:

- the physical assets;
- the intellectual assets and sensitive information, as well as relating to business intelligence;
- facilities held under the Group's responsibility;
- the Group's employees, whether on business travel, foreign residents or local residents.

The Group Security Director, who reports to the Group Human Resources Director, is therefore responsible for:

- proposing the Group's security policies to the Executive Committee;
- leading and coordinating the network responsible for their implementation, in conjunction with the Group's Divisions;
- reporting to the Executive Committee on the application and effectiveness of this implementation;
- ensuring the application of the Group's regulatory and contractual security obligations;
- sharing feedback and best practices within the Group;
- acting as an interface with the competent authorities to define the policies in this area in France, in the countries where the Group operates and with international institutions.

The Security function is an integral part of the development of the risk management approach in the countries where the Group operates mining activities, as well as in the countries in which it develops, processes and/or markets its products and services.

The Security Department is one of the main contributors to the Country Risk Committee (CRP), created to manage and limit Eramet's exposure to "Country and Geostrategy" risk in the countries in which the Group operates as well as in those where it would like to develop activities.

6.3.2.3.3 Risk prevention strategy

The protection measures put in place by the Security Department are the result of analysis and monitoring of the security situation and the assessment of the threat. They also depend on the nature of the activities carried out by the Group's units in the region and the effectiveness of the public institutions in the countries concerned.

A security manager has been appointed in all the countries or regions where the security situation and Eramet's activities require such a position (Gabon, New Caledonia, Senegal and South Africa). Acting as a local correspondent, he/she oversees the implementation of Eramet's security policy in coordination with the Group Security Department.

Various media are used to communicate and help memorise the safety instructions set up by Eramet, as detailed below:

- country sheets and/or assessments of current situation: written in English and/or French and regularly updated, these provide general information, advice on behaviour, and even instructions and directives. They are available on request from the Security Department and are communicated to the employees directly concerned once they are recorded in the travel register;
- security alerts: sent by email to managers, and then forwarded to all staff, these alerts provide rapid information in case of emergency as well as instructions and recommendations (attempted fraud or scams by telephone, etc.), or when a situation suddenly deteriorates in a country (demonstrations, attacks, specific threats, etc.);
- a Security/Health booklet: distributed on request or during on-site awareness sessions, it contains advice on how to behave in different situations;

- awareness sessions: individual or group sessions, organised in particular before departure abroad, they are supplemented by the protection coordinator (where available) in the country of destination;
- an interactive E-learning divided into several chapters, each one dealing with specific topics to prevent and manage risks, and to handle emergency situations regardless of the geographical context.

Before each trip abroad, employees must register online in a travel register. They then receive, based on the security analysis of the country concerned, information and advice for their upcoming trip.

A smartphone application was also rolled out in the Group to all employees on assignment to "geolocalise" their position in case of an emergency.

6.3.2.4 Promotion and development of employees

6.3.2.4.1 Main social risks and general governance

6.3.2.4.1.1 Main risks

The main social risks identified are risks related to attracting and retaining talent, social relations and discrimination/harassment.

Risks related to attracting and retaining talent and social relations are included in the Group risk map and risks related to discrimination/harassment are included in the Human Rights map.

6.3.2.4.1.2 The Group's Human Resources Policy

The Eramet Group considers that the women and men who make up its community are the main drivers of its performance. Dependent upon them is the quality of customer relations which are at the heart of the Group's business plan. Dependent upon them are future developments based on enhanced technical leadership and the fullest possible expression of their managerial and technical skills. Dependent upon them is the proficiency of management and the operational excellence of each of their fields.

The Eramet Group's Human Resources strategy is a reflection of the Group's strategy to meet the challenges facing the Group. It aims to strengthen the commitment of the Group's employees and is structured around six strong strategic areas:

1. identify, attract, retain and develop talent, which translates into the desire to attract the best talent, diversify our talent pool in order to make it more international, with a better representation of women at the managerial level, develop local talent, anticipate skills needs, develop cross-functionality, versatility and mobility to staff our projects and absorb cycles, prepare the leaders of tomorrow, develop and transmit skills;

2. develop and recognise value-creating performance by ensuring the implementation and management of the performance cycle, accompanying employee performance and strengthening the link between compensation and performance: basic, variable and long-term remuneration;
3. strengthen managerial skills, define and promote the role of managers, by associating them and training them to manage their teams;
4. participate in the implementation of a work environment that is respectful of employees and of the Group's values by aiming at 'zero accidents', through the promotion of well-being at work illustrated by fairness, transparency and exemplary management, ethics and respect for the Group's values, active management of Occupational Health issues, application of national regulations and ILO directives at all Group sites, while ensuring to all of our employees social protection to cover the major risks while preserving our competitiveness;
5. develop and promote a constructive relationship with our social partners by ensuring the implementation of a decentralised but coordinated approach, anchored in the economic realities of companies and sites, by facilitating a transparent and continuous dialogue, by ensuring that structures and organizations evolve and are exemplary in their social treatment;
6. develop the operational excellence of the HR function, by acquiring efficient and adapted tools, as part of the Group's digital transformation, by demonstrating a clear and readable organization serving its internal customers, putting the HR function at the heart of strategic and business challenges.

The Eramet Group, while having a very strong international dimension (approximately 60% of the Group's workforce works outside Metropolitan France), also relies on subsidiary companies that have significant local presence and awareness. The Group's human resources management must take this into account, while relying on unifying principles and tools common to all of the Group's companies and sites.

6.3.2.4.2 Attracting and retaining talent

6.3.2.4.2.1 Employees involved in the Group's transformation

In line with the extensive NeWays transformation programme launched in 2017, aimed at unlocking the Group's performance potential and creating a change in mindset and corporate culture to achieve profitable and sustainable performance, in September 2018 the Group launched a vast engagement survey among all its employees worldwide to enable them to express themselves in relation to 12 key areas: work and decision-making processes, organizational transformation, relationship with their direct supervisor, agility and innovation, etc. More than 6,700 employees took advantage of this opportunity and responded to the survey.



The engagement rate measured in 2018 for the Group as a whole was 67%. Around 400 team managers received personalised results for their area and have been developing action plans since December 2018 in collaboration with their teams. Those plans were rolled out throughout 2019.

The Group's main strengths highlighted by the survey are employees' understanding of the role of their job in achieving their company's objectives (91% favourable score), respectful treatment by managers (83% favourable score) and finally employee motivation to go beyond expected performance levels to help their company succeed (82% favourable score).

A new survey, planned for 2020, will measure progress in each of the areas.

6.3.2.4.2.2 A fair and competitive remuneration policy

The skills and level of responsibility of the employees are remunerated by a fixed salary in line with the experience gained and the practices observed for each trade on the market. The Group's remuneration policy aims to be fair and competitive but also tailored to the specific local factors of host countries.

One out of two managers benefits from individual variable remuneration schemes based on quantitative and qualitative annual objectives. Since 1 January 2018, the Group deployed a new variable compensation system common to all eligible managers worldwide: it is based on collective objectives (safety and financial indicators) for 60% and on individual objectives for 40%. The Group makes available a common framework for setting and assessing annual objectives. This system has been gradually extended to all Group executives and managers.

Collective performance remuneration schemes may exist in certain countries, be they mandatory legal schemes (profit-sharing in France, etc.) or schemes voluntarily implemented by the Group in accordance with local practices (profit-sharing calculated in the light of the Company's results, collective savings plans). The profit-sharing plans are often based on negotiated criteria related to safety, environment and the activity of the Company. Depending on the arrangements in force, these bonuses may be invested in savings schemes on advantageous terms.

We conduct pay scale analyses every year to ensure our remuneration packages are competitive relative to practices in other companies operating in the same sectors. New compensation surveys were carried out in 2019 to evaluate the competitiveness of the compensation policy with respect to the market: blue & white collar workers, technicians, supervisors and young graduates in France, Senegal.

In each country in which the Group operates, the remuneration policy implemented aims to reward individual and collective performance, while adapting to the local context.

In response to the expectations expressed in the commitment survey in 2019, the Group further rolled out in 2019 an e-BSI (individualised social assessment) which allows all employees of the companies in metropolitan France to access a dedicated website that presents and explains each of the components of the compensation package: salary, contributions, employee benefits and fringe benefits. This system will be gradually extended internationally.

Personnel costs – social security contributions

Salaries represent the largest component of staff remuneration.

In 2019, personnel costs for the Eramet Group amounted to €723 million, compared to €702 million in 2018.

More than 8,500 employees, or 65% of the workforce, benefited from a revaluation of their fixed salary in 2019, whether through a general increase or an individual merit-based increase.

Social benefits

As part of its human resources policy, the Human Resources, Health, and Security Department seeks the most appropriate solutions for its international activities on the personal insurance market, and subscribes to insurance schemes able to guarantee the best social protection against the major risks (health, welfare, professional assignments) to which employees are exposed when carrying out their duties.

In line with the Group's agreements relating to the provision of insurance against major risks and the uncertainties of life, the Eramet Group wanted all of its employees in Metropolitan France to benefit from additional health insurance. In France, a new collective agreement was signed in December 2016 by all the organizations representing staff. This agreement ensures that social protection is brought into line with legislation on responsible contracts, but also improves the reimbursement of certain costs, such as pharmacy, dental implants, alternative medicine and laser eye surgery.

In the area of pension insurance, a new agreement was signed for France in June 2016. It includes an improvement of death covers, the introduction of a "Help for helpers" cover, allowing the employees concerned access to a solution where they can talk to professionals and receive help and advice as appropriate.

Provisions are set aside for retirement benefits, severance payments, medical coverage, pension plans and other commitments for active or retired employees in accordance with the conventions in force in each country.

The portion not covered by insurance companies or pension funds, in particular for US and Norwegian companies, is also provisioned (defined benefit plans in general). The specific commitments for these schemes are in the United States, Norway, New Caledonia and France. Other plans are defined contribution plans where employer contributions are recognised as an expense in the period to which they relate. The main quantitative assumptions used to calculate these commitments are detailed in the consolidated financial statements.

Employees in the metropolitan France scope benefit since 1 July 2019 from a complementary retirement scheme (PERO), fully funded by the employer, which allows them to save towards supplementary retirement throughout their career.

Finally, an additional pension plan (Article 39) for a group of managers is also fully funded. The estimated actuarial value of the plan for active beneficiaries was €40 million as at 31 December 2019. Pursuant to the French PACTE law, the scheme stopped accepting new beneficiaries on 31 December 2019 and the rights of the existing beneficiaries became fixed and unchangeable.

Employee stock ownership plan

In order to build Group membership in all areas of the world where it operates, and share the created value, the Eramet Group has opted, since 2009, for the deployment of global bonus share plans. This programme, called Erashare, originally consisted of allocating 5 bonus shares to each of the Group's employees, regardless of the country of activity, Division, occupation or level of responsibility.

Since July 2011 in France and Italy, and since July 2013 in other countries, employees have benefited from all the rights attached to the Eramet shares: voting and dividend rights. An information leaflet on Erashare was also prepared in the nine languages used within the Group to support the worldwide implementation of the plan.

Ten new bonus share plans were implemented from 2010 to 2019 with the same scope and allowed the allocation of two additional shares each year to more than 12,000 employees.

Employee incentive plans

In Metropolitan France and New Caledonia, profit-sharing agreements are regularly negotiated and signed with the social partners. They complement, where they exist, the regulations governing participation. The incentive is paid to members of staff with more than three months of service as at 31 December in an amount that is partly uniform and partly dependent on gross annual remuneration. In 2014, the Group's Human Resources management specified, in a framework memorandum, the three components that the Eramet Group wishes to find in the new agreements renewed from 2014 onwards:

- Group financial result, with a criterion common to all entities in France;
- financial result of the entity;
- operational criteria specific to the entity (safety criterion, service rate, reject rate, variation in WCR, etc.).

In 2019, Group companies in mainland France paid profit-sharing for the year 2018. A gross amount of €10 million was paid to the beneficiaries concerned (gross value). In addition to this amount, more than €2.9 million was paid out in profit sharing by the SLN in New Caledonia to the employees concerned.

Employee savings plan

In Metropolitan France and New Caledonia, Eramet Group employees can sign up to a Company Savings Plan to build up their savings. The Savings Plan may receive the incentive bonus, profit sharing, as well as voluntary payments made monthly or on a one-off basis by the employees. Group

companies participate in the savings plan through a system of matching the sums paid by employees (the methods for paying the matching contribution vary from company to company).

A range of diversified corporate mutual funds (*fonds communs de placement d'entreprise* or FCPE) is offered to Group employees. A collective retirement scheme also exists in the form of a PERCO (Collective Retirement Savings Plan), into which the payments are paid.

As at 31 December 2019, 6,727 employees and former employees of Eramet in mainland France were signed up for an Employee Savings Plan, with total assets representing roughly €93 million, or €13,885 per saver. Total assets are divided between the FCPE of the PEE/PEG (84% of the assets) and the PERCO (16%). In 2019, the Group's French companies paid approximately €3.2 million in contributions (gross value) to the Group Savings Plan (PEG) and the PERCO, or €608 per employee on average.

6.3.2.4.2.3 Employee development and career management

6.3.2.4.2.3.1 Career management process

One of the Group's key values and a structural theme of its HR Strategy is to ensure the personal growth of its employees.

The Group's Career and Mobility Development Charter defines the roles and responsibilities of each person (employee, manager and HR) so that the development and career paths of the Group's men and women can be promoted and encouraged within a clear, defined and shared framework, and with the help of tools and processes.

It places particular emphasis on promoting the initiative and the proactivity of the employee in his or her own career development.

In order to optimally implement these career developments, management processes are set up and run throughout the year.

The Annual Appraisal Interviews make it possible to identify mobility objectives and to take them into account both at monthly HRD network meetings and during People Reviews. These Talent reviews are organised at site, Business Unit, entity and even country level. They allow the identification of people to be developed, their potential, etc.

Other meetings are organised by business line according to the needs expressed by operational staff, making it possible to review these development needs in a cross-functional manner, and to assess medium-term needs and available business resources by business line.

These exchanges are consolidated at the Division level during the reviews of Division management, thus making it possible to approach the Annual Appraisal Interviews with concrete development elements to be submitted.

A review of senior executives and holders of key Group positions is performed regularly with the Executive Committee.

A review of succession plans for key positions in the organization is carried out on the occasion of the Selection Committee or Remuneration Committee of the Boards of Directors of Eramet or its subsidiaries.

6 Non-financial performance statement

Social and societal commitments of the Group

An annual cycle



Furthermore, a pilot programme concerning the implementation of an SWP (Strategic Workforce Planning) process was conducted in 2019 on mining businesses. This process was applied to the Maintenance segment and will be extended to the other Group businesses. The full potential of this process will be optimised during the implementation of a single Group Jobs and Skills Repository on all its Business segments and which will be rolled out under the plan to overhaul the HR information systems, Atlas (SIRH global Group).

Lastly, the Professional Interview (set up in the framework of the application of the Act of 5 March 2014 on vocational training, employment and social democracy – Article L. 6315-1 of the Labour Code) for all employees in Metropolitan France has been deployed since 2015. It is devoted to the prospects for professional development, in particular, in terms of qualification and employment. It focuses on the employee's career path, career development, and training needs.

6.3.2.4.2.3.2 Performance evaluation

Successful mobility or career development involves the combination of three elements:

- performance;
- existence of an opportunity;
- willingness to demonstrate functional and/or geographical mobility.

As the cornerstone of operational improvement plans, performance is assessed individually in the context of Annual Appraisals based on objective evidence, with each assessment based on factual evidence.

In 2019, 7,269 employees (including managers as well as non-managers) benefited from an Annual Appraisal Interview. Many sites have extended the benefit of this scheme to non-management staff.

The supporting material for the Annual Appraisal Interview has been modified to take into account performance appraisal in the context of the responsibilities of a position, and the assessment of professional behavioural competencies.

Following the need to improve performance tracking and assessment, the new format developed in 2019 for the 2019-2020 assessment campaign now includes the functional manager in the assessment process.

The Talent@Work tool of the Objectives module in which the Annual Appraisal Interview is recorded allows the manager to create goals throughout the year for new entrants recruited from outside or inside the Company and to adjust the goals during the year if necessary. Goals may be adjusted to reflect a change in employee priorities or to complete the results and highlights, or even the achievement rate throughout the year in order to facilitate the assessment at the next annual interview.

The now widespread use of the Annual Appraisal Interview form in Talent@Work means a significant improvement in access to information on expressed mobility wishes, better consideration of them in the career management and people review, and an optimised follow-up.

6.3.2.4.2.3.3 Employer Brand

A study was conducted in 2018 which involved the Group's employees and intended to define the Group's Employer brand.

This important work carried out in collaboration between the HRd and the Communications Department has been used to characterise what currently represents the missions

offered by Eramet as well as the "employer" contract proposed (what the Group expects from its employees and what they can expect from the Group by joining it). Illustrated by visuals representing the Group's employees and a signature, "*Laissez votre talent battre plus fort*" (Allow your talent to shine), this campaign began early December. A new booth at the Schools forums attended by the Group promotes the intensity of the missions proposed at Eramet.

The Talents page of the Group's website has been redesigned to emphasise the strengths of the Employer brand. The site's recruitment space has also been redesigned to reflect the key messages of the Employer brand.



6.3.2.4.2.3.4 Recruitment and Onboarding

The Recruitment module, developed in the HRIS, enables HR and managers responsible for recruitment, through internal or external mobility, to be able to track the progress of the process, from job description to filling the position.

To support managers in their role as career managers, a training module on recruitment and mobility is available as part of the training courses offered by the Group.

This module enables managers and HR staff to be trained in the same selection interview tools, to make their choices in an objective and transparent manner, to ensure high-quality feedback to internal and external candidates, and to educate their participants on the subject of non-discrimination.

Moreover, the use of a personality test by appropriately trained and authorised personnel within the HR teams makes it possible to complete candidate evaluations in the context of recruitments or certain mobilities.

In order to facilitate the integration of employees into the Group, the Eramet Group developed an Onboarding module integrated into the Group HRIS, which is currently being deployed at Group level. The Onboarding module is a platform which is accessible to external employees as soon as they are recruited, making it possible to create a privileged link between the future employee and his or her future working environment (information on the Group and its business lines, welcome message from the manager, introduction to future colleagues, schedule of integration programme, etc.).

6.3.2.4.2.3.5 Vocational training

The Group designs training courses for Group employees:

- to facilitate their integration by giving them the keys to understanding the organization and management processes of the Group;
- to develop their skills by giving them access to business and management programmes;
- to promote exchanges of best practices among participants;
- to build development paths.

Integrate, improve know-how, raise awareness of specific risks, share experience and best practices, develop cross-functionality at Group level, foster the deployment of managerial methods, further strengthen the Group's expertise and technical leadership: these are the points of the training programmes and of the training effort initiated by the Group, each year, at all its sites and locations.

In relation to vocational training for its employees, the Eramet Group also prioritises safety training and business skills development, which are aimed in particular at ensuring better control of processes and their environment (project management, communication, change management, continuous improvement of performance, etc.).

The Mining and Metals Division has extended a significant managerial training programme (Leadercoach) to people in key positions based on an initiative that was successfully deployed at SLN.

The High Performance Alloys Division has built a significant programme known as "*Manager Autonome*" (Self-reliant manager) intended for all supervisors to accompany the deployment of WCM (World Class Manufacturing) practices on its industrial operations.

A Mentoring Programme was launched in 2018. It has enabled 14 managers with key positions in the Group, selected by the Executive Committee and monitored over a one-year period to support and facilitate the transition to their new responsibilities, to develop and support potential young talents, to improve the relationship between these managers and Executive Committee members, and to support the NeWays transformation. A second group will begin in early 2020.

In November 2019, the Eramet Leaders Program (ELP) brought together 23 Group managers for a week for its 15th year, bringing the number of executives who have participated in this programme since 2006 to 311, enabling them to build a network, improve their knowledge of the Group, exchange with managers on strategic development themes etc.

The development programme for the Group's executive managers (EDP – Executive Development Program), which began in 2015, continued in 2019 with a new format that will be offered for the programme's fourth year. This programme takes place over several months and is designed to strengthen the leadership of participants and prepare them for their advancement within the Group.

The digitalisation of the training offer also continues.

Several e-learning programmes were rolled out in 2019 on the topics of safety, CSR or again the DPGR and others are being rolled out.

A new impetus was given to the Eramet Group Ethics awareness-raising training through a continuous education programme that was proposed during the year to 2,419 employees.

In 2019, there were 10,629 registrations for e-learning training programmes that were taken for a completion rate of 55% and nearly 9,650 on-line training hours.

Overall, in 2019, Eramet employees received more than 410,474 training hours, approximately 37 hours per employee for the year. Almost 11,064 employees, or 84% of the total workforce, benefited from training in 2019 (compared to 472,000 hours in 2018, which corresponded to 37 hours per employee, with almost 9,000 employees trained last year).

6.3.2.4.3 Social dialogue close to field realities

The Eramet Group's social policy is based on complementarity between central and local bodies, close to the realities of our jobs and our activities and the geographic zones in which the Group is located.

It is based on the clearly announced policy to:

- strongly involve the Group's management (e-learning to raise social dialogue awareness, information seminars and exchanges, development, mobility and career growth within and between Divisions);

- connect employees with the life of their site and the Group through clear and regular information (Group intranet, online films and videos, regular company and site newspapers, induction days for new recruitments);
- to communicate with social partners, both formally (remuneration policy, training, health and social protection, employment management, quality of life at work) and on a daily basis at the sites.

6.3.2.4.3.1 Social implications of Eramet's strategy

2019 was socially marked by numerous transformative projects, such as the implementation of new representative bodies, which have strengthened the quality of social relations, an essential factor in competitiveness.

The majority of Eramet Group companies have employee representatives who are mostly elected. The Group takes account of the diversity of the legislations in force with respect to social dialogue everywhere it is located. Multiple in-depth and didactic exchanges on strategic issues with the social partners in the organizations and countries concerned made it possible to explain the technical and strategic choices and their organizational impacts.

In addition, the two annual meetings of the European Works Council and the Group Works Council provided opportunities for General Management and social partners to exchange information and views on the social and financial situation, as well as on issues related to the Company's social responsibility and on the Group's research and investment guidelines. Furthermore, interim meetings with the executives of these two bodies allow regular exchanges on the Group's current affairs.

6.3.2.4.3.2 The deployment of the new organization of work at the SLN

At SLN (New Caledonia), management and trade unions worked together to set up target organizations which have been effective since March 2019, with a repositioning of supervisory personnel on the new positions.

Following the signing of the agreement on the organization of work at 147 hours at the end of 2018, mining centres have changed their work rhythm. An agreement was also signed in April 2019 on the transition to four teams starting from May 2019 on the Doniambo Plant, and since September 2019 for the Népoui washing plant.

The 2020 social roadmap will mainly concern continued training to accompany employees on the operation of these new organizations and the negotiation of agreements on career paths and compensations etc.

6.3.2.4.3.3 Dynamic social dialogue

As in 2018, 2019 was rife with labour-related events in France with in particular the signature in February of the agreement on social dialogue and the collective negotiation by all CGT, FO, CFE-CGC and CFDT unions, which proposes methods of operation that go above and beyond the legal framework, such as training management in social dialogue and supporting future elected officials in their



new responsibilities; social dialogue on the ground with local representatives; the establishment of health, safety and working conditions committees at all industrial sites; and other measures adapted to the Group's context and enabling quality social dialogue.

Professional elections took place on each of the sites and the new bodies began to gradually organise themselves.

At the level of each of the subsidiaries, management and staff representatives have initiated discussions and even negotiations on recently emerged topics such as: Gender equality – Women, Quality of life at work, Teleworking etc.

More than 70 agreements were signed in 2019. These mainly concern remuneration, profit sharing and participation, and working time.

6.3.2.4.4 Equal opportunities – measures to foster non-discrimination and diversity

For Eramet, diversity is a performance and transformation driver and source of personal growth for all employees. In this way, the Group wishes to offer a work environment based on respect for differences and better community living.

The promotion of diversity is based on a deep-seated conviction: stereotypes are at the root of all forms of discriminations. It is therefore our duty to fight them to enable everyone, regardless of their gender, age, disability, sexual orientation or religious belief, social or ethnic background, to thrive in the Group's different businesses.

Conscious of the fact that diversity and inclusion are long-term ambitions, the Group developed its first roadmap in 2019 with actions that will continue over several years. Actions already initiated include the integration of diversity in recruitment processes or talent management with neutral offers, "non-discriminatory hiring" training for management, awareness-training for recruitment firms etc.

6.3.2.4.4.1 Encouraging the feminisation of managers and respecting equal pay between women and men

Women now account for 17% of the total workforce of the Group, specifically: 8% of operators, 26% of supervisors, technicians and employees, and 23.8% of management.

Eramet encourages the feminisation of business sectors, that are traditionally masculine, and wants to guarantee women equivalent job conditions as men. Efforts are thus being made locally to promote gender balance inside teams and in particular technical professions, presentations to middle and secondary school pupils and students, adapting facilities to accommodate female staff and promoting the provisions set out in the collective agreements for gender equality signed on numerous sites in metropolitan France.

The goal to increase the proportion of women in supervisory positions integrated in the Group's CSR roadmap is applied worldwide. The goal is to change from 22% of female managers in 2018 to 30% by 2023. The target set for 2019, 24% was reached at the end of the year with 23.8% of female managers.

Female representation on the Executive Committee is 38%.



% OF WOMEN IN THE TOTAL WORKFORCE	17%
% of women in management	23.8%
% of women among new permanent contract recruitments in 2019	26%
% of women among new management permanent contract recruitments in 2019	30%
% of women on the Executive Committee	38%

Since October 2018, the "WoMen@Eramet" network has been working to promote gender balance in the Company, and in particular more women in the workforce. In 2019, the network was organised with the appointment of a governing body and commissions in charge of proposing actions and mechanisms, organising events and exchanging with other networks. The early works have already resulted in the onboarding booklet, the special web page on the Group intranet, onsite breakfast briefs, etc. A study has also been conducted with a sample of key managers to bring them around the project, determine with them the key success factors and the needs they might have to contribute to them.

In the context of the 5 September 2018 law and the resulting application decree of 8 January 2019 aimed

at eliminating the pay gap between men and women, Eramet published in 2019 the gender equality index for its two companies in metropolitan France which employ more than 250 employees: Aubert & Duval⁽¹⁾ and Erasteel SAS⁽²⁾. Following the results, dedicated action plans were put in place.

6.3.2.4.4.2 Work/life balance

Attention is paid during the Annual Appraisal Interview to the prevention of psychosocial risks. Indeed, part of the exchange between the employee and his/her chain of command is devoted, at this important annual meeting, to the organization of work, the workload and work-life balance.

(1) Interforge is included in Aubert & Duval, since an existing UES with AD and Interforge are integrated in all Aubert & Duval negotiations. Index published on 1 March 2019

(2) Erasteel SAS includes the Paris, Chalon and Commentry establishments.

In this area too, the Group promotes a number of local initiatives of a different nature but intended to promote this necessary balance: a listening service provided by an occupational psychologist, sabbatical leave was granted to employees wishing to devote time to a personal project, teleworking systems and agreements have been deployed in several entities, measures favouring parenthood: organization of working time, allocation of CESU cheques (Cheques for Universal Employment Services) for the employment of domestic help (child care, tutoring, housework, etc.), inter-company nursery, concierge services, and workshops on the theme of quality of life at work, led by professionals (nutrition, sleep, sophrology, etc.) have also been implemented at some sites.

6.3.2.4.4.3 Employment and integration of persons with disabilities

The Eramet Group is paying attention to the employment and integration of people with disabilities.

The Group has 279 employees with disabilities (data from the CSR survey). This count is probably underestimated, as the regulations of certain countries do not permit the accounting of employees with disabilities.

At most Group sites, various actions are regularly undertaken to promote the employment of people with disabilities: adapting premises, access ways and workstations, awareness campaigns, financing of hearing aids, and contributing to organizations or associations dedicated to helping people with disabilities, participating in forums etc.

Subcontracting activities are also carried out by work centres or associations employing persons with disabilities. The accessibility of the premises is also a topic discussed at many of the Group's sites.

6.3.2.4.4.4 Youth, Seniors and Intergenerational

One of our priorities, highlighted in our Human Resources policy, is to participate in preparing young people for working life through all the school/company programmes: internships, apprenticeship contracts, work-study agreements, International Volunteers in Business programme (VIE), theses, etc. In this context, in 2019, we welcomed 1,600 young people, i.e. nearly 12% of the Group's workforce. The commitment and actions taken across all sites contributed to this significant increase.

Since 2013, Eramet has been involved with numerous major groups, and within the framework of the AFEP (French Association of Private Enterprises), for the employment of young people. The Group is a signatory to an initiative called "*Jeunes et Entreprises*" ("Young People and Companies").

With a strong commitment from the Trappes research centre (Eramet Ideas) and its teams, Eramet participates in numerous forums for schools in metropolitan France or in the countries in which it operates. This is an opportunity to introduce the Group and its businesses, to exchange ideas with young people and to advise them on their career directions. Many of the Group's employees also volunteer, for the most part in teaching courses, to present the Company or to deliver specialised technical courses. Some of these

experts are also involved in school guidance councils or their board of governors. Scientific exchanges are also carried out on certain projects with the laboratories of major schools or universities, and teachers.

The Group is also very involved in partnering with major schools through the payment of grants (graduation trips, etc.), the apprenticeship tax, in particular, to the National Chemical Engineering Institute in Paris (Chimie ParisTech), the National School of Geology (ENSG), the National School of Mines in Ales, the University of Montpellier (Geology), the Mines ParisTech (ENSMP Soil and subsoil specialisation), the Central School Supélec (Energy specialisation), etc.

SLN engages in a partnership with the preparatory classes of the Jules Garnier secondary school in Noumea. The SLN competitive exam proves valuable for the young New Caledonians who end up continuing their scientific studies in Metropolitan France.

With regard to the employment of seniors, across the Group as a whole, 35 people aged 10 years younger than the statutory retirement age were recruited on a permanent or fixed-term contract.

6.3.2.4.4.5 Employees and compliance with ILO fundamental conventions

Eramet complies with the applicable regulations in the countries where the Group operates.

As the Group points out in its Ethics Charter and its Human Rights policy, Eramet respects the international standards of the International Labour Organization and, more generally, complies with the principles of international law relating to human rights. In particular, the Group refrains from using any form of forced labour or child labour, either directly or through its suppliers or partners, and respects the right of association.

The Group also ensures fair treatment of all its employees in terms of professional equality by fighting against discrimination at work, ensures the integrity of those present at each site, and respects the moral integrity of each employee. The Group ensures the quality of human relations within work teams. In particular, it engages in the fight against all forms of violence and helps promote respect for others and fellowship in working relations.

During the annual collection of feedback from the Group's sites on non-financial matters, the Group's various sites are asked whether they comply with the provisions relating to the fundamental ILO Conventions (freedom of association or the right to collective bargaining, the abolition of child labour, the fight against illegal work, the elimination of discrimination at work) and it is important to note the excellent feedback (96% positive replies out of 51 sites surveyed in 2019) demonstrating the attention paid to this subject.

The Group wants to make an even greater commitment to respect for Human Rights, setting the objective of becoming a benchmark company in terms of respect for Human Rights in our field of activity by 2023. The elements concerning this Group approach are presented in section 6.3.1 "Commitment to Human Rights".

6.3.2.5 Social indicators

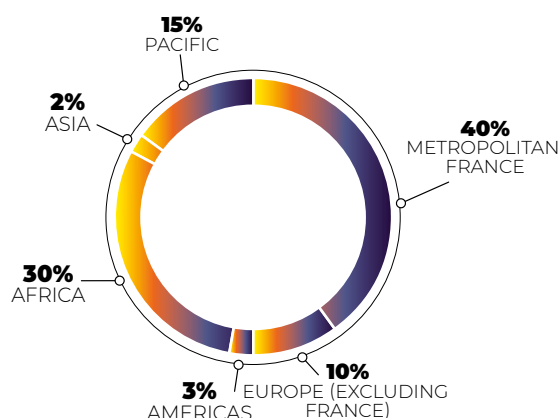
6.3.2.5.1 Total workforce and breakdown by geographical area

As at 31 December 2019, the Group employed 13,097 employees in 20 countries, compared to 12,705 employees at 31 December of the previous year. The Group's HR reporting in force concerns the consolidated workforce and the managed workforce.

NUMBER OF EMPLOYEES AS AT 31 DECEMBER (PERMANENT AND FIXED-TERM CONTRACTS)

	2017	2018	2019	2019 breakdown
Metropolitan France	5,049	5,089	5,278	40%
Europe (excluding France)	1,218	1,221	1,279	10%
Americas	250	265	342	3%
Africa	3,746	3,801	3,925	30%
Asia	298	381	262	2%
Pacific	2,029	1,948	2,011	15%
TOTAL	12,590	12,705	13,097	100%

Workforce registered in 2019 by geographical area



6.3.2.5.2 Breakdown of total workforce by Division and BU

The registered workforce increased by 2.7% between 2018 and 2019: it increased for the Holding company (+19.3%) and for the Mining and Metals (+2.1%), and for the High Performance Alloys Division (+1.7%). The increase in the number of employees is largely due to the increase in the number of employees with permanent contracts in the support and reorganization functions, and in the Lithium BU.

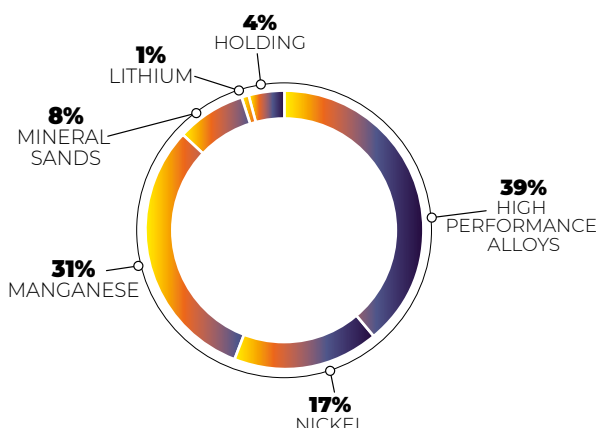
	2017 restated ⁽³⁾	2018	2019 breakdown	
Holding⁽¹⁾	386	420	521	4.0%
High performance alloys	5,021	5,092	5,178	39.5%
Aubert & Duval	3,942	3,984	4,141	31.6%
Erasteel	966	987	946	7.2%
Other ⁽²⁾	113	121	91	0.7%
Mining and metals	7,183	7,193	7,398	56.5%
Nickel	2,320	2,282	2,225	17.0%
Manganese	3,909	3,923	4,038	30.8%
Mineral sands	900	921	995	7.6%
Lithium	54	67	140	1.1%
TOTAL	12,590	12,705	13,097	

(1) Holding: Eramet SA, Eramet Services, Eramet Ideas, Eramet International.

(2) Other: Forges de Monplaisir and Brown Europe.

(3) According to the new organization.

Breakdown of the 2019 workforce by Division and BU



6.3.2.5.3 Breakdown of total workforce by contract type

As at 31 December 2019, 95% of Group employees had permanent employment contracts.

The technical nature of the mining and metallurgy professions requires a long professional training period, and the use of short-term employment contracts remains very minor.

Employees on fixed-term contracts within the Group have the same rights and benefits (pension systems, healthcare costs, profit share, etc.) as employees on permanent contracts.

WORKFORCE BY CONTRACT TYPE

	2017	2018	2019	2019 breakdown
Permanent	12,113	12,098	12,393	95%
Fixed-term	477	607	704	5%
TOTAL	12,590	12,705	13,097	100%
Temporary workers (in full time equivalent)	900	930	841	

6.3.2.5.4 Breakdown of total workforce by socio-professional category

Eramet extended the French notion of socio-professional category (SPC) to all its entities, which share the following definitions:

- Workers: workers (blue collars);

- Supervisory staff: clerks, technicians, foremen (white collars);
- Management: executives, managers, post-graduate staff, civil engineers (white collars).

BREAKDOWN OF WORKFORCE BY SOCIO-PROFESSIONAL CATEGORY

	2017	2018	2019
Workers	53%	52%	51%
Supervisory staff	33%	33%	33%
Management	14%	15%	15%

6.3.2.5.5 Average age and age distribution

The average age of Group employees was 41.9 years as at 31 December 2019.

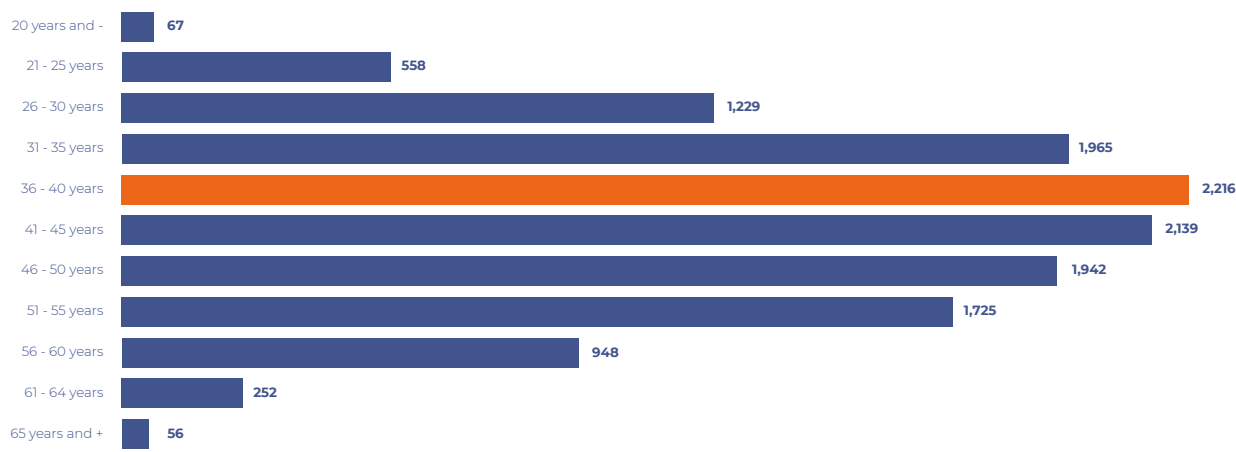
Workers	Administrative, Technical and Supervisory staff	Management
40.8	42.9	43.4

Employees aged 50 and over represent 25% of the total workforce; those aged 30 and under represent 14% of the total workforce.

Eramet carefully monitors the evolution of the age distribution of its managerial staff, particularly in order to anticipate the retirement of its key employees. Since the implementation of the People Review process at the local, Division and Group level, Eramet has succession plans updated every year for all its key positions.

Age pyramid of the Group

Age pyramid at 31-12-2019



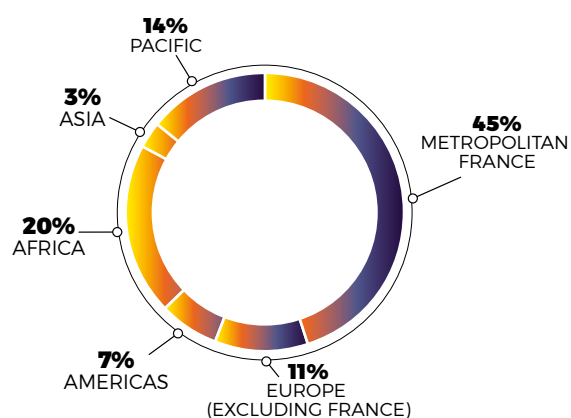
6.3.2.5.6 Recruitment

Group companies recruited, excluding transfers between Group companies, 1,529 employees in 2019, up 22% compared to 2018.

NEW RECRUITS BY REGION (EXCLUDING TRANSFERS WITHIN THE GROUP)

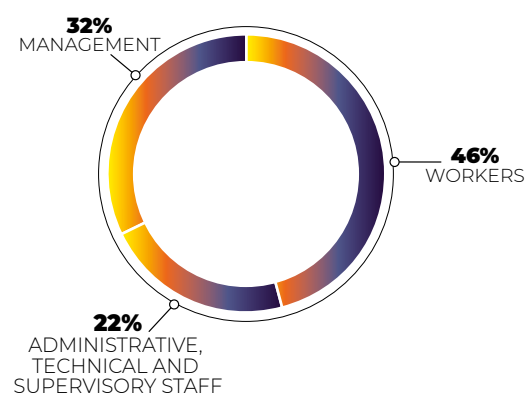
	2017	2018	2019
Metropolitan France	544	579	715
Europe (excluding France)	135	114	123
Americas	67	42	105
Africa	166	305	318
Asia	23	171	53
Pacific	19	44	215
TOTAL	954	1,255	1,579

New recruits 2019 excluding transfers



The external recruitment of 885 permanent employees is divided into the following professional categories:

Permanent contract recruitments 2019 excluding transfers



Since 1 January 2013, Eramet has prioritised the recruitment of permanent employees under the age of 30 and over 55.

Permanent contract recruitments 2019		
	< 30 years	> 55 years
TOTAL	292	35
% of total permanent contract recruitments	33%	4%

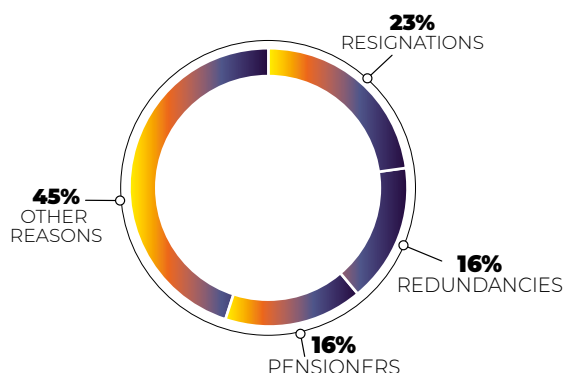
6.3.2.5.7 Departures

In 2019, the total number of departures (this concept includes resignations, redundancies, retirements and terminated contracts, but does not include Group transfers) was 1,186, of which 278 were resignations (23% of departures), 194 were redundancies (16% of departures) and 185 were retirements (16% of departures). The other reasons for leaving (45% of departures) mainly consisted of end of fixed-term contracts.

DEPARTURES BY REGION (EXCLUDING TRANSFERS WITHIN THE GROUP)

	2017	2018	2019
Metropolitan France	592	514	660
Europe (excluding France)	85	109	113
Americas	140	32	32
Africa	208	244	201
Asia	29	85	34
Pacific	102	123	146
TOTAL	1,156	1,107	1,186

BREAKDOWN OF DEPARTURES (EXCLUDING TRANSFERS) BY REASON IN 2019



- in China, Gabon, the United States and Sweden: 40 hours per week over five days;
- in Senegal: 40 hours per week;

Part-time workers

Part-time employment contracts exist in many countries where the Group operates. The number of staff concerned by this arrangement represents 1.6% of the total number of staff.

As at 31 December 2019, 203 people were part-time, two thirds of whom were women.

80% of part-time employees, or 162 people, work in France and they account for 3% of the total workforce in Metropolitan France.

Organization of work

In 2019, **57%** of employees worked fixed days, while 43% worked shifts.

Absenteeism (data from the CSR survey)

The reasons for absence taken into account here are random and unplanned absences, such as sickness, maternity, accidents at work, commuting and unjustified absences.

The average absenteeism rate for the Group was 2.8% in 2019. The average absenteeism rate in metropolitan France is 3.8%. For the rest of Europe, the average rate is 2.8%. The Americas has a rate close to 1.6%. Africa has an average rate of 1.3%, Asia 1.6%. Finally, the average rate recorded in the Pacific zone is 3.2%.

6.3.2.5.8 Labour organization

Working time

The organization of working time depends on the companies, the nature of their activities and their location and is defined in order to best meet the requirements of the activity and the wishes of the employees. Wherever it operates, the Eramet Group complies with legislation on working time regulations. As an indication, the working hours are:

- in Metropolitan France: 35 hours per week;
- in Norway: 37.5 hours per week;
- in New Caledonia: 38 hours per week;

6.3.3 Commitments to host communities

6.3.3.1 Objectives, organization and instruments

Eramet places its social commitment at the heart of its vision, especially its contribution to local populations. While the Group has previously focused on limiting and compensating the impacts of its activities and ensuring societal acceptability, it is now seeking to build a partnership relationship, a move which is appreciated by local residents.

This challenge is addressed by objective 5 of the Roadmap, "Be a valued and contributing partner of our host communities". A five-year programme in respect of host communities is implemented by the Divisions for this purpose. The achievement of the objective will be measured against two targets by 2023:

- 100% of sites have established a mechanism for dialogue with local stakeholders;
- 100% of sites have implemented an investment programme to contribute to local development, with a focus on actions in favour of young people.

In this perspective, the Group formalised in 2019 the three pillars and six fundamentals of Eramet's community relations, modelled on the standards and good practices of the International Finance Corporation (IFC, World Bank Group). These internationally recognised and proven standards adopt a proportionality approach according to which the required measures must be designed to match the challenges of the sites. An internal procedure that combines all the requirements applicable to the sites has also been developed. It will be rolled out in 2020 to supplement the Eramet management system.

For Eramet, a contributive and partnership relationship with communities has to be built on three pillars:

1. **management of risks and impacts on communities:** Risk prevention and management of the impacts inherent in mining and metallurgy activities is a fundamental aspect of the relations maintained with local populations. These risks and impacts are identified and covered by containment measures in

accordance with the "mitigation hierarchy" which entails avoiding, reducing and compensating these impacts. Complaints handling mechanisms available to local populations ensure that any incident or concern can immediately be brought to the attention of the entity. These incidents are then handled through corrective actions and used as feedback for the continuous improvement of the management system;

2. **dialogue with local stakeholders:** Whether it concerns the roll-out of operations, risk management measures or again local development support programmes, Eramet and its subsidiaries make sure they continuously inform and consult nearby populations. This is done through various ways: organising public information meetings or open days at facilities, setting up joint committees, holding public consultations, distributing written publications etc. For sites developing new activities, dialogue is essential for presenting the characteristics of projects and involving communities in the definition of measures to contain the impacts affecting them. In all cases, the subsidiaries focus on ensuring that the dialogue is culturally appropriate and also inclusive; they also make sure that the vulnerable people are identified and included in the exchanges;

3. **contribution to local development priorities:** Eramet aims to make the Group's activities a source of net benefits for local populations. Through employment, local sourcing and subcontracting, the Group's subsidiaries constantly strive to increase their contribution to the economy of the territories where they are based. Above all, the Group's sites develop community investment or sponsorship programmes aimed at supporting local development priorities. In a partnership approach, these priorities are identified and monitored collectively: support to economic activities, actions to promote education, health, sport, culture and the environment or construction of infrastructures.



Relations with host communities: Eramet fundamentals

3 pillars and 6 fundamentals of community relations of the Eramet group

1 CONTROL risks and societal impacts

Initial state / assessments / control of societal impacts
Grievance mechanism

2 DIALOGUING with communities

Mapping of local stakeholders
Dialogue mechanisms

3 CONTRIBUTING to local development priorities

Employment, purchases, local subcontracting
Community investment/sponsorship

On large industrial sites, this issue is most often addressed by Health, Safety and Environment managers, as the impacts on local residents are mainly related to environmental issues.

In the case of mining activities, the management of community relations covers much broader themes. For this reason, the Group's mining sites have resources dedicated to these societal issues, which are essential for the development of responsible mining operations. These professionals are part of a network managed by the Group's Communication and Sustainable Development Department. This network populates a platform to exchange good practices in order to increase the Group's internal expertise on community relations.

6.3.3.2 Control of impacts and risk prevention for local communities

6.3.3.2.1 Risks for the safety and security of local populations

The presence of industrial or mining facilities may constitute a source of risks for nearby populations. As Eramet pays particular attention to preventing these risks as early as possible in its industrial or mining projects, an industrial risk prevention approach is continuously implemented by the Group, as detailed in section 6.2.1.4. The sites concerned control access to the sites, set up barriers and information signs, and some sites also use security guards.

Information on risks for the safety of nearby residents is also presented through dialogue with populations. In 2019, as in every year, Setrag (Gabon) organised large-scale communication campaigns to raise awareness of the risks of collisions between trains and people due to non-compliance with safety instructions. More than 30,000 people were given awareness training in primary schools, secondary and middle schools located in a radius of 400 km of railway tracks. A comic strip containing illustrations of accident scenarios was produced and distributed. Setrag also made significant investments aimed at improving the safety of people living near railway tracks, by building over four kilometres of protective walls around two train stations and erecting five pedestrian bridges for safe crossing of the railway tracks.

Security measures protecting the physical integrity of employees and infrastructure, such as security guards, are governed by the Security Policy adopted by Eramet. This is in accordance with international law, French law and the law of the countries in which Eramet operates. As part of this policy, the prevention of security risks first requires dialogue and a relationship of mutual respect with local residents. Training and rules governing the use of force and the equipment of the security personnel are decided, designed and controlled by a Site Security Officer, who acts within the framework defined by the Group Security Director. The use of force is strictly limited to cases of extreme necessity and must be proportional to the threat.

6.3.3.2.2 Land purchases and population displacements

The activities of certain Group mining sites require the acquisition of land from communities that reside or carry out economic activities (agricultural or commercial) in the area. These operations may present risks of Human Rights violations (property rights or the right to an adequate standard of living of these communities). The sites concerned have therefore set up dedicated teams on the relevant sites, to assess, talk to the locals and keep potential impacts under control. Displacement activities are carried out in accordance with the principles set out in the Performance Standard of the International Finance Corporation (World Bank Group) relating to these rehousing activities, with in particular the introduction of resettlement action plans and attention paid to restoring the livelihoods of the displaced populations.

This is the case of Grande Côte Operations in Senegal, which performs mobile mining activities as part of the mining concession granted by the State. Due to the particular issues of this site, the Environment and Communities department of this site has a specialised team, in charge of defining, in collaboration with communities, methods of displacement (compensations, relocation sites, configuration of welcome infrastructures etc.) In 2019, nearly 630 people in the village of Foth were rehoused. Located in the neighbourhood of a first rehousing village that had become home to the people displaced by GCO in 2016, this second village welcomed 78 new families in July. The village is equipped with infrastructures selected with the local people: homes with access to water and solar lighting, place of worship, water well equipped with a water tower to provide water to the village and a household waste management system. The school on the first resettlement site has been extended to welcome new pupils. GCO also helps to restore the livelihoods of the displaced people through capacity-building programmes or the purchase of seeds and the construction of a community market. The entire process was managed by the Resettlement Commission chaired by the Prefect and consisting of the departmental services and community representatives. It ensures the involvement of the concerned parties throughout the process.

In Gabon, as part of Setrag's project to restore the Trans-Gabon railway line, work is planned on the different points of railway from Libreville to guarantee the safety of the track and local residents. Some of this work resulted in the displacement of shops, homes or farms occupying the area surrounding the railway line, which is non-transferable State property. A resettlement unit is in charge of supervising the implementation of resettlement action plans and livelihood restoration plans in accordance with international standards. In 2019, inventories were carried out with communities to identify the affected trades and farms.

Comilog has maintained long-term dialogue with communities on the subject of displacements linked to its projects. As part of the mining operations on the edges of the Bangombé plateau, Comilog has conducted socio-economic surveys and drawn up an inventory of farm plots, shops and homes that will have to be displaced. A resettlement plan developed in 2019, which specifies in particular the planning of the relocation site, is being discussed with the stakeholders. For the mining extension plan, which affects crops on the edges of the Okuomo plateau, a livelihood restoration plan has been developed in consultation with the 190 people concerned. They mainly participated in the selection of different locations for the replacement plots proposed by the project. In this context, compensation for farms is still ongoing, and actions have been initiated to support the restoration of livelihoods.

6.3.3.2.3 Risks and impacts on the environment of communities

Some sites also present environmental impact risks that may affect local residents. The Group is deploying all necessary means to reduce its environmental footprint, both at its operating sites and in the context of its development projects. The measures implemented to mitigate environmental and industrial risks (section 6.2. Environmental conservation) also aim to limit disturbances to local communities and avoid pollution risks and those related to a reduction in their access to natural resources.

Nearly half of the Group's sites have special relations with local public or community organizations regarding environmental issues. These mainly consist of direct discussions organised by the sites or meetings within the framework of regular meetings organised by local authorities.

Going even further, some entities have also developed partnerships with specialised organizations. This is particularly the case for Eramet Norway's sites, which for several years now have been working with the NGO Bellona on environmental issues. In New Caledonia, SLN, which is also a member of Scalair, provides its financial support to the Environmental Observatory (*L'Œil*), performing an environmental follow-up of the marine environment and air quality. In 2019, SLN also decided to support the Reprise project, supported by the municipal authority of Houailou (near the Porto SLN site) in collaboration with an NGO, Conservation International. The aim of this programme is to restore the forests in this municipality, particularly through reforestation and regulation of invasive species. Winner of ADEME's call for projects "pilot sites for reconquering biodiversity", under the "*Investissement d'Avenir*" programme, this project is based on a very close collaboration with local ethnic groups. Although the area concerned is not a former SLN mining site, this action is in line with the Company's environmental conservation commitment in New Caledonia.

In Argentina, as part of the preparatory work for the Lithium treatment project in the region of Salta, in 2019, the Group's teams trained the first group of "environmental monitors". These are volunteer local residents who will help to monitor samples as part of efforts to control the environmental impacts of the project. This partnership approach aims to encourage local populations to take an active role in managing the environmental risks associated with the project and to create the conditions for a trusting relationship, based on transparency. In Gabon, in addition to its collaboration with the *Agence nationale des parcs nationaux*, Setrag signed in 2019 a partnership with the Conservation and Justice NGO, which actively fights the poaching of protected species.

6.3.3.2.4 Local complaint management mechanisms

More than half of the Group's sites, including the mining sites in Gabon, Senegal and the project in Argentina, are developing their own mechanisms to receive and handle complaints from local communities. The procedures for the receipt and processing of complaints are managed

directly by the sites. Like the management of community relations, for industrial sites, complaints are received and handled by local managers in charge of health, safety and the environment. On the mining sites, this function is performed by teams in charge of commercial relations. Complaint tracking updates are most often presented to the site's Management Committee, thus receiving the attention of top management.

6.3.3.3 Dialogue with local communities

Sites that may have an impact on the environment and local residents carry out information and consultation actions with them, whether due to regulatory obligations or voluntary initiatives. Knowing the local populations and establishing dialogue with them anticipates and prevents the potential impact of activities. This universal approach is adapted by each entity according to its specific challenges.

In 2018, more than 50% of the sites – including 100% of the mining sites and projects – developed a dialogue with the communities, in an informative or consultative manner.

Dialogue modes

INFORMATION: PREFERRED TOOLS

Information meetings

Site visits
Open days

Participation in external events

Written publications

CONSULTATION: OPERATING MODE

Company

Presentation
Project / Activities

Local elected officials
Government representatives
Local populations

Expression

- Opinions
- Expectations

New developments /
modifications

Informing neighbourhood residents about industrial and mining activities

Information meetings are the preferred way for sites to communicate with local populations. The information shared encompasses the site's activities and also the environmental and/or societal impact.

For projects or sites developing new activities, these information meetings are essential to explain their characteristics and present the measures implemented to control the impacts. For example, in addition to maintaining its permanent contacts with the communities, GCO in Senegal organises periodic information and awareness meetings with local populations in their respective villages or in town halls. In 2019, more than 2,000 people were informed of GCO's activities in their neighbourhood. In Gabon, Comilog brought together more than 1,000 people in 2019 to provide them with information about the C2020 project in particular.

The sites in operation also have the opportunity to regularly inform their local residents. In France, because of their Seveso "High Threshold" status or their ICPE (Installation Classified for the Protection of the Environment) status, two sites participate in "Site Monitoring Committees", composed of representatives of the national government, local authorities, local residents, farmers and employees. These committees constitute a framework for the exchange and monitoring of site activities. In addition to regulatory obligations, some sites organise voluntary information meetings, such as Eramet Norway's sites.

In 2019, nearly two thirds of the Group's sites, including Eramine, SLN or again Eramet Norway, welcomed the external stakeholders, on the occasion of the open day, visits from schools or elected officials, or special events. This openness, which is appreciated by the various welcomed groups, offers a tour of the facilities and consequently, better understanding of the activities and challenges of the sites.

In New Caledonia, the SLN opened an office of community relations in June in Koné, the administrative capital of the Northern province, to enhance the quality and frequency of exchanges with these populations. Furthermore, the SLN's facilities welcomed 800 visitors in 2019, 200 of whom were at the Doniambo plant. The mines – and in particular the Thio facility, which hosts monthly visits in partnership with the Tourist Office – account for the largest number of visitors.

The presence of sites at external events organised locally, such as fairs or exhibitions, also allows them to communicate about their activities and their social commitments to various audiences. This type of communication is mainly appreciated by the industrial sites, such as the Aubert & Duval (France) entities, which notably participated in the "Ailes et Volcans" aeronautical event in Issoire France in 2019.

Consultation/collaboration with local residents

Consultation is a more engaging form of dialogue with the communities that is practical for gathering the opinions, expectations or concerns of local residents. Apart from consultations linked to resettlements on GCO, Comilog and Setrag sites, and detailed in section 6.3.3.2, the main consultation activities are presented below.

At GCO, Senegal, the different joint committees, which involve local community representatives in the monitoring of mining and industrial activities, met regularly during the year. Among them, the "Cadre de concertation sur l'environnement et la gestion des ressources naturelles dans la concession minière" (Consultation framework on the Environment and Management of Natural resources in mining concessions) comprises representatives of Government technical services, local authorities, local populations and GCO.

In Argentina, the project team continued its public assemblies ritual in 2019. It held three sessions during the year which were used to inform populations about the advancement of the project, to understand and address their concerns.

In Gabon, under the Trans-Gabon railway rehabilitation project, Setrag began the construction of walls along railway tracks in the neighbourhood of train stations and of secure pedestrian bridges. These work sites were preceded and accompanied by public consultations and local committee meetings, enabling in 2019, 200 neighbourhood residents to be involved right from the start and throughout the construction period.

To prepare its future investment strategy for local populations, in 2019, Comilog conducted consultations in 14 neighbourhoods in the city of Moanda and 12 villages in the department. These meetings, attended by nearly 500 people, provided an opportunity to clearly understand the priorities of these populations, and what they expect from Comilog. This information was directly incorporated into the ongoing preparation work regarding the investment strategy and the dialogue mechanisms with populations.

In New Caledonia, the SLN continued its proactive dialogue programme with local stakeholders aimed at recreating lasting trust, especially after the blockades at the Kouaoua site in 2018. The CSR team has been strengthened and now includes ten people. The new SLN model and its new CSR approach were presented at the meeting rituals held in 2019 with municipal teams, traditional authorities, young people and associations (in Poum, Poro, Kouaoua, Koumac in particular). These meetings also provided the opportunity to collectively identify and build SLN's new contributive actions together as partners.

6.3.3.4 Contribution to the development priorities of communities

As a corporate citizen, Eramet aims to become a company that contributes to public interest issues in the territories where it operates, dedicating one of the objectives of its CSR Roadmap to this topic. Specifically in its relations with local communities, the Group is working on transitioning from an approach focused on reducing and offsetting the impacts of its activities to a partnership-based approach.

For the Group's entities, this entails seeking a positive contribution for local populations, by helping to improve their situation, depending on their priorities and their aspirations. This is all the more true for the Group's mining activities, for which the development of good relations between all stakeholders in the region is essential for the creation of shared value in the long term.



Developing a positive footprint primarily entails the creation of direct and indirect local jobs, by using subcontracting and local sourcing, supporting the UN's 8th Sustainable Development Goal of Decent Employment and Economic Growth. The supported training programmes and apprenticeship mechanisms contribute more directly to the achievement of target 8.6 "Substantially reduce the proportion of youth not in employment, education or training".

The community investment programs set up by the Group's entities are tailored to the needs of the beneficiary communities. These programmes mainly contribute to SDG 11 "Sustainable cities and communities", SDG 3 "Good health and well-being" and SDG 4 "Quality education", with the construction of infrastructures for populations and support programmes for health and education. Specific examples given below illustrate the achievements of Eramet entities in 2019.

6.3.3.4.1 Job creation and local sub-contracting

The major subsidiaries of the Group contribute significantly to job creation in the areas in which they operate, recruiting the vast majority of their teams locally. The Eramet Group, through its subsidiaries Comilog and Setrag, directly employs more than 3,000 people in Gabon. 98% of the positions created are occupied by Gabonese citizens, making the Group Gabon's second largest private employer. SLN, New Caledonia's biggest private employer, provides more than 2,000 direct jobs. The Auvergne-Rhône-Alpes region accounts for more than half of the jobs created by the Group in metropolitan France.

In Senegal, Grande Côte Operations (GCO), which represents more than 700 direct jobs, created a recruitment committee with the municipal authorities in order to foster the dynamism of a local employment pool.

In addition, many sites are working to develop local skills over the long term in order to develop employability in the regions.

In Argentina, 65% of 140 employees of the Lithium Project come from the province of Salta, of whom 13% come from a few settlements and villages closest to the site (ten or more kilometres away). In anticipation of the construction phase, the collective agreement signed in 2019 by Eramet and the main construction union, contains a special clause to its relations with local communities. In particular, partners undertake to maximise job opportunities for these communities. Against this background and in collaboration with the local stakeholders, local candidates interested by a job in the project have been identified, and in 2019, 35 people already received training in safety and basic construction skills.

In Gabon, Comilog continued its contribution to the Moanda School of Mines and Metallurgy (E3MC, which opened in 2016), the result of a public-private partnership between the Gabonese State and Eramet Group. This school, which aims to train young Gabonese people in the fields of geoscience, process engineering, mining research and exploration, celebrated in 2019, the graduation ceremony for specialised engineers or professional mining and metallurgy graduates in the presence of the Mining, Energy and Hydraulic Resources Minister. The 25 students of the School's

second graduation class, six technicians and two engineers were then inducted into the Comilog workforce.

Setrag has developed a partnership with a Gabonese public institution, the National Employment Office, with the aim of creating apprenticeship contracts for young people. 260 young people were trained in 2019.

Aubert & Duval (France) has also made learning assistance and support one of its long-term commitments. It supports the activity of local structures that offer mobility and accommodation solutions for work/study students in Auvergne, such as Sira and Corum Saint Jean.

In 2019, more than two thirds of Group sites welcomed and trained trainees, apprentices or PhD students, ranging from a few weeks to several months. This represents several hundred students or apprentices each year.

The Eramet Group also contributes to the development of economic activities on the territories where it operates through its purchasing and subcontracting practices. The activities of the Group's sites may, indeed, require subcontracting, which encourages the establishment of local companies. This is particularly the case with SLN in New Caledonia, whose mines, plant and support services subcontract activities and draw from the base of local businesses.

6.3.3.4.2 Community investment and sponsoring

The Eramet Group is involved at various levels in actions in favour of the communities surrounding the sites, aiming to develop local life through a partnership approach. Work to formalise community investment strategies continues on mining sites, to strengthen the positive impact of numerous actions already implemented. Comilog, with the help of external experts, has devoted in particular two workshops, involving part of the Management Committee, with the update of its strategy. This work, which is expected to end in 2020 on the validation of a new strategy, relied on the results of the exchanges conducted with part of the neighbourhoods of the city of Moanda and neighbouring villages. Pursuant to the 2023 horizon CSR Roadmap, all of the Group's entities are expected to have by 2023, a community investment plan deployed around strategic pillars and formal decision-making processes.

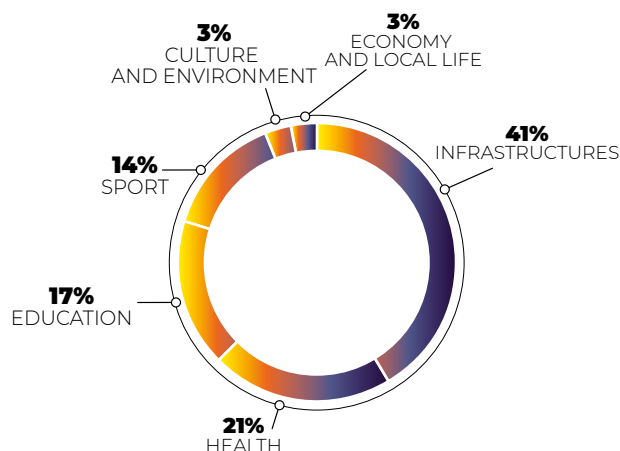
In 2019, Group entities devoted more than €15 million to community investment and to sponsoring. This represents an increase over spending in 2018, which amounted to €10.4 million. This increase is due to the enhancement of SLN programmes (in particular in the context of multipartite agreements signed in the municipalities around our mining sites), and an increase in Comilog's expenditure under its three-year CSR plan.

In addition to these expenditures, Comilog also made an exceptional contribution to funding the rehabilitation work on the Moanda railway tracks, identified in 2018 as a local priority, in collaboration with stakeholders.

In total, €20.2 million has been allocated to actions that are beneficial to the communities living near our sites.

As in the previous year, Eramet's sponsoring and community investment action in 2019 mainly focused on **local infrastructures, health, education and sports**.

Breakdown of sponsoring and community investment expenditure by area



Construction and rehabilitation of local infrastructure

In 2019, the Group's mining sites continued to participate in the construction and rehabilitation of local infrastructure, promoting the communal and economic development of the areas in which they operate.

In New Caledonia, SLN contributes to the implementation of municipal facilities through multipartite agreements with mining municipalities, Provinces and communities. In 2019 for instance, the Company helped to fund a Cultural and Sports Complex for the city of Houailou, in Poro, inaugurated in November in the presence of Christel Bories, Chairman and CEO of the Eramet Group, the Managing Director of SLN and the Mayor of Houailou. This inauguration was also the opportunity to introduce a formal multi-year economic, social and environmental development partnership in the region, between the municipal authority, SLN and Eramet.

GCO has established a social mining programme with the Senegalese Government, which commits the Company to making annual investments in local communities. These expenses are managed by the Company, which decided to create a tripartite committee for this purpose. This committee, which includes mayors and representatives of GCO, local residents and civil society, is responsible for allocating the funds for the actions to be taken. The area covered by this programme, which includes several villages, is quite extensive. A system of rotating allocations has been established, allowing a concentration of funds per municipality each year, and therefore more substantial investments.

In Gabon, Comilog and Setrag are heavily involved in the development of the surrounding areas. The main achievements include the rehabilitation of the main trunk road from Moanda and the city's secondary roads by Comilog. These works which contribute to road safety and to the opening up of certain neighbourhoods, are

substantially underway and are expected to be completed by the beginning of 2020.

Health-related actions

The Group's entities in Gabon are particularly active in developing local residents' access to health infrastructures. The Marcel-Abéké hospital in Moanda, is open to the entire population and reduced the prices of its services in 2018 to make treatments more affordable. A branch office of the *Caisse nationale d'assurance maladie et garantie sociale* has been opened in the hospital to make it easier for patients to sign up for the national health insurance scheme.

The Gamma programme which consists in setting up Aids HIV screening and prevention actions has enabled the Group to continue its action (see details in section 6.3.2.2.4).

In Senegal, vaccination is the subject of a specific commitment by GCO. As a long-term partner of AFRIVAC, the Company supports the foundation's projects, which include the implementation of campaigns to vaccinate children in Senegal and raise parents' awareness on the subject.

Supporting quality education for all

The Group is committed to a policy of active support for education for local communities, and young people in particular. This support is provided in several ways on Group sites and projects, in particular through financial or in-kind donations, and also through actions aimed at schoolchildren.

The main achievements in this field in 2019 include Comilog's funding for the renovation of 95 classrooms in seven primary and secondary schools in Moanda, each of these secondary schools now have a multimedia room with broadband internet. Since 2009, more than 8,000 pupils

have been able to study under better conditions. In 2019, Setrag continued to support school transport for about 400 middle school and secondary school pupils of the four districts around some of its train stations.

Many sites and subsidiaries maintain close relations with educational structures. This is reflected in site visits organised for classes at all levels to promote Eramet's business lines and industrial and mining challenges – in 2019 half of the Group's entities ran such activities.

There are also collaborative actions with educational institutions, in the form of interventions by employees in institutions or skill-based sponsorship, as carried out by employees of more than a quarter of the sites in 2019. Representatives of the sites or of the Group contribute as experts to specialised training courses, such as the *École des mines de Moanda* in Gabon, the CFTMC (*Centre de formation aux techniques de la mine et carrières*) in Poro in New Caledonia, or vocational secondary schools at the request of the Regional Chambers of Commerce in France. In a memorandum of agreement with the Environmental Sciences Institute, GCO received at the end of 2019, the first class of graduates in the Environment and mining waste management Master's programme from the Cheikh Anta Diop University in Dakar, Senegal.

Sports-related actions

The Group's involvement in sports is universally shared by its entities. This commitment pursues several objectives, including supporting local associations, often aimed at young people, and developing the attractiveness of the region for employees. More than a dozen sites directly support local sports associations, particularly in Auvergne-Rhône-Alpes, but also in New Caledonia, the Scandinavian countries of Eramet Norway and Erasteel Kloster (Sweden), and in Gabon.

For Comilog (Gabon), the main contributor to AS Mangasport, the active support of several Moanda sports associations is a key element of its commitment to young people, enabling more than 800 registered members to achieve fulfilment through sport, in addition to its actions in favour of education. In 2019, the young Manga basketball team, mostly made up of local youth, won the Gabon Cup, while the AS Mangasport football team, won the first edition of the Gabon League Cup.

Economic diversification

Some sites support local micro-entrepreneurship. In 2019, Setrag (Gabon) helped women to sell their local products at the Libreville fair. In New Caledonia, SLN continued to provide financial support to ADIE (*Association pour le*

Développement de l'Initiative Économique), a partnership that dates back to some twenty years, and which proposes assistant services to micro-entrepreneurs. Through its contribution to the association Initiatives Nouvelle-Calédonie, SLN participates in the creation and development of sustainable companies based in New Caledonia that generate added value and employment, including projects developed by SLN employees, subcontracting projects and projects by inhabitants of the municipalities in which the Company is located. In Argentina, the local teams supported the creation in 2019 of the Quewar farm cooperative aimed at bringing together the most active people in the production of Quinoa, a crop that was reintroduced with the support of Eramine.

Aubert & Duval Foundation

In accordance with Eramet's CSR strategy and priority focuses, the Aubert & Duval Foundation seeks to introduce activities in the territories near its sites in the Auvergne-Rhône-Alpes, Bourgogne-Franche-Comté and Occitanie regions in France.

The Aubert & Duval Foundation has been supporting non-profit sponsoring initiatives since 2010 and is a key partner in public outreach projects that bring life and energy to territories and help women and men to thrive in their local environment. The Aubert & Duval Foundation pays attention to the expectations of the stakeholders living near its facilities and accordingly contributes to several neighbourhood development programmes. In 2019, it supported and assisted 30 programmes that reflect its corporate history and values, in the following areas:

- culture and heritage, with the support of music schools or charities that facilitate access to culture and art in rural areas, and others involved in the renovation of heritage buildings and transmission of local know-how;
- the environment, by assisting charities that develop biodiversity conservation programmes (educational ecosystem rehabilitation projects useful for regulating waterways and managing embankments) and sustainable mobility (Urban travel mapping projects with the prototyping of new forms of green mobility such as solar-powered bicycles);
- sports and health, through support for charities involved in providing sports activities on a regular basis in rural territories or proposing new sports disciplines that create social ties;
- education and solidarity, by participating in the funding of projects that foster intergenerational ties and uphold the values of solidarity, exchanges and sharing.

6.4 BUSINESS ETHICS

This section covers the actions taken by the Group to promote and implement good practices in business ethics and corporate responsibility. Understandably, this pertains to the Group's direct employees, but also applies within its field of activity, to its external stakeholders (suppliers, customers, institutional partners, public- or private-sector partners, and so forth). In pursuing these objectives, the Group is contributing materially to the sustainable development directives (ODD) 9 – Industry, Innovation and Infrastructure, and 16 – Peace, Justice and Effective Institutions; in particular, objective 16.5: To significantly reduce all forms of corruption and bribery.

6.4.1 Ethics, Compliance and Anti-Corruption

The Group undertakes to conduct its activities, in the countries in which it operates, in compliance with the laws and regulations applicable to it. Rigour, transparency and sincerity are the values that form the basis of Eramet's ethical conduct.

In order to safeguard the integrity of its business and carry out its activities according to the highest of ethical standards, the Group has an Ethics Charter – the text on which the Compliance Programme is founded.

This document has been translated into the Group's 12 main languages (French, English, Italian, Spanish, Portuguese, Japanese, Korean, Chinese, German, Swedish, Norwegian and Indonesian) and can be viewed directly on the Group's website.

The Ethics Charter states that the fight against corruption is an absolute priority for the Group, recalling the principle of compliance with the OECD Convention and local laws.

The members of the Executive Board commit, alongside the Group's employees, to disseminate these values by means of repeated messages from the General Management highlighting the importance of Ethics, the need to act in full compliance, and the fight against corruption.

As such, the members of the Executive Board have signed the Anti-Corruption Policy, which stipulates a zero-tolerance policy and full involvement on the part of the Group's top managers.

The matter is also dealt with in the Group's CSR roadmap, under the ninth objective: "To be a leading ethical partner". Hence, the advancement of this goal is regularly monitored by various committees, even in the highest echelons of the Group. This objective is broken down, annually, into benchmarks with different targets. The ultimate goal is, by 2023, to achieve 100% training of the sales and purchasing teams in anti-corruption measures each year.

6.4.1.1 Main risks

In 2017, the Group – in addition to the existing Group risk mapping, and in accordance with the Sapin 2 Act – produced a map of its Corruption and Influence Peddling risks, relying on a qualified external contractor to ensure transparency and independence of the exercise.

In accordance with a proven methodology for analysing the criticality of the risk of Corruption and Influence Peddling, depending on its impact and probability of occurrence by business sector and/or geographical area, the "Eramet risk universe" was assessed through interviews, workshops and a self-assessment questionnaire involving the Group's key functions – i.e. more than 151 people in all the geographical regions in which Eramet operates.

In 2019, the "Corruption" risk mapping was continuously monitored by the Ethics Department teams, in close collaboration with the Audit, Risk and Internal Oversight Departments. Thus, the risk universe evaluated in 2017 was specifically monitored in certain regions, based on local current affairs and geopolitical situation (Gabon/Argentina).

The Corruption risk mapping will be updated in 2020, in accordance with the three-year update policy for Group maps. The panel of service providers has already been inaugurated and will carry out a review during the first half of 2020.

6.4.1.2 Ethical governance

In 2019, the Group continued with its new approach, strengthening its ethical governance apparatus, which is organised as follows:

- an Ethics and Compliance Department, headed by the Group's Chief Compliance Officer, reporting to General Management. The department's ranks have been swollen by the addition of a Compliance Officer also serving as Data Protection Officer, and a new resource (work-study agreement);
- the Executive Board meets for a Compliance session, at least once a year. At these meetings, the Board reviews files and reports (confidentially and in full respect of the whistle-blowers' rights), besides the monthly review meetings between the Chairman and CEO and the Group's Chief Compliance Officer;
- the "Ethics Compliance" Steering Committee, made up of members of the departments of Human Resources, Social Relations and Legal Affairs, notably, and chaired by the Group's Chief Compliance Officer. The steering committee meets when called, at least once every two months. Its purpose is to:
 - monitor ongoing actions to improve under the Compliance Programme,
 - reflect on the main actions to promote a culture of ethics within the Group,
 - disseminate the Ethics Charter widely, and ensure that its principles are put into practice,
 - make recommendations on Ethical Compliance, and particularly on procedures;
- an Ethics Compliance network consisting of:
 - 17 "Ethics Compliance Officers" (ECOs), appointed by the Executive Committee and covering the entire Group, a key element of the system, local and operational representatives of the Ethics and Compliance Department. The mission of the ECOs is to ensure the



local implementation of and compliance with Group procedures, ensure communication with employees, and implement the necessary training programmes. As part of the Group's whistleblowing procedure, the ECOs can be contacted by employees directly.

To this end, in full respect of the rights of whistle-blowers, they will ensure full confidentiality and immediately communicate the alert to the Group's Chief Compliance Officer. At the express, prior delegation of the CCO, ECOs may conduct enquiries on the ground.

In 2019, The CSR Network was improved considerably; all the regional legal officers have been appointed to CSR roles, where possible,

- 55 "Ethics Compliance Ambassadors" (ECAs), appointed by the Area/Division Ethics Compliance Officer. To provide support at a local level on these issues in 2019, the Group has continued its drive to improve by appointing new ambassadors.

The ECAs' duties consist of supporting the Ethics Compliance Officer locally in promoting, communicating, raising awareness and training Group

employees. To achieve this end, the Group's Chief Compliance Officer distributes a compliance pack to the ambassadors, who familiarise themselves with the subject, and take concrete actions on the ground.

This Ethics Compliance Network is regularly informed by the Group's Chief Compliance Officer of ongoing actions – in particular, through access to an Ethics SharePoint where all Group procedures are posted, a regularly updated communication framework (infographic), and the reports of the "Ethics Compliance" Steering Committee. In 2019, specific training sessions for this Network, on Corruption and Influence Peddling issues, was again offered specifically by the Group's Chief Compliance Officer, by videoconference or, for certain areas, through on-site training sessions (Gabon, Argentina, France, Norway and China).

The Group's Chief Compliance Officer regularly interacts with the Ethics Compliance Network and promotes close collaboration through regular travel to the different areas.

Finally, the Group's Chief Compliance Officer regularly sits on the Audit, Risks and Ethics Committee.

Organization



This dedicated governance arrangement contains the fundamental elements of Eramet's Compliance Programme – namely:

- a clear message from the top management regarding a zero-tolerance policy;
- an anti-corruption guide which defines the different types of behaviours which are unacceptable because they are indicative of corruption and influence peddling;
- risk mapping on corruption;
- a system for assessing third parties (customers, suppliers, etc.), including prevention measures and awareness-raising tools (audits, due diligence, signing of the Responsible Purchasing And Sales Charter);
- accounting checks built into the Group's internal oversight protocols to prevent and detect corruption and fraud;
- an employee training system, which is updated by the Group's Chief Compliance Officer after each and every site visit. A situation report is drawn up, and dedicated plans of action are implemented;
- a professional whistleblowing system, which is open to employees and to all external stakeholders, on issues falling within the scope of the Sapin 2 Act and the law on the Duty of Vigilance.

6.4.1.3 Risk prevention strategy

An action plan has been adopted by the Executive Committee to ensure that all the risks identified by the risk mapping exercise relating to Corruption and Influence Peddling are covered by procedures and controls. A real risk prevention strategy, both internally and externally, has thus been defined. The main categories of risks identified have been addressed by dedicated action plans and are monitored at the highest level of the Group in close collaboration with the Audit, Risks and Ethics Committee, which every year will assess the need to update the risk map to reflect changes in the Group's business activities.

Reference frameworks and procedures

A reference framework, supported by the Ethics Charter, provides all Group employees with information and guidance on the main ethical issues, including the fight against corruption. It is made up as follows:

- an Ethics Charter, which was revised in 2019 to include new subjects and clarify certain points that were already in place;
- an Anti-Corruption Policy, signed by the members of the COMEX, and rolled out across the whole group;
- an Anti-Corruption behavioural guide, which was disseminated in December 2019, as part of a global communication plan: the "International Anti-Corruption Day". This guide is available in all of the Group's 12 languages;
- specific procedures on "Gifts and Invitations" and "Managing conflicts of interest", which will be subject to

an improvement plan in 2020, including the implement of a computerised management tool.

Training

Training and awareness-raising programmes are regularly carried out, both across the Group as a whole and at local level.

Eramet is greatly committed to regular training of all its workers on these important issues, by face-to-face training sessions led by the Group's Chief Compliance Officer and the Ethical Compliance Network.

An e-learning course, raising awareness of the Ethics Charter, made available two years ago and compulsory for all new recruits to the Group, must be completed by all employees.

In 2019, 3,268 learners signed up for this course (new recruits and veteran employees wanting a refresher). To date, 62% have passed it.

Thus, since the e-learning course went live, 7,373 people have enrolled and 4,546 have passed it. The e-learning course and the plan of action continue to be put into practice.

Priority is constantly given to improving the information systems, with the support of the Group-wide Information Systems Department, to give online access to all our workers who have a computer.

Where this is not possible, in certain countries, free-to-use computer workstations have been made available for the rest of the Group's employees. Such is the case, in particular, at certain sites in the High Performance Alloys Division and in certain regions where Ethics Compliance Ambassadors, working alongside the Group's Chief Compliance Officer, dispense training locally.

In parallel, regular campaigns to raise awareness and train were carried out in 2019 at various Group sites (in Gabon, Argentina, China and Norway). Further to this, there are training sessions for hundreds of employees including ethics-related content as part of an approach specific to the High Performance Alloys Division.

In addition, the Group's Chief Compliance Officer regularly attends Division seminars (sales conferences, purchasing seminars, strategy meetings, internal audit meetings), and meetings of the Division Management Committees and support functions in order to constantly raise awareness about these issues among all Group employees.

Over 600 employees attended face-to-face training and awareness-raising sessions in 2019.

At the International Anti-Corruption Day, awareness-raising actions and training were delivered in 2019 by the Ethics Compliance Network (ECO and the ECAs). For this purpose, an invitation to attend training, accompanied by a message from the Chairman and CEO, and local training sessions, were disseminated in all regions.

The Group continues to actively participate in the meetings of professional associations dedicated to business ethics (Transparency International, *Cercle éthique des affaires*, *Cercle de la compliance*, European Business Ethics Forum).

Whistleblowing system

The professional whistleblowing system set up in 2017 has been considerably improved, as has the whistle-blower report management procedure attached to it. This system allows each employee to alert the Group's highest authorities about unethical behaviour and/or violation of Group rules. Several whistle-blowing channels are available to employees: the Group Chief Compliance Officer, the Ethics Compliance Officer (ECO) of the employee's entity, or the IT system deployed, namely: a dedicated, secure and confidential e-mail address and a telephone alert number. In 2020, the Group plans to roll out a new, external whistleblowing system globally, certified as compliant with the GDPR.

Any employee or stakeholder anywhere in the world can notify the Company of anything that might violate the principles and commitments of the Ethics Charter and the laws or rules relating to ethics applicable to our business activities.

The Group allows its employees and external stakeholders to blow the whistle on the following unethical behaviour:

- corruption;
- fraud;
- theft;
- embezzling;
- forgery of any documents;
- conflicts of interest;
- anticompetitive practices;
- discrimination, unfair treatment, bullying or sexual harassment at work;
- conduct contrary to the Group's policies and standards in relation to health, hygiene, safety at work and protection of the environment;
- serious violations (or risk of serious violations) of the Human Rights of the Group's employees or of third parties affected by the Company's activity;
- and generally, any crime or misdemeanour, gross and manifest breach of the law or regulation, and any threat or serious harm to the general interest.

These alerts can be submitted anonymously where permitted by local regulations.

Alerts are dealt with following a dedicated procedure, which can be viewed on Eramet's intranet, in four main languages. This procedure guarantees that the whistle-blower has complete confidentiality, and insofar as the employee acts selflessly and in good faith, it also guarantees that no action can be taken against him or her as a result of the use of this mechanism. Finally, in full compliance with the new legislative provisions, the protection of whistle-blowers who disclose information in good faith is ensured.

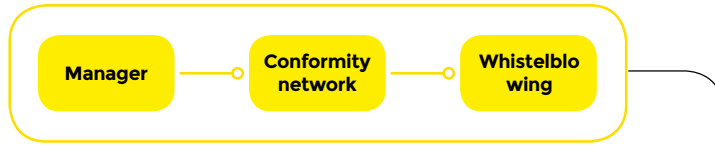
A plan to improve the whistleblowing system was in the process of being finalised in late 2019, to facilitate the automation of the process using a dedicated computer tool.

All information on how the whistleblowing system operates is given in the Ethics Charter, which is available on the Group's websites (both internal and external) and is made available to all employees. Infographs that are regularly updated are displayed at the premises of each entity within the Group.

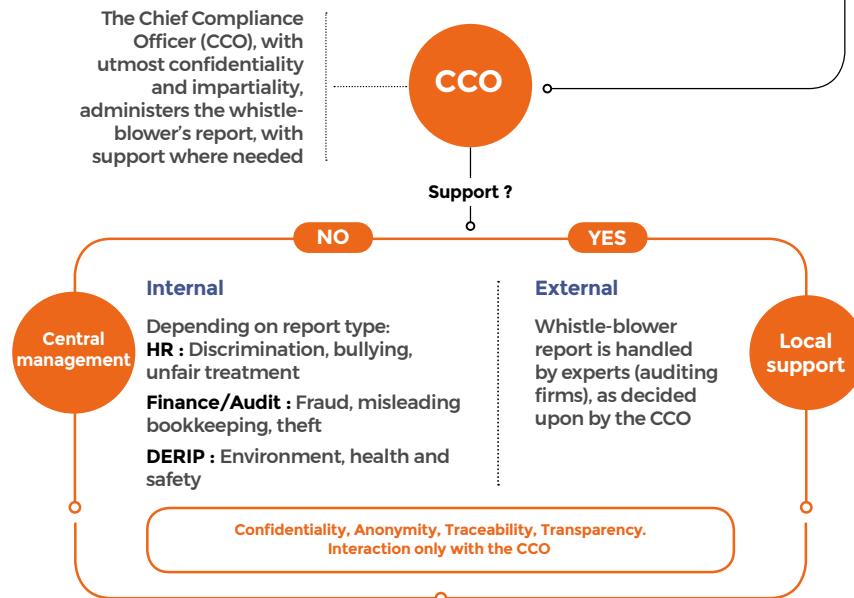
The Group, with the aim of ensuring constant improvement and compliance with the latest and highest ethical standards, has decided to review these issues on a regular basis. Thus, the whistle-blower reports are regularly reviewed, with the highest degree of confidentiality.

A Governance policy associated with alert management was put in place in 2019, clarified in the whistle-blower alert management procedure (see the attached diagram).

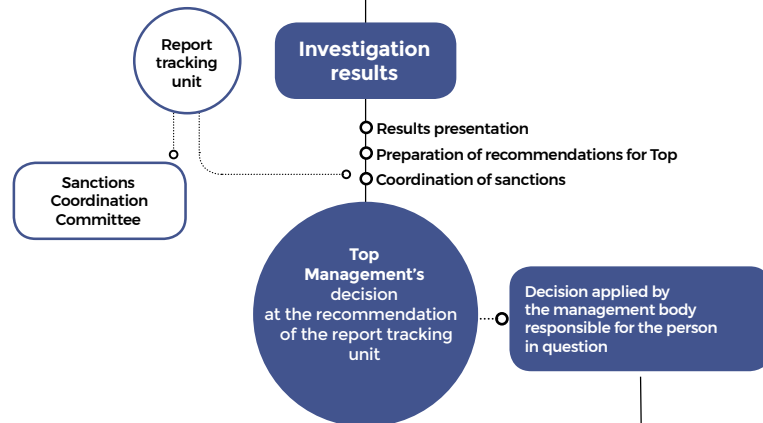
1
Receipt of
whistle-blower report



2
Report
management



3
Report
tracking



4
Closure of
whistle-blower
file



A Sanctions Coordination Committee, including representatives from the Group's Human Resources Department and from the two major Divisions, meets twice yearly to ensure that the sanctions applied are consistent.

This overhaul of the whistleblowing system was carried out in order to improve and update the reporting channels available to employees, the automated system and frames of references, and to adapt the dedicated organization to the requirements of all new legislation on sanction policy, protection of whistle-blowers and personal data protection (GDPR).

Transparency

In addition to these internal actions, Eramet also promotes transparency in the extractive industries. Eramet has been a member of the Extractive Industries Transparency Initiative (EITI) since 2011. This initiative is based on a set of principles and rules, bringing together governments, companies, civil society groups, investors and international organizations to promote revenue transparency at a local level. By adhering to these principles, Eramet demonstrates its willingness to ensure the responsible development of natural resources and to ensure transparency in financial flows between companies and host countries, and also to ensure regular accountability to its stakeholders.

Eramet has sites in four EITI member or candidate countries: Senegal, Indonesia, Argentina and Norway. In Senegal, Grande Côte Operations (GCO) is contributing to the preparation of the country's EITI reports; in 2018 Senegal was recognised as the first African country and the fourth in the world to achieve satisfactory progress in the implementation of the EITI standard. In Indonesia and Argentina, Eramet does not yet have an active mining operation, and it only has non-extractive sites in Norway: its subsidiaries have not been required to contribute to the EITI reports of these two countries.

6.4.1.4 Performance

Several key performance indicators have been identified and are regularly monitored by the Group.

Thus, in the context of the CSR Roadmap and its ninth objective, the Group has committed to respect the following

objective for 2019: 100% of Sales and Purchasing Managers, and those directly attached to them, shall be trained.

At the time of writing, this objective has been achieved and, in anticipation of the annual benchmark set for 2021, 70% of purchasers and sellers have already been trained.

In addition, specific key performance indicators have been taken into consideration and are already included in the Group's internal control framework with control points dedicated to Compliance, which will be regularly reviewed as part of the internal control self-assessment campaigns from 2019. The KPIs in place notably relate to the number of alerts, number of people having received the training, or the visibility of the system, with specific plans of actions in place for each KPI. Finally, an indicator relating to the time taken to follow up on alerts has been added.

In 2019, particularly close attention was paid to improving the relaying of whistle-blower alerts in certain regions. For this purpose, a specific plan of action was put in place.

In addition, numerous targeted audits were conducted in 2019 by the Group's Internal Audit Department (seven), in close collaboration with the Ethics Department, regarding the follow-up of plans of actions being rolled out. Now, the Ethics aspect has been integrated into the internal audit frame of reference. These indicators are monitored as part of the annual CSR Roadmap and the action plan for monitoring Group risk mapping, as well as at meetings of the Risk, Audit and Ethics Committee. The Ethics and Compliance Department and the Group Risk Internal Control and Audit Department work closely together on these matters.

The outsourcing of investigations which may be monitored, in line with the above procedure, either internally or tasked to external audit bureaus, means that a new performance indicator can be integrated.

Statistics will be regularly communicated to the Chairman and CEO, to the COMEX, and also to the Audit, Risks and Ethics Committee.

Finally, as part of its development of a responsible value chain, the Group has implemented a procedure for evaluation of all its customers and suppliers.

In this context, two Responsible Purchasing and Responsible Sales Committees, described in detail in section 6.4.2, have been established.



6.4.2 Responsible value chain

6.4.2.1 Governance

As a responsible economic player, Eramet has established a structure to address new challenges in the value chain. Two dedicated committees, stemming from the Ethics Compliance Committee (mentioned in 6.4.1), meet on a quarterly basis to manage the responsible value chain approach, both upstream and downstream of Eramet's operations. In particular, Eramet's Responsible Value Chain approach covers all matters relating to CSR – in particular, corruption and influence peddling, the violation of Human Rights and fundamental freedoms, of the health and safety of individuals, damage to the environment, as well as the CSR and ethical situation of suppliers and subcontractors of these third parties.

The Responsible Purchasing Committee includes members of the Ethics and Compliance Department, the Communication and Sustainable Development Department, the Legal Department and the Purchasing Department, including a Supplier Performance Coordinator, with specific responsibility for CSR matters. The Committee leads the Group-wide responsible purchasing approach.

This approach is governed by Eramet's responsible purchasing policy. This policy formalises the Group's desire to strengthen the integration of sustainable development

issues related to procurement and promotes a dynamic of continuous improvement. Eramet's expectations with regard to its suppliers, subcontractors and service providers primarily target three main areas: Human Rights and working conditions, environment and products, and good business practices. It is available on the Eramet website.

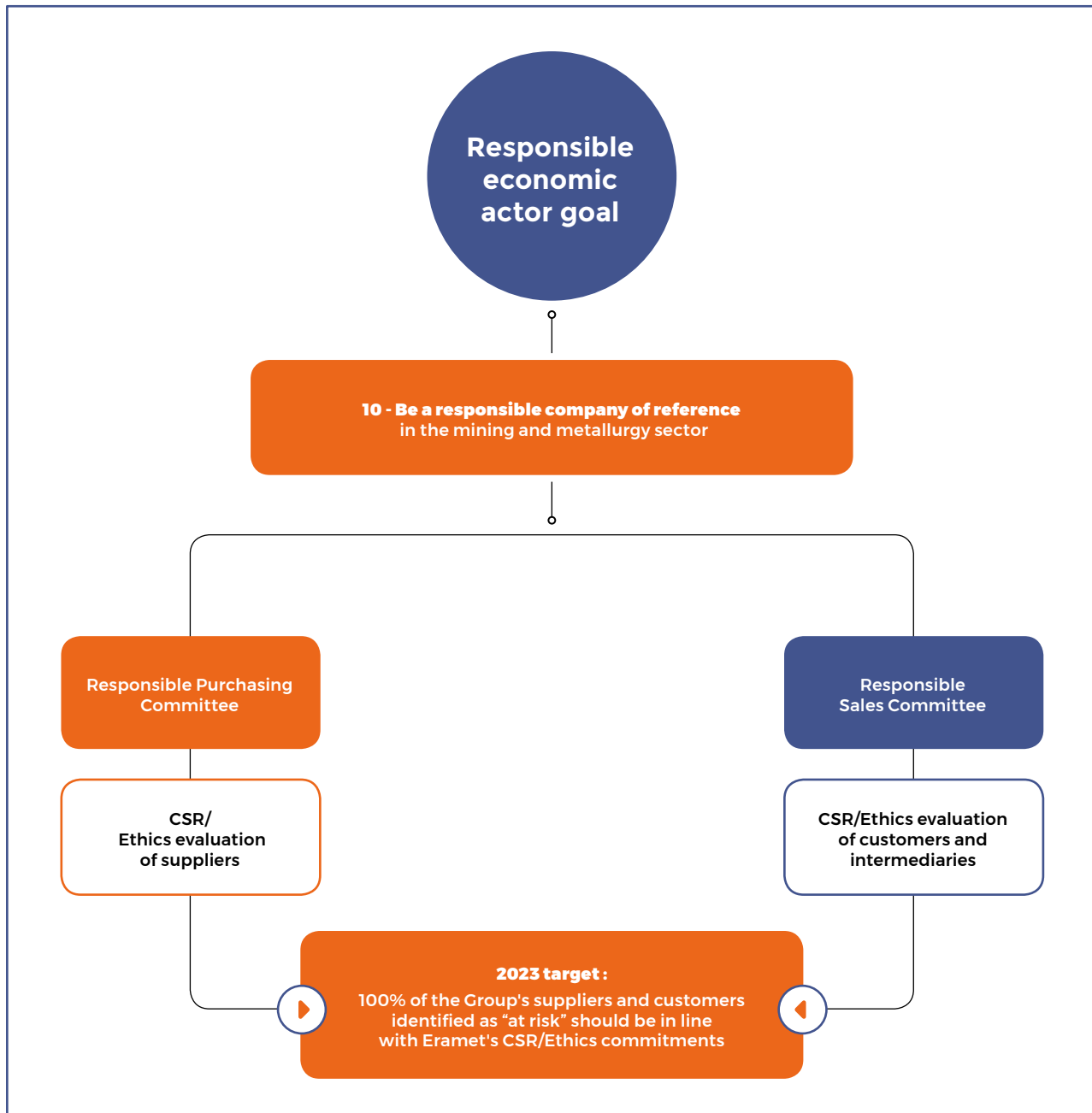
The Responsible Sales Committee is made up of members of the Sales Department, the Legal Department, the Ethics and Compliance Department and the Communication and Sustainable Development Department. The Committee oversees the gradual implementation of the Group's CSR and ethical commitments to customers, as set out in the Group's Ethics Charter. In addition, particular vigilance is exercised in relation to exports potentially involving countries subject to international sanctions.

There are two internal procedures in place governing CSR and ethical assessments of, firstly, suppliers, and secondly, customers and intermediaries. These procedures and their application are the subject of regular awareness-raising sessions within the various Group entities.



The progress of the "Responsible Value Chain" approach is monitored through one of the objectives of the Commitment to Economic Responsibility focus area of the CSR Roadmap.

Group Responsible Value Chain approach



By at-risk suppliers and customers, the Group means third parties evaluated as "critical and/or sensitive" (in terms of importance to Eramet or CSR risk – depending on the business activity or country concerned). These parties must comply, according to the results of CSR/Ethics evaluations, with the Group's commitments in these areas. If there is a discrepancy between the evaluation results and the Group's expectations, the Group encourages dialogue and support, but reserves the right to suspend the business relationship.

6.4.2.2 Responsible purchasing

Due to the issues associated with the Group's businesses, purchases are the subject of particular attention and also strong expectations from stakeholders in this issue. Eramet is committed to a responsible purchasing approach, which aims to favour suppliers offering products or services that respect environmental and social criteria while maintaining a high level of competitiveness.

Supplier and subcontractor performance evaluation

Eramet has launched a global and progressive approach to evaluation the CSR performance of its suppliers and subcontractors.

With reference to the obligations imposed by the Law of 27 March 2017 relating to the duty of care of parent companies and contractors, the Group formalised its responsible purchasing approach by structuring it around a risk-based approach. Thus, the Responsible Purchasing Committee has produced a CSR risk map relating to the activities of its suppliers and subcontractors. This mapping exercise, the methodology of which may evolve as part of a continuous improvement drive, is repeated every year.

In order to develop this risk map, an approach based on the business categories of the various suppliers and subcontractors was chosen. By cross-referencing two criteria – the CSR risk of the category and the importance of that category for the Eramet Group – it is possible to rank purchase categories into four risk zones, and in particular, identify those categories of purchases which, while they are important for the Group, exhibit CSR-related risks. It is on these categories that Eramet focuses, as a matter of priority, in its due diligence actions. Indeed, the Group has defined a procedure for assessing these suppliers' situation in relation to these risk categories.

Suppliers in categories considered at risk are required to fill out an initial evaluation questionnaire. The questionnaire focuses on CSR criteria, such as respect for the environment, the management of the value chain, respect for Human Rights and labour relations, and business ethics. Depending on the risk level of the third party in question, this questionnaire is administered and analysed by an external specialist (Ecovadis) or by the internal supplier performance coordinator.

The results of these assessments, which may be supplemented by due diligence measures, allow the Responsible Purchasing Committee to define the degree to which the suppliers identified as at risk are in compliance, or in breach. Then, arbitration committees decide upon the risk management actions that need to be implemented for the suppliers currently judged to be non-compliant. Among the actions to control potential risks, dialogue with suppliers, the development of targeted action plans and on-site audits are given priority.

Additional elements relating to this approach are described in the Eramet Group's Vigilance Plan, which is attached to this Registration Document.

Since the launch of the consolidated programme, 200 suppliers and subcontractors identified as at risk have been evaluated. In late 2019, 58% of suppliers were considered compliant with the Group's requirements. The majority of those suppliers classed as non-compliant is attributable to non-response from certain suppliers. If they fail to respond to the evaluation, they are automatically classed in that category. 31 cases of non-compliance have been examined by the arbitration committees this year. For suppliers who declined the evaluation, the committees ruled that further questionnaires should be sent and recommended that on-site audits be conducted. In two cases, this year, the Group has opted to sever the business relationship as a last resort. Finally, 23 suppliers are currently subject to a corrective plan of action, seven of which were initiated directly by Eramet.

The establishment, in late 2019, of a Group Supplier Relationship Management platform will help improve the launch and monitoring of the CSR/ethics evaluations of prospects, and thus, the management of suppliers identified as being at risk. Indeed, the evaluation tools, based on the risk criteria defined above, will be crucial to the registration of a supplier. The same year, an additional due diligence approach was also put in place, through a specialised KYC platform, which is a compulsory prerequisite for certain categories of suppliers.

Monitoring of the "conflict ores" question

Some of the Group's activities require the use of tungsten in metal form in their manufacturing processes. This metal comes from ores that may be called "conflict" ores if their exploitation is used to finance armed groups and fuel civil wars in some parts of the world. Eramet is therefore very attentive to the conditions of supply of these materials and in particular to compliance with the specific provisions of the "US Dodd Frank Act", as well as the guidelines set by the OECD for multinational companies.

The Eramet buyers in charge of these supplies thus systematically require their suppliers to provide information concerning the origin of the ores used for the manufacture of tungsten metal sold to the Group. They are also asked what due diligence measures they have put in place to verify this origin. To this end, buyers use the Conflict Minerals Reporting Template (CMRT), supplied and updated regularly by the Responsible Minerals Initiative (RMI).

To expand its commitment to this theme, Eramet has become a partner member of the Responsible Minerals Initiative (formerly known as the Conflict Free Smelter Initiative). By supporting the RMI, the Group is contributing to the advancement of best practices in the sector.

The RMI, created in 2008 by the Responsible Business Alliance (RBA) and the Global e-Sustainability Initiative (GeSI), implements due diligence measures regarding conflict ores, in particular through audits of foundries supplying T3G (Tungsten, Tin, Tantalum and Gold). This initiative is currently working to also encompass Cobalt from sensitive areas.

6.4.2.3 Responsible sales

As part of its commitments in terms of ethics, governance and responsible performance, the Group attaches particular importance to CSR and Ethics issues and risks related to its value chain.

The internal procedure mentioned in 6.4.2.1 formalises the CSR and Ethics risk analysis measures adopted by the Group to evaluate its customer's situation in relation to these issues. Eramet is committed to ensuring that the practices and behaviour of third parties with whom it interacts do not generate risks of the same nature as those assessed by the Group in the context of its own activities. Particular objectives are protection of the environment, the respect of Human Rights and ethics in business relations. An e-learning course based on this new Group-wide procedure has been rolled out to the sales teams.

In order to carry out this assessment, the Group uses a specialised Know Your Customer (KYC) database. The results

of this platform are then reviewed by the Responsible Sales Committee, which is tasked with following up on these evaluations and implementing additional due diligence actions as necessary.

Implemented in 2018, all customers identified as risk carriers were the subject of this first CSR/Ethics assessment. The potential risk carried by the business relationship is evaluated using two criteria: the amount of turnover achieved and the risk of the country in which the third party operates, according to the results of an evaluation carried out by an external service provider. The evaluations continued in 2019 across the Group's main Business Units. Thus, nearly 2,850 customers have been evaluated with this procedure since the launch of the programme. Over 99% of evaluations have yielded a positive recommendation. For customers whose evaluations yielded a non-compliant result (about fifteen), risk management actions have been defined in consultation with the sales teams.

6.4.3 Responsible interest representation

As a world leader in the production and transformation of alloy metals – notably manganese and nickel – and in top-of-the-range metallurgy, Eramet is in contact with the public authorities, bringing issues in the mining and metallurgy sector to their attention.

The Public Affairs Directorate, attached to the Communication and Sustainable Development Department, serves as the go-between with the different Divisions of the Group depending on the topics at hand. The General Management, the Communications Department, the Environment Department, Energy Department, Strategy Department and the site managers are often called upon to carry out actions: presentation of activities, participation in work carried out by the States or working groups for the sectors or geographic regions, organization of visits to the installations, or simply, responses to information requests.

In addition, Eramet has chosen to actively engage with various professional structures to contribute to the work of the public institutions. The Group is involved in organizations which take action at national, European and pan-national levels. These structures help to promote the Group's business lines and activities.

Many members of the Comex and Directors represent the Group in the organs of governance and management: such is the case, for example, in France, with the *Conseil national de l'industrie* (CNI – National Industry Council), the *Alliance des Minerais, Minéraux et Métaux* (A3M – Ores, Minerals and Metals Alliance), the *Comité stratégique de filière des industries extractives et de première transformation*

(Strategic Committee for Extraction and Raw Materials Transformation Industries), and MEDEF. Similarly, in Europe, the Group has a strong presence as part of EuroAlliages, Eurométaux, the European Powder Metallurgy Association. On the international stage, it belongs to the International Manganese Institute and the Nickel Institute. In addition, many of the Group's experts contribute to the work of the various commissions or topic-specific working groups set up by these professional associations – relating, for example, to non-financial reporting, the duty of vigilance and the circular economy.

Finally, Christel Bories, as President of the *Comité stratégique de la filière mines et métallurgie* (CSF – Strategic Committee for the [Mining and Metallurgy] Industry), as part of the *Conseil national de l'industrie*, helps to represent the interests of the sector in dealing with the administrative authorities in France. In June 2019, for example, Christel Bories made a presentation to the national Senate's information committee relating to “*Enjeux de la filière sidérurgique dans la France du XXI^e siècle*” (Issues in the Steel Industry in 21st-Century France).

The CSF has made representations to governmental authorities on a number of the industry's key objectives, including: creating and implementing the benchmark standards in mining and responsible supply chains; ramping up the digital transition of the metallurgy industry to make it more competitive; developing mines and the jobs connected to them; and reducing greenhouse gas emissions by extracting CO₂ from the gases and fumes emitted by the industry.

6.4.4 Combating tax evasion

As stated in its Ethics Charter, the Group works to develop lasting relationships with local populations, local authorities and communities in the regions where it operates. Eramet's employees demand exemplary behaviour from themselves, ethical conduct that does not violate the laws of the countries in which they operate or the values to which they adhere.

The Group's activities are subject to specific taxes depending on their geographical location. Indeed, as Eramet is the parent company for a fiscal consolidation group in France, made up of 20 companies as at 31 December 2019, the Group's activities are subject to specific taxes depending on their geographical location.

Its companies and units in mainland France are liable for tax at the standard French rate. The current corporate income tax rate is 33.33%, excluding an additional welfare contribution of 3.3%. The following specific notes apply to subsidiaries outside mainland France:

Le Nickel-SLN is liable for the 35% mining and metallurgical corporation tax in New Caledonia.

SLN's distributions to Eramet are subject to an additional income tax contribution of 3% (for any distribution in excess of 30 million Pacific francs, or €251,400). The withholding tax on dividend distributions applied in New Caledonia amounts to 10%. The deductibility of overhead costs is capped at 5% of the amount of external services.

SLN is exempt from the general consumption tax which came into force on 1 October 2018 (this tax is a variation of value added tax).

The Comilog company is liable for corporate income tax at 35% and export duty and mining royalties representing approximately 6% of the pithead value of the products mined (close to FOB value), and also a 15% tax on dividends (10% on the fiscal scheme for corporate groups). This tax regime is fixed until 2032 as part of a mining agreement signed in October 2004. This convention was ratified by the Gabonese Parliament in 2005.

Under the Agreement signed with the Senegalese Government in 2004 and Amendment 1 to the agreement signed in 2007, Grande Côte Operations (GCO) benefits from a mining concession regime for 25 years in accordance with Ministerial Decree No. 2007-1326 of 2 November 2007. Under

the provisions of the mining code, it enjoys full exemption for 15 years (exemption from VAT, customs duties, corporate tax, patenting and property tax, etc.), running from the end of the investment period (construction). This exemption period will end in November 2022.

With respect to mining royalties, as an exception to the Mining Code (which sets royalties at 3% of the pithead value), in 2007, GCO agreed to raise these fees to 5% and implement a production sharing arrangement at 10%, based on the margin, net of certain costs.

Dividends paid to the parent company by subsidiaries in Norway, Sweden and the United States are not subject to withholding at the source.

In accordance with its legal obligations, Eramet has carried out its "country by country reporting" by declaring to the French tax authorities the distribution of its profits, taxes and activities by tax jurisdiction (Article 223 *quinquies* of the French General Tax Code), as well as its "mining reporting" on its extractive activities, which includes payments made to governments (Article L. 225-102-3 of the French Commercial Code).

This "mining reporting" obligation is directly inspired by the Extractive Industries Transparency Initiative (EITI), of which Eramet has voluntarily been a member since 2011. The EITI aims to contribute to the fight against corruption by promoting transparency in money transfers between oil, gas and mining companies and the countries that host their activities. The Group's financial transparency reporting is available on Eramet's website – www.eramet.com.

6.4.5 Governance of the sustainable development of industrial and mining projects

All projects carried out by the Group are developed in accordance with the internal procedure "Integration of HSE/CSR factors into projects", which was renewed in 2018. This procedure requires compliance with both national and local regulations of the country where the project is located, Eramet policies and standards, and the requirements of the project funders. In addition, international financing standards (Equator Principles, World Bank Group standards) and best practices of the Group's businesses are referenced and applied as far as reasonably possible to the economic performance of the project. The compliance of the Group's projects with this standard is verified at regular intervals.

The aim is to build a long-term trusting relationship with the communities present in the settlement sites and to prevent any risk of infringement on the fundamental rights of these communities, particularly, where applicable,

indigenous communities. This requires the implementation of mechanisms for dialogue with the representatives of relevant stakeholders.

Environmental, social, societal and health aspects are taken into account from the most upstream phases of projects. Sustainable development experts and specialists are integrated into the industrial, technical, legal and financial teams, and participate in the various steering committees, from pre-project phases to feasibility studies and pre-construction. Likewise, they participate in acquisition audits in the case of merger or acquisition projects, as well as in due diligence related to the transfer of assets.

The following sections detail the consideration of sustainable development factors in the main projects undertaken by the Group in 2019.

6.4.5.1 Project to improve the safety and reliability of the railway in Gabon

The Trans-Gabonese railway, which crosses Gabon from Libreville to Franceville, has a total of 710 km of tracks, 52 bridges, and 22 stations. In addition to transporting the ore from Comilog to the port of Owendo, it plays a strategic role in the economic development of the country.

Setrag (the Trans-Gabonese operating company) operates the railway under a Concession Agreement established in 2005 and updated in 2015. Setrag is the manager of the railway infrastructure, traffic and operations (passengers, timber, ore and other goods).

For several years, Setrag has stepped up the pace of maintenance and rehabilitation work on the Trans-Gabonese railway. However, the overall condition of the track continued to hinder the operation of the network so Setrag decided to intensify the infrastructure overhaul programme. The Company applied to the International Finance Corporation (IFC) and PROPARCO (French Development Agency Group) to finance the programme, and it successfully obtained funding in 2016. A new financing arrangement is envisaged to help speed the programme along. Other solutions under consideration are the consolidation of the platforms in unstable regions, securing of the track (level crossings, pedestrian bridges, etc.) and deployment of new traffic optimisation tools.

The concession contract stipulates a contribution from the concession grantor, the State, to certain works, in particular those associated with the reinforcement of infrastructures, the rehabilitation of civil engineering structures, the securing of level crossings and the renovation of "employee" housing developments. In this context, the State has taken steps similar to Setrag to obtain financing from the French Development Agency, whose terms were finalised in December 2016.

The work, which began in September 2017, continued in 2018 and 2019. Over 100 km of tracks have been replaced.

In accordance with Eramet's standards, the project was designed to minimise the potential associated environmental or societal impacts, based on comprehensive and relevant studies. Of particular note are: an environmental and social study for the work to upgrade the track, an impact assessment on a unit producing steel-concrete sleepers, and an impact assessment for the operation of the sand quarry to feed the sleeper factory. On this basis, management plans and dedicated actions have been developed and implemented.

Setrag reports its results in terms of Environment, Health, Safety and Stakeholder Dialogue to the two financial institutions once a year. It hosts on-site representatives twice a year for follow-up visits to verify the project's compliance with the environmental and social requirements of IFC and PROPARCO.

6.4.5.2 The Lithium project in Argentina

The project aims to produce 24,000 tonnes per year of lithium carbonate, using an alternative process to make the product from brines, which differs fundamentally from the conventional process of natural evaporation. Remember that lithium carbonate is a key product for electric car batteries, and hence is crucially important for the green transition.

The project is located in the province of Salta, in northern Argentina, on the Centenario-Ratones salt lake.

The social and environmental studies necessary for the project to proceed have been completed. These included the study of the environmental and social current state, and the environmental and social impact assessment. They involved work by over 25 external experts, local teams and Eramet's corporate support staff. These studies gave rise to a dialogue with the competent regional authorities, leading to the granting of the primary environmental licence for the project in February 2019.

A special effort has been made to integrate sustainable development criteria into the design of the project and the plant. For example, in the space of two years, this ongoing effort has reduced projected water consumption per tonne of lithium carbonate by about 30%, which is crucially important in this arid region of the world. This progress has been accomplished either by modifications that reduce water requirements, or by adding elements that better recycle water in the process. The recycling rate of water within the process is now over 60%. Finally, it should be pointed out that, thanks to the improved extraction efficiency of the innovative process implemented by Eramet, the impact of evaporation losses on the water balance of the catchment area is significantly reduced compared to the conventional evaporation process.

The project team maintains regular multi-channel dialogue with the inhabitants of the few communities surrounding the project site as well as with all project stakeholders (local and provincial authorities, etc.). It is also implementing a robust Community Development Plan, the focus of which has been decided in conjunction with the communities. These include the revitalisation of quinoa cultivation for the purpose of economic development and to fight against malnutrition, the partnership with the Ministry of Health to develop access to health services for the inhabitants of the *altiplano*, and a plan to develop local skills.

Finally, working hand in hand with the National Mining Agency, the project is one of Argentina's pioneering programmes in the rollout of the standard *Hacia una Minería Sustentable* (Steps Toward Sustainable Mining). This high-level standard is an adaptation of the one used by Mining Association Canada.

6.4.5.3 Moanda Mine Extension project

As part of the development of its activities, Comilog is considering a scenario to increase production capacity at its Moanda site in Gabon.

The project includes the launch of the exploitation of a new Okouma plateau and the construction of associated mining and industrial infrastructure, including a new washing plant in the Moulili valley.

The project is being developed in accordance with the performance criteria and guidelines of the International Finance Corporation, one of the most stringent sustainable development standards in the world.

These commitments were applied from the early stages of design, by carrying out studies to characterise the human, physical and biological environments. In 2018, these studies were completed, and consultations were conducted with local communities and public authorities. The environmental and societal impact study, carried out with the participation of internationally recognised specialists in their field, was finalised in 2019. Public hearings aimed at the general population and the local authorities were held in June 2018 and February 2019. A detailed presentation of the project was made, which included discussion of its potential impacts, the risks it poses and the opportunities it presents. The impact assessment was filed and then submitted to the governmental authorities and financial institutions as part of operating licence and financing applications. The operating licence was granted in May 2019. The financial institutions contracted an independent firm to assess the application; they approved the study in July 2019.

Biodiversity issues are important for the project. The main focus is the chimpanzee – an iconic species, classified as endangered by the international organization IUCN⁽¹⁾. The presence of chimpanzees on the site, alongside other species on the IUCN red list, means that specific measures must be put in place. Avoiding their habitats is a central concern of the project's biodiversity conservation strategy. The mapping of future quarries is the result of

collaborative work between environment, biodiversity, mining and engineering representatives of the project and Eramet, and the international specialists and experts of consultants Golder and Biotope. As a result, for the preservation of biodiversity it was decided to leave a significant proportion (more than 15%) of the mining reserves initially identified untouched. A dedicated plan of action is currently being developed. The purpose is to significantly increase the biodiversity of the project.

6.4.5.4 Weda Bay Nickel partnership in Indonesia

Following the signing of partnership agreements between Eramet and the Chinese steel group Tsingshan (the world's leading stainless steel producer), work to exploit the Weda Bay Nickel deposit, on the island of Halmahera, began in 2018 and continued through 2019.

This partnership, in which Eramet is now a minority shareholder, consists of using a pyrometallurgical process to produce nickel ferroalloy, with an annual volume of about 30,000 tonnes of nickel content, from the ore mined from the Weda Bay deposit.

The implementation of strong environmental and societal commitments for this project is an integral part of the objectives set out in the agreements signed between Eramet and Tsingshan. Eramet exercises full vigilance as part of this partnership. For instance, two audit and support projects were carried out during 2019, contributing to the dynamic of continuous improvement of the site's environmental and social performance.

Note that according to the consolidation process established by Eramet, activities for which the Group holds a percentage of control in the financial sense of less than 50% are not included in the reporting scope (see 6.5 "Methodological note"). As a minority shareholder, but aware of the potential CSR issues of the activities operated at Weda Bay, Eramet will publish separate annual information on the environmental management of these operations from the start of operational production (scheduled for 2020).

(1) IUCN: International Union for Conservation of Nature.

6.5 METHODOLOGICAL NOTE

6.5.1 Framework of indicators

The purpose of Chapter 6 is to inform stakeholders about actions undertaken by Eramet in relation to Sustainable Development and CSR. The indicator framework used for this purpose has been designed to provide the most accurate picture of the significant issues facing the Group given its activities. Specifically, the framework is made up

of those indicators which Eramet deems relevant to reflect the breakdown of its policies and its performance in terms of CSR. It includes some of the information given by Article R-225-101-1 of the French Code of Commerce and indicators drawn from those given by the Global Reporting Initiative framework, and its specific section on Mines & Metallurgy.

6.5.2 Scope of reporting

The non-financial reporting scope has changed little compared to 2018. The changes mainly relate to mergers, restructuring or site closures:

- France:
 - Eramet Research and Eramet Engineering have merged to form the new Eramet Ideas,
 - Divestment of the site in Landévant run by Construction de Moules Métalliques (CMM);
- China: Eramet Comilog Shanghai Trading (ECST) has become Eramet Shanghai Trading (EST);
- Hong Kong: Comilog Far East Development (CFED) has closed;
- Italy: the Eramet International branch in Trezzano has closed.

N.B. 2019 was the first year in which TiZir (formed by the GCO and TTI sites) was fully consolidated. This year also marked PT Weda Bay Nickel's exclusion from the scope of consolidation of the non-financial reporting (Eramet holds a minority stake in this company).

The Eramet Group's non-financial reporting covers:

- for the Social aspect (information provided in section 6.3): all companies consolidated from an accounting point of view (full consolidation), and also those accounted for by the equity method, as well as the following additional companies: Sodepal, Eramet Alloys UK, Eramet Alloys GmbH and Erasteel India;

- for the Safety aspect: all companies consolidated for accounting purposes (full consolidation) and also those accounted for by the equity method, as well as EcoTitanium and Sodepal, and finally the Eramet International sales offices. Recent Group entities (acquisitions, new projects) may be excluded from the scope of consolidation if their reporting is not reliable or if the project does not yet represent a significant Group activity;

- for the Environment, Energy and Societal aspect: all of the Group's sites which meet the following criteria:

- Eramet holds a controlling interest in the financial sense of at least 50%;
- the sites are subject to environmental regulations (permit, code, national regulations).

Within this scope, it does not apply to:

- sites whose activity is solely administrative (e.g. sales offices),
- sites in the project or closure phase, as long as no commercial production is carried out (with the exception of Eramet Ideas, to which this reporting requirement does apply),
- since 2016, sites whose activity is limited to distribution, it being understood that their cumulative impact is less than 0.1% of the Group total in relation to the main indicators concerned (six sites whose characteristic of non-significant impact is monitored).

The societal aspect also includes the information relating to Eramine (Argentina) and Sodepal (Gabon).

The following table summarises the entities covered by the various reporting scopes.

Country	Legal entity	Site	Scope social data	Scope Safety	Environment & Energy scope	Societal
Germany	Eramet Alloys GmbH	Mönchengladbach	x	x		
	Eramet International German Branch	Frankfurt	x	x		
Argentina	Eramine Sudamerica	Salta	x	x		x
Brazil	Eramet Latin America	São Paulo	x	x		
China	Aubert & Duval Moulds & Die Technology (ADMDT)	Wuxi	x	x		
	Erasteel Innovative Materials Ltd (EIML)	Tianjin	x	x	x	x
	Eramet Shanghai Trading (formerly ECST)	Shanghai	x	x		
Korea	Eramet Korea	Seoul	x	x		
Spain	Aubert & Duval	Irun	x	x	x	x
United States	Erasteel Inc.	Boonton	x	x	x	x
		Bolingbrook	x	x		
	Eramet North America	Pittsburgh	x	x		
	Eramet Marietta	Marietta	x	x	x	x
France	EcoTitanium		x	x	x	x
	Aubert & Duval	Les Ancizes	x	x	x	x
		Clermont-Ferrand La Pardieu	x	x		
		Issoire	x	x	x	x
		Heyrieux	x	x		
		Imphy	x	x	x	x
		Pamiers	x	x	x	x
		Firminy	x	x	x	x
	Aubert & Duval TAF	Gennevilliers	x	x	x	x
	Brown Europe	Laval-de-Cère	x	x	x	x
	Aubert & Duval TOG	Paris	x	x		
	Erasteel	Commentry	x	x	x	x
	Erasteel	Champagnole	x	x	x	x
	Erasteel	Paris & Chalon	x	x		
	Forges de Monplaisir	Saint-Priest	x	x	x	x
	Interforge	Issoire	x	x	x	x
	UKAD	Les Ancizes	x	x	x	x
	Eramet Holding	Paris and Trappes	x	x		
	Eramet Ideas	Trappes	x	x	x	x
	Comilog Dunkerque	Dunkirk	x	x	x	x
	Eramet Comilog Manganese	Paris and Trappes	x	x		
	Eramet Sandouville	Sandouville	x	x	x	x
	Eramet Nickel	Paris and Trappes	x	x		
	Eramet Services	Clermont-Ferrand	x			

Gabon	Comilog SA	Moanda Complexe C2M	x	x	x	x
		Moanda Complexe CIM	x	x	x	x
		Owendo Mineral Port	x	x	x	x
		Moanda Mine	x	x	x	x
	Setrag	Owendo	x	x	x	x
	Sodepal	Bakoumba	x	x		x
India	Eramet India Private Limited	Mumbai	x			
	Erasteel India	Mumbai	x			
	SQUAD	Belgaum	x	x	x	x
	ADEI	India	x	x		
Italy	Eramet Alloys Italia	Ferrara	x	x		
Japan	Eramet International	Tokyo	x	x		
Norway	Eramet Norway	Kvinesdal	x	x	x	x
		Sauda	x	x	x	x
		Porsgrunn	x	x	x	x
	TiZir Titanium & Iron (TTI)	Tyssedal	x	x	x	x
	Eralloys Holding		x			
New Caledonia	SLN	Nouméa (Doniambo)	x	x	x	x
		Kouaoua	x	x	x	x
		Népoui	x	x	x	x
		Poum	x	x	x	x
		Tiébaghi	x	x	x	x
		Thio	x	x	x	x
United Kingdom	Eramet Alloys UK	Sheffield	x			
	Erasteel Stubs	Warrington	x	x	x	x
Senegal	Grande Côte Operations – TiZir	Diogo	x	x	x	x
Sweden	Erasteel Kloster	Söderfors	x	x	x	x
		Långshyttan	x	x	x	x
		Vikmanshyttan	x	x	x	x
Taiwan	Eramet International	Taipei	x	x		

6.5.3 Collection, consolidation and control of data

Social reporting is based on the Era-Link dedicated acquisition and consolidation tool and on a qualitative questionnaire, sent in parallel to the entities concerned (which also facilitates feedback on the sites' societal commitment). Comparing the figures from these two tools for some common indicators allows for data verification.

The procedure "Safety and Information Reporting in case of personal accident" is the reference in terms of safety reporting. The applicable version was revised in 2019.

Data relating to occupational accidents are cross-checked with the monthly declarations made by the sites to the Safety and Prevention Department via the Group's HSE SharePoint.

The process of environmental and energy reporting is subject to a procedure that was updated in 2016, which clearly defines the responsibilities and operating procedures.

Environmental and energy reporting is based on a dedicated information system, called EraGreen, which has been in place at all relevant sites since 2011. All the quantitative information provided in this report (environmental indicators) is extracted from EraGreen and comes exclusively from the data entered by each of the Group's sites and validated by each site manager.

EraGreen contains systems for checking data automatically by comparison with previous years. In addition, the annual site reports issued through EraGreen are systematically checked for consistency by experts from Division or Group departments.

6.5.4 Specific points and methodological limitations

- The CSR performance indicator is a calculated value, by means of which the Group can, each year, assess the degree to which their CSR roadmap has been successfully implemented. For each of the targets⁽¹⁾, the year's achievement is compared to the initial benchmark initially set for the year, defining the corresponding level of attainment. Every attainment level is assigned a score, as a percentage. The mean of the percentages for each target is then consolidated to obtain an overall indicator.
– Sustainable value chain (suppliers and customers).
- From 2019 onwards, fatal accidents are also taken into account in calculating the frequency rates⁽²⁾ of occupational accidents, and include External Contractors in the workforce. The methodology used to calculate the severity rates has not changed.⁽³⁾
- Due to planning constraints, some monthly environmental data may not be available for the last month of the year. In this case, the missing data is estimated as accurately as possible, based on the historical site data, and, where appropriate, is correlated to production, in accordance with the Group's standards.
- When an environmental measurement is deemed to be faulty or is unavailable, an estimate based on historical ratios is used, adjusted according to the site's production level. This situation may arise in particular for nitrogen oxides (NOx) and channelled dust parameters, for which the quantities reported are based on a limited number of measurements during the year for certain sites.
- **Waste:** waste is reported in the environmental reporting by the sites in accordance with the national regulations applicable to them. The reported quantities correspond to the quantities of waste discharged into the treatment systems during the year. The criteria used to identify hazardous or non-hazardous waste vary depending on the regulations of the different countries, so the reporting cannot be completely uniform in this respect.
The measurement of non-hazardous waste does not include tonnages of deliberately rich slag that is generated as part of the ferromanganese pyrometallurgical process to feed the silicomanganese production furnaces as a secondary raw material, thus contributing to the circular economy.
- **Water consumption:** the quantities of seawater used for the cooling of the thermal power plant and for the granulation of SLN slag (New Caledonia), and water used for cooling the facilities at the Marietta site (USA) are not accounted for, as the water is directly returned to the natural environment without undergoing transformation.
- **Greenhouse gas emissions:** reporting is done in accordance with the rules of the GHG Protocol (WRI). The emission factors used are those most recently published by ADEME (in its Carbon Database), and by the International Energy Agency for electricity.
- **Biodiversity:** from 2018 onwards, the figures given for the cleared and revegetated area indicators have been made more comprehensive in scope by including contracted sites. The values for 2017 and 2016 are given with this same definition. This explains the discrepancy with the data published in previous registration documents.
- **Enrolled workforce:** employees with a contract of employment with the Company (fixed-term contract "CDD", permanent contract "CDI") and entered in the personnel records on the last day of the period concerned. This information corresponds to the number of people regardless of their working time (full or part time). Each employee is counted as 1.

(1) It should be noted that, for the 13 objectives, 15 targets are assigned, owing to the distinction between the targets for the following two objectives:

– Circular economy (waste and residue);

(2) The **frequency rate** of workplace accidents is the number of accidents (including fatal ones) that occur at work in a given period, expressed in relation to one million hours worked. $FR = (\text{number of occupational accidents} \times 1,000,000) / \text{number of hours worked}$.

(3) The **severity rate** of workplace accidents is the number of calendar days not worked after an occupational accident, occurring during a given period, based on one thousand hours worked. $SR = (\text{number of days not worked due to occupational accident} \times 1,000) / \text{number of hours worked}$.

6.6 REPORT BY THE STATUTORY AUDITOR, APPOINTED AS INDEPENDENT THIRD PARTY, ON THE CONSOLIDATED NON-FINANCIAL STATEMENT

This is a free English translation of the Statutory Auditor's report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

For the year ended 31 December 2019

To the Annual General Meeting,

In our capacity as Statutory Auditor of your Company (hereinafter the "entity") appointed as independent third party, and accredited by the French Accreditation Committee (*Comité français d'accréditation* or COFRAC) under No. 3-1049⁽¹⁾, we hereby report to you on the consolidated non-financial statement for the year ended 31 December 2019 (hereinafter the "Statement"), included in the Group Management Report pursuant to the requirements of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*Code de commerce*).

Responsibility of the entity

The Management Board is responsible for preparing the Statement, including a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement and available upon request at the entity's head office.

Independence and quality control

Our independence is defined by the requirements of Article L. 822-11-3 of the French Commercial Code and the French Code of Ethics (*Code de déontologie*) of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with applicable legal and regulatory requirements, the ethical requirements and French professional guidance.

Responsibility of the Statutory Auditor appointed as independent third party

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the statement with the requirements of Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with Article R. 225-105I-3° and II of the French Commercial Code, i.e., the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on the entity's compliance with other applicable legal and regulatory requirements, in particular the French duty of care law and anti-corruption and tax avoidance legislation nor on the compliance of products and services with the applicable regulations.

Nature and scope of our work

The work described below was performed in accordance with the provisions of Article A. 225-1 *et seq.* of the French Commercial Code, as well as with the professional guidance of the French Institute of Statutory Auditors (*Compagnie nationale des commissaires aux comptes* or CNCC) applicable to such engagements and with ISAE 3000⁽²⁾:

- we obtained an understanding of all the consolidated entities' activities, and the description of the principal risks associated;

(1) Accreditation scope available at www.cofrac.fr.

(2) ISAE 3000: international standard on assurance engagements other than audits or reviews of historical financial information.

- we assessed the suitability of the criteria of the Guidelines with respect to their relevance, completeness, reliability, neutrality and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information set out in Article L. 225-102-1-III as well as information regarding compliance with human rights and anti-corruption and tax avoidance legislation;
- we verified that the Statement provides the information required under Article R. 225-105-II of the French Commercial Code, where relevant with respect to the principal risks, and includes, where applicable, an explanation for the absence of the information required under Article L. 225-102-1-III, paragraph 2 of the French Commercial Code;
- we verified that the Statement presents the business model and a description of principal risks associated with all the consolidated entities' activities, including where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators associated to the principal risks;
- we referred to documentary sources and conducted interviews to:
 - assess the process used to identify and confirm the principal risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the principal risks and the policies presented,
 - corroborate the qualitative information (measures and outcomes) that we considered to be the most important presented in Appendix. Concerning all risks, our work was carried out on the consolidating entity and on a selection of entities⁽³⁾.
- we verified that the Statement covers the scope of consolidation, i.e. all the consolidated entities in accordance with Article L. 233-16 of the French Commercial Code within the limitations set out in the Statement;
- we obtained an understanding of internal control and risk management procedures the entity has put in place and assessed the data collection process to ensure the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important presented in Appendix, we implemented:
 - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
 - tests of details, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities⁽³⁾ and covers between 18% and 54% of the consolidated data selected for these tests;
- we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgment, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

Means and resources

Our work was carried out by a team of five people between October and March 2020 and took a total of five weeks.

We were assisted in our work by our specialists in sustainable development and corporate social responsibility. We conducted around ten interviews with the people responsible for preparing the Statement.

Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the non-financial statement is not presented in accordance with the applicable regulatory requirements and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.

Paris-La Défense, 13 March 2020

KPMG S.A.

Anne Garans

Partner

Sustainability Services

Pierre-Antoine Duffaud

Partner

⁽³⁾ TiZir Titanium and Iron (Norway), Eramet Norway Porsgrunn (Norway), Société Le Nickel (New Caledonia, France), Grande Côte Opérations (Senegal), Complexe Métallurgique de Moanda (C2M) of Comilog (Gabon).

Appendix 1

Qualitative information (actions and results) considered most important

- Measures taken in favour of the safety of employees
 - Environmental policies and action plans
 - Audits on human rights
 - Risk management on corruption and influence peddling
 - CSR and ethics supplier assessment procedures
-

Key performance indicators and other quantitative results considered most important

- Social key performance indicators and outcomes
 - Workforce on 31 December 2018 and distribution by type of employment contract and by socio-professional category
 - Recruitments
 - Departures
 - Share of women in managerial positions
 - Share of employees trained during the year
 - Frequency rate of work accidents (with and without lost time)
 - Severity rate
 - Environmental key performance indicators and outcomes
 - Total energy consumption
 - CO2 emissions due to energy consumption
 - Canalized dust
 - Chemical oxygen demand (COD)
 - Dangerous waste production
 - Total water consumption and its distribution by type of source
-





2017 Vigilance Plan – Eramet Group

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I. SCOPE AND OBJECTIVES

The aim of this vigilance plan is to meet the requirements of Law No. 2017-399 of 27 March 2017 on the duty of care of parent companies and contracting companies.

The scope of this plan primarily covers all Group entities: the parent company, Eramet SA, and the companies it directly or indirectly controls. This scope is also described in the chapter on Corporate Social Responsibility (CSR) in the Group's Universal Registration Document. The measures

concerning the in-scope entities are set out in sections 2, 3, 4 and 6 of this plan.

The scope of the plan also covers suppliers and sub-contractors of Group entities (parent company or controlled subsidiaries). Risks related to entities are discussed in section 5 of this plan, as the assessment and management of risks in the supply chain is subject to specific measures.

The Eramet Group

(See also www.eramet.com.)

Eramet is one of the world's leading producers of:

- manganese and nickel, used to improve the properties of steels, mineral sands (titanium dioxide and zircon);
- parts and semi-finished products in alloys and high-performance special steels used by industries such as aerospace, power generation, and tooling.

Eramet is also developing activities with strong growth potential, such as lithium mining and recycling, which will play a key role in the energy transition and mobility of the future.

The Group employs around 13,000 people in 20 countries.

A more detailed description of the Eramet Group is provided in Chapters 1 and 2 of the management report in which this vigilance plan is published.

II. RISK MAPPING AND ASSESSMENT OF SUBSIDIARIES

As part of its risk identification and control process, the Group compiles every three years and annually updates its major risk map, the implementation of which is managed by the Risk Management Department. The risk map is presented to the Executive Committee and to the Audit, Risks and Ethics Committee of the Group's Board of Directors. The map identifies major strategic, operational, financial and compliance risks. It is complemented by more detailed risk mappings focusing on specific cross-functional themes, such as human rights, the environment and health and safety of people.

1. Risk mapping

a. Risks of violations of human rights and fundamental freedoms

In 2017, the Group formalised its mapping of the risks of violations of human rights and fundamental freedoms, with the support of external expertise.

A risk universe was established by matching the impacts of the Group's activities with the list of rights contained in the UN Universal Declaration of Human Rights of 1948, the two UN International Covenants of 1966 (International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights), as well as the European Convention on Human Rights of 1950. Sector benchmarks on the identification and management of risks of human rights abuses were also taken into account. The criteria for assessing these risks, in terms of severity of harm and probability of occurrence, were also defined. They involve an assessment of the severity of the impact, not directly for the Group, but for the potentially affected third party(ies) (employees, local residents or other people).

The assessment of the level of severity and probability of occurrence of these risks was carried out by a representative panel of the different corporate functions and Group entities across all geographical areas.

The risk universe of human rights violations defined during this exercise for the Eramet Group can be broken down into the following three broad categories, and the main risks were assessed for each of them:

- risks for Group employees, mainly those related to health and safety at work, and to a lesser extent those related to discrimination and harassment. The risks to the health and safety of employees are described in more detail in the following section (II.1.b);

- risks to communities bordering the Group's sites, whether related to potential environmental impacts, or resulting from other activities (acquisition of land or, to a lesser extent, safety measures implemented for the protection of certain installations);
- the risks generated by contributors to the Group's supply chain, such as, for example, non-compliance with the fundamental conventions of the International Labour Organization. These risks are addressed in the section of the Vigilance Plan that focuses on the supply chain (section V).

The risk mapping will be updated regularly, based in particular on continuous assessments of the situation of the Group's sites and entities with regard to these risks.

b. Risks of harm to the health and safety of people

This section focuses on the risks of harm to the health and safety of employees. Risks to the health and safety of other people, such as residents close to the sites, are discussed in the sections on human rights and environmental risks and the associated control measures.

Risks of undermining the safety of employees

The prevention of risks of work-related accidents is based primarily on the analysis of risks in the workplace, conducted within the plants. This highly operational analysis makes it possible to secure a specific operation by identifying all the risks to which the operators are exposed and the means of control implemented to manage them. These local analyses are compiled in the risk register of each site (known as the "single risk assessment document" for French sites). These risks are assessed according to a scale based on the frequency x gravity pair, taking into account the protection measures in place. This methodology makes it possible to identify the most critical risks and thus feed into the site's Safety Improvement Plan. Risk registers make it possible to group the risks by standard activities specific to each site. For example, they include mechanical handling, machine driving, walking, etc.

At Group level, the risk analysis is based on this segmentation by type of activity. Risk assessment is based on actual accident statistics taken from the reporting of accidents over a period of several years, according to the frequencies actually observed and the average potential severity estimated on a case by case basis.

The Group's risk analysis of workplace accidents allowed the risks identified to be grouped into three distinct categories:

- **Technological risks** associated with processes and installations present the most serious potential hazards. An explosion, a toxic gas leak, or equipment failure can impact several people in a single incident. The frequency of occurrence of these events is the lowest in our history.
- **Critical activities** are dangerous tasks that are carried out on a daily basis as part of the operation of our facilities. They include machine work, work at height, vehicle traffic, working in confined spaces and working with liquid metal. Failure to control these risks can lead to serious accidents. In 60% of cases, the consequence of lack of control of these critical activities is work stoppage and, in a little over 10% of cases, serious injury.
- Finally, the Group's operations involve many routine activities, such as walking, lifting and moving objects and using hand tools. About two-thirds of the Group's accidents involve these activities, but the severity of the accidents associated with them is statistically less serious than for critical activities. For these routine activities, the accident rate that triggers a work stoppage is only 40%, while the rate of serious accidents is less than 1%. Eramet groups these activities which are difficult to categorise under the heading "**non-standardised activities**".

Risks of undermining the health of employees

Based on the analysis of risks in the workplace recorded in the risk registers of each site, occupational health professionals identify the risks that may have a lasting or deferred impact on the health of employees. These risks may relate to physical health (noise, vibrations, awkward postures, repetitive movements, night or alternating work, electromagnetic fields, extreme temperatures, exposure to dangerous chemical agents, including asbestos) or psychological health (workload, organization of work, autonomy).

Deferred risks are risks of occupational diseases, which are reported separately based on reports sent to the employer or which result in investigations by internal or regulatory prevention services. In France, a Table of Occupational Diseases is regularly updated and specific regulations are implemented in the other countries where the Group operates.

These risk maps and analyses of the risks to the health and safety of employees are regularly updated.

c. Risks of damage to the environment

As part of its environmental protection commitments and objectives, the Group maps the environmental damage risks for each of its sites. Environmental impact and risk assessment studies are carried out as part of the sites' exploration licences, ISO 14001 management systems and the Group's HSE audits. They are supplemented by industrial risk assessments carried out with insurers.

In 2017, the assessments resulting from these various activities were aggregated and harmonised in order to formalise a Group-wide risk map of damage to the environment. This mapping of environmental risks will be updated on a regular basis.

The main risks and challenges for the Group's sites are related to the following potential impacts:

- water consumption/pressure on water resources (for industrial and mining sites);
- emissions into water (for industrial sites);
- atmospheric emissions (for industrial sites);
- energy consumption and greenhouse gas emissions (for industrial sites);
- production of hazardous waste (for industrial sites);
- risks of historical soil pollution (for industrial sites);
- impact on biodiversity (for mining sites);

- erosion (for mining sites);
- production of waste rock and tailings (for mining sites).

The details of the nature of the risks associated with these impacts are described along with the corresponding control measures in section III.2 of this plan.

Furthermore, industrial risks (the occurrence of an industrial accident) can also lead to environmental damage. The main industrial risks to which the Group's sites may be exposed are fire, explosion (including, for certain sites, related to the risk of contact between water and molten metal), machine breakdown on critical equipment, and natural events (floods, storms/cyclones, etc.).

2. Procedures for the regular risk assessment of subsidiaries

In terms of environmental and health/safety risks, the risk situation of the subsidiaries is regularly assessed through two main mechanisms: internal environmental and safety information systems, and the HSE (Health, Safety and Environment) audit system.

A dedicated environmental information system (EraGreen) has been fully deployed in all industrial and mining sites, allowing for the collection and consolidation of environmental performance indicators. These indicators are mostly derived from the sampling and analysis plans developed by the sites as part of their operating permits. Information and reporting systems dedicated to the management of human resources and Health/Safety, including the reporting of accidents resulting in work stoppage, are also deployed at all sites.

The Group also relies on a demanding internal audit system for the performance of its entities in the areas of Environment, Health, Safety and Energy. The common audit guidelines are structured around three pillars: human involvement, operational control and prevention. They fully take into account the requirements of ISO 14001, OHSAS 18001 and ISO 50001. Mixed teams of the Group's Internal Auditors (corporate departments, Division coordination, and site representatives) trained according to an internal guidelines system, conduct these audits which last several days and make it possible to situate in detail the performance of the sites. This involvement strengthens the cross-functional level of expertise of HSE managers and promotes experience sharing between operational teams.

Corrective action plans are defined at the end of each audit, and for all risks considered significant, a quarterly report on the implementation of corrective actions is consolidated at Group level.

In particular, with regard to the risk assessment of subsidiaries in terms of industrial risk, the control system is based primarily on the programme of biennial insurance engineering visits (insurance prevention audits) to its industrial sites in close collaboration with insurers, brokers and the Group Insurance Department. Any significant risk detected during these audits results in a corrective action plan by the site concerned.

In terms of risks of human rights violations, the risk situation of sites will be assessed each year in light of the risks identified by the risk mapping exercise performed in 2017. This assessment must be based on data from the annual site CSR reports, covering specific Human Resources management indicators, and indicators related to the management of potential impacts on communities bordering our sites. This assessment will also take into account data from the monitoring of the social and environmental management of Group projects, carried out as part of the provision of project support.

III. RISK MANAGEMENT

1. Risk management policies and organization

a. Policies and commitments

The management of risks related to human rights, health, safety and the environment is first and foremost the focus of a clear commitment by the Group in all of these areas. Eramet has adopted an Ethics Charter and a Sustainable Development Policy, both of which set the standard for its social responsibility. These two fundamental documents have been translated into the languages of the countries where the Group operates and are implemented across all Divisions and sites.

- **The Group's Ethics Charter** sets out the Group's commitments and the rules and principles of action and behaviour of employees in many areas, including respect for human rights (with reference to the UN Universal Declaration of Human Rights and all the fundamental conventions of the International Labour Organization), the protection of the health and safety of persons, and the respect for and protection of the environment.
- The Eramet Group's **Sustainable Development Policy** sets out a number of these commitments. It is structured around four priorities:
 - *the protection and development of the Group's employees*, with commitments relating in particular to employee health and safety and social dialogue;
 - *the management of risks and impacts on health and the environment*, with commitments relating to the control of the impacts of industrial processes at the Group's sites, the reduction of energy consumption, the fight against climate change, better use of natural resources, and the development of recycling;
 - *the use of sustainable development opportunities for the benefit of customers*, with commitments related to the integration of sustainable development in the Company's business innovation and diversification policy, product responsibility (development of their environmental benefits and risk reduction) and a responsible purchasing approach;
 - *and finally, maintaining a relationship of trust with stakeholders*, by meeting their expectations through dialogue and cooperation actions, by contributing to the development of the areas where we operate, and by sharing the Group's non-financial performance in a transparent manner.

These thematic commitments are set out in more specific policies, such as the **Safety Charter**, the **Health Policy**, the **Environment Charter**, the **Biodiversity Policy**, the **Energy Policy** and the **Climate Change Policy**. The complete texts of these charters and policies are available on the Eramet Group's website.

b. Organization

The Group's commitment translates into involvement at the highest level of the Company. The Communication and Sustainable Development Director and the Human Resources, Health, Safety and Security Director, both members of the Group's Executive Committee propose, support and monitor the multi-year objectives and associated action plans. They report to the Executive Committee.

The effective integration of CSR topics into the Group's activities is also closely monitored by Eramet's Board of Directors, in particular through two of its Committees, the Strategy and CSR Committee, and the Audit, Risks and Ethics Committee.

The Communication and Sustainable Development Department (DC2D) has an Environment, Industrial Risks and Product Department (DERIP) and a Public Affairs Department (DAP), while the Human Resources Department (DRH) includes a Social Relations Department, a Safety and Prevention Department (SP), a Security Department and a Medical Advisor, responsible for promoting the Group's Health Policy. The Group Ethics Officer and the Divisions' Purchasing Departments complete this system.

These corporate functions are organised and structured around practices and processes aimed at continuously strengthening their commitment and efficiency, highlighting a strong culture of risk identification and control.

The objectives and action plans are available in all of the Divisions and operational entities of the Group. Their effective execution and the good coordination between the Corporate functions and the Divisions have been strengthened by the establishment of working groups and cross-functional committees focusing on various themes (biodiversity, mining environment, responsible purchasing).

Furthermore, the Group pays particular attention to the integration of social, environmental, health and safety, cultural and societal criteria at the earliest stages of their projects. Sustainable development experts and specialists are integrated into the industrial, technical, legal and financial teams, and participate in the various steering committees, from pre-project phases to feasibility studies and pre-construction. Likewise, they participate in acquisition audits in the case of merger or acquisition projects, as well as in due diligence related to the transfer of assets.

2. Risk management actions

a. Management of risks of human rights violations

Human rights in the workplace

Health and safety is an integral part of fundamental human rights, and as such has been integrated into the Group's risk mapping exercise on human rights violations. Due to the nature of their industrial and mining activities and their countries of operation, the Group's sites may incur risks related to the health and safety of employees, the management of which is one of the Group's priorities. These measures are described in section III. 2. b of this plan.

In order to strengthen the control of local workplace discrimination and harassment risks identified during the Group mapping exercise, an e-learning course is gradually being rolled out to all Group employees to raise awareness about the Ethics Charter, including a section dedicated to these issues. More generally, information is sent to all employees, through infographics displayed at all the Group's sites concerning the organization of ethical compliance and in particular the existence of the professional whistleblowing system, presented in section VI of this plan. In addition, as part of a trade union agreement related to the prevention of psychosocial risks, monitoring units have been set up at the various sites in mainland France to anticipate risk situations and give warning if an employee with psychological difficulty is identified. Training on the prevention of psychosocial risks has also been deployed for all Group managers. Actions to reinforce these mechanisms are planned, with the appointment of a Group Diversity Officer, whose role is to promote and coordinate all actions in favour of diversity and the fight against discrimination.

Measures to manage risks to the rights of workers in the supply chain, which were also identified during the mapping exercise, are presented in section V of this plan.

Rights of communities bordering Group sites

Most of the Eramet Group's sites have a permanent presence in the areas in which they operate, which with they develop highly interdependent relationships. The local integration of sites, particularly with regard to neighbouring communities, is therefore a key element in the sustainability of the Group's activities. As a result, the Group has built long-term relationships of trust with neighbouring communities, and works to prevent any risk of violation of their fundamental rights.

The prevention of such risks is primarily achieved through the implementation of dialogue mechanisms with the relevant stakeholders or their representatives. Information and consultation activities with local residents are set up according to the level of impact and risk of each site. The scope of these actions is most often adequately

defined by national or local regulations. In France, for example, because of their Seveso "High Threshold" status or their ICPE (Installation Classified for the Protection of the Environment) status, several sites participate in "Site Monitoring Commissions", composed of representatives of the State, local authorities, local residents, farmers and employees. As part of authorisation processes and studies of societal and environmental impacts, the projects establish mechanisms for consulting with local residents and other stakeholders in order to take into account their expectations in controlling these impacts at all stages of the project. In consultation with the Communication and Sustainable Development Department, some sites may go beyond the regulatory requirements for dialogue with local residents. In particular, the sites exercise greater vigilance with regard to the indigenous or vulnerable populations that may reside in the surrounding area. In addition, and depending on their potential impacts, some sites also set up dedicated systems to receive and respond to concerns, questions or complaints from local populations, as presented in section VI of this plan.

As part of a process of continuous improvement, actions to reinforce these dialogue mechanisms with the affected people are included in a multi-year action plan drawn up by the Group.

More targeted control measures are also put in place to manage specific risks related to the acquisition of land, environmental impacts and systems to ensure the safety of certain facilities.

The activities of certain Group sites require the acquisition of land from communities that reside or carry out economic activities (agricultural or commercial) in the area. These operations may present risks of human rights violations (property rights or the right to an adequate standard of living of these communities). In terms of preventing these violations, the Group refers to the principles set out in the Performance Standards of the International Finance Corporation (World Bank Group) relating to these relocation activities, with particular focus on the implementation of resettlement action plans.

Some sites also present environmental impact risks that may affect local residents. These may be pollution risks or risks of reducing communities' access to the natural resources they use. All these risks are covered by risk-management strategies, presented in section III. 2. c. of this plan, on management of risks of damage to the environment. Depending on the nature of these impacts or risks, local residents may be involved in the definition or execution of these control measures. In particular, local communities are associated with baseline characterisation studies that include their knowledge of biodiversity, its uses and ecosystem services.

In addition, some of the countries or regions in which the Eramet Group operates may experience unstable political, security or climate situations (terrorism, information theft, crime, earthquakes, cyclones, etc.). In this context, the Group Security Department implements measures to ensure the protection of employees (whether travelling for business reasons, or foreign or local residents), intellectual property and Eramet facilities. Eramet is aware that these measures must be established in respect of the rights of communities bordering the Group sites, therefore it has established a Group Security Policy that respects international law, French law and the laws of the countries in which the Group operates. As part of this policy, in accordance with the principles of the Eramet Group Ethics Charter, the prevention of safety risks first requires dialogue and a relationship of mutual respect with local communities. Similarly, training and rules governing the use of force and the equipment of the security personnel are decided, designed and controlled by a Site Security Officer, who acts within the framework defined by the Group Security Director.

b. Management of risks of harm to the health and safety of people

Actions to prevent risks to the health and safety of employees are coordinated by the Safety and Prevention Director and the Group Medical Advisor, who report directly to the Director of Human Resources, Health, Safety and Security. Together, they establish and propose to the Executive Committee the Group's health and safety policies and guidelines. Once validated, these guidelines are defined in the Divisions by the Division Managers, assisted by Health and Safety coordinators, and then by the Site Managers, who are themselves assisted by a site Health and Safety coordinator.

Prevention of damage to health and accidents is at the heart of the system, and concerns Eramet employees and temporary workers and subcontractors who work on the sites. It is based on the analysis of risks in the workplace, which determines the actions and preventive measures to be implemented.

Management of risks related to employee safety

In relation to Safety, actions at Group level are coordinated within the framework of the "Group Safety Committee" which includes the Human Resources, Health, Safety and Prevention Director, the Division Directors, the Safety and Prevention Director, and the Health and Safety coordinators of the Divisions.

Prevention tools are adjusted to the three major risk groups identified:

- the prevention of technological risks is based on the implementation of barriers (technical, organizational and human) as a result of hazard studies. Prevention depends greatly on the technical expertise of the teams that has been acquired over years of operations and their ability to identify and respond to weak signals;
- the risks associated with critical activities are too important to leave the choice of method of operation to the stakeholders; these activities are also strongly governed

by rules. Eramet has compiled a set of minimum essential rules – "Essential Safety Requirements" – that are required by all sites, in compliance with local legal requirements. Limited in number, they are communicated as part of a Group communication campaign. They are auditable and audited as part of corporate audits;

- finally, non-standardised activities cannot reasonably be governed by simple rules. For the work situations concerned, Eramet develops the situational intelligence of its teams so that the stakeholders learn to make safety-related decisions. Team awareness, feedback, and especially interactions with the chain of command in the field are all systematically used to guide decisions towards safer behaviour.

Management of risks related to employee health

In terms of prevention of health risks, the Group's strategy is based on the Group's Health policy, which covers four main areas, broken down into specific priority actions. The strategic areas are:

- reducing and managing the effects and impacts of the Group's activities on the health of employees and local residents;
- continued employment for all employees during their professional career, including when affected by poor health;
- participation in general public health and chronic disease prevention campaigns;
- the prevention of risks to psychological health and the implementation of actions for the Quality of Working Life.

For the management of risks related to products, a centralised structure, the Group Products Committee defines the rules and standards for the management of chemical products and provides support and services to the Divisions and sites in order to help them comply with the many regulations. The action of this structure has three main objectives:

- improve the technical and scientific knowledge of Group products;
- provide support and information to internal and external clients;
- harmonise the chemical risk management methods on the sites.

Harmonising the chemical risk management on the sites is a major challenge. Eramet Group production sites are found on five continents, and they must, therefore, follow and respect various regulations concerning hygiene and controls of chemical exposures in the workplace. In this area of regulation, there may be significant differences from country to country for the same substance. Harmonisation and communication between sites on these subjects is therefore important for exchanging, explaining and implementing practices and references, ensuring a corresponding protection that is the same or higher than the regulations in force in the relevant country. In concrete terms, a steering committee brings together the Group Prevention and Safety Department, the Group Medical Advisor, the Group

Environment, Industrial Risks and Products Department and the Hygiene, Health and Safety Coordinators of the Divisions. It defines and monitors the priority actions for the year. One of these actions is the production and circulation of practical toxicological sheets that identify the references and good practices, accompanied by a methodological guide for the measurement of exposure. A consolidated chemical risk assessment method is also available and is being deployed across the sites.

In particular, the asbestos-related risk for the Group is divided into environmental asbestos at nickel mines and also the management of asbestos products at industrial sites.

In New Caledonia, specific operating procedures exist to control veins of asbestos-containing ores in the event that the mining activity uncovers them. The operators are trained in the precautions to be taken, and special medical monitoring has been set up, in consultation with the authorities, social partners, and other mining operators.

No industrial site of the Group has ever produced or processed asbestos, nor marketed composite materials made up entirely or partially of asbestos. This material has never been used as a raw material by Eramet but rather only as a component of certain materials of thermal protection equipment. In accordance with applicable regulations, particularly in France, the Group has carried out asbestos technical diagnostics (DTA) on its industrial sites, by authorised firms, the conclusions and recommendations of which are then translated into detailed action plans.

c. Management of risks of damage to the environment

To manage its environmental risks, the Group relies on a network of internal experts and on a structured organization: The Environment, Industrial Risks and Products Department defines the Group's benchmarks, coordinates the general dynamics of continuous improvement, implements the control mechanisms of the internal standards and provides expert technical support to the sites and projects. The monitoring and anticipation of regulatory changes are performed jointly with the Public Affairs Department. In addition, more than 80 people make up the network of HSE functions at the sites with a reporting line to their senior management for the vast majority of them. Training and awareness activities on the essentials of environmental responsibility management are also developed at the sites, within the Divisions and at Corporate level.

The management of environmental risks begins with the implementation of environmental management systems. This is why the Group pursues the objective of ISO 14001 certification for all its sites, except those that have no significant impact on the environment. The latter category includes sites with purely administrative activities, such as offices, distribution centres or sites in project or closure phase.

In terms of controlling risks specific to mining sites, teams dedicated to taking into account environmental requirements in mining are present on the sites and in the subsidiaries concerned, and implement formalised tools for the environmental management of mines. All mining subsidiaries have formalised a Mining Environment plan of action and the progress of these action plans is reviewed regularly with the Group Environment, Industrial Risks and Products Department. In addition, a community of experts on the mining environment has been set up and meets regularly. Its role is to formalise good practices guidelines applicable throughout the Group and to encourage the exchange of expertise between sites. Finally, Environmental Management Systems compatible with the requirements of ISO 14001 have been deployed by the mining subsidiaries.

The more targeted measures and actions to control each of the environmental risks are described below.

Water consumption/pressure on water resources (industrial and mining sites)

Mining, metallurgy and hydrometallurgy activities consume water in several ways: for the cooling of furnaces and other metallurgical plants, for the washing of ores, raw materials and by-products, and finally for hydrometallurgical processes (solubilisation and reactive environments).

None of the Group's industrial sites is located in a country confronted with "water stress" according to the definition adopted by the UN, that is to say, whose water resource per inhabitant, for all uses combined, is generally less than 1,700 m³ per person per year. Although this water resource is often substantial or abundant on its sites, the Group attaches real importance to its preservation. Multiple actions are taken to use only the required amount.

Whenever technically possible, the sites encourage internal recycling of the water consumed. The cooling of furnaces and other metallurgical facilities, as well as other high-consumption uses, are mainly done in a closed circuit. The water consumption is then essentially supplemented in order to compensate for evaporation or losses in the system. Where possible, the sites also source water from a nearby industrial site.

With regard to mining sites, the issue of water consumption mainly concerns the Grande Côte Operations (GCO) site in Senegal. The subject of water management is sensitive there, as the operation of the mine uses two aquifers, one of which is very important for the people and the country in general. Given this situation, every precaution is taken to ensure that the impact of the mine is as low as possible. GCO has an expert team in hydrogeology, and the water management system was designed and authorised by the competent department of the Senegalese Government to avoid additional pressure on the surface water table used to supply agricultural crops for local residents. All mining installations are controlled to ensure minimal variations in the level of this water table.

Emissions into water (industrial sites)

Hydrometallurgical sites are the sites that present relatively the most significant risks of water pollution, due to the use of chemicals and an aqueous process. Eramet is committed to reducing its aqueous emissions, and all industrial water is managed in accordance with applicable regulations.

In addition to preventive systems, such as basins and double-walled storage tanks, curative mechanisms, such as effluent treatment plants using physico-chemical processes or hydrocarbon separators (separation by decantation) are used to allow discharges that are in accordance with the statutory limit values.

The Group's sites also closely monitor the quality of groundwater and the impact of the activity on soils and subsoils. Several hundred piezometers are distributed throughout the Group's various sites, both within and outside of the Company, to support the initial phases of any new project (characterisation of the initial state) and also to monitor any impacts on ground and surface water.

Atmospheric emissions (industrial sites)

Pyrometallurgical activities with their fusion plants and heat treatment furnaces contribute the most to channelled air emissions, including power plants. The CO₂ emissions are discussed below.

Air emissions are a function of the nature of raw materials and ores used, the transfer and loading technologies in place, the installed capacity of the equipment and especially the level of activity of the sites.

In pyrometallurgy, channelled emissions are generated in the handling of materials, furnaces, grinding and milling operations, as well as operations involving molten liquid metal and slag. In hydrometallurgy, channelled dust emissions most often occur during the handling, grinding, drying or transfer of materials.

The effluent purification systems generally used in the Group's factories are electrostatic precipitators, baghouses and washing towers. Specific treatment systems for certain pollutants can also be used, such as activated carbon filters. The different items of equipment are installed according to the characteristics of the industrial processes, the targeted purification performances and regulatory constraints.

Energy consumption and greenhouse gas emissions (industrial sites)

Sites that have metallurgical furnaces and/or electricity generation facilities are the sites that represent the bulk of energy consumption and greenhouse gas emissions. Thus, around four-fifths of the energy requirements are consumed by 14 Group pyrometallurgical plants.

Through its Climate Change policy, the Group is committed to reducing its greenhouse gas emissions, in particular by reinforcing its approach to improving energy efficiency, by promoting and developing the recycling of raw materials in a circular economy approach, and prioritising low-carbon energy sources and processes under economically acceptable conditions.

The Group Energy Policy, which incorporates the principles of the ISO 50001 standard, is deployed by the Group Energy Centre across all sites, where ISO 50001 certification is being progressively extended. The Group Coordinator, an ISO 50001 auditor certified by AFNOR, leads the process, providing the sites with expertise in several business areas and ensuring regulatory and technological monitoring. The site energy contacts, representatives of site management in relation to the ISO 50001 standard, locally implement the continuous improvement process in relation to energy. Finally, the site management is committed to an energy management system based on the principles of the ISO 50001 standard and to allocating resources that are adapted to the challenges of each site. Division management is called upon to support site management.

As part of the energy efficiency initiative, energy performance indicators are set up at the sites and are integrated into the management of industrial performance. The values and developments of these indicators are analysed in relation to each local process. Because of the variety of jobs and processes, consolidation of these indicators at the Group level would have no purpose. Consequently, and for reasons of confidentiality and protection of our processes, the Group decided not to communicate more precisely on these indicators.

Production of hazardous waste (industrial sites)

The activities that generate hazardous waste are mainly derived from the pyrometallurgical processes of the Group's mining divisions. The High Performance Alloys Division sites that are significant in terms of their size also generate significant quantities of hazardous waste.

These activities produce dust recovered by filtration systems, sludge and sodium-calcium slag which, depending on their intrinsic properties and the location of the operation, can be considered hazardous waste. The hazardous waste is treated through specific, authorised channels. Controls are put in place to ensure the proper management of this waste throughout the process (transport of waste, delivery to approved centre and final treatment).

Impact on biodiversity (mining sites)

In terms of controlling biodiversity risks, Eramet has formalised its commitments through a dedicated policy, which is structured around three main areas:

1. better awareness and understanding of biodiversity and its features;
2. acting to preserve biodiversity;
3. raising awareness, exchanging and sharing.

These principles are to be adapted at sites in a manner proportionate to local issues.

In New Caledonia, Société Le Nickel (SLN) operates nickel deposits on various sites in the heart of a region renowned for its rich biodiversity and the high rate of endemism among its flora and fauna species. It has developed reliable and environmentally friendly rehabilitation methods including revegetation by hydraulic seeding and plantations. The naturally low fertility of the soils, rich in metals and poor in organic elements, as well as the extreme rainfall conditions, make it difficult to see the results of this work in the short term because of the very slow growth.

SLN has implemented a global biodiversity management plan derived from a Biodiversity Strategy that incorporates international preservation standards in this area. Through this strategy, SLN implements its global biodiversity management plan.

In this context, SLN is working on the reintroduction of rare and threatened plant species through inventories of mining centres, as well as phenological monitoring to better control the reproduction of these species. SLN also monitors the wildlife (reptiles, birds, bats), the marine environment and the water quality of its mining creeks on all of its active sites.

In Gabon, the mining procedure includes a remodelling step and the progressive upgrading of the topsoil. The gradual reshaping of historically disturbed surfaces has also been completed.

In Senegal, the exploitation of mineral sands involves the clearing of vegetation as a floating dredge moves along the deposit. Biodiversity is of medium sensitivity in the areas currently being exploited. The issues are mainly related to the rehabilitation and revegetation of large areas when the exploited sites are made available. Revegetation (sowing/planting of local species) occurs after the reshaping of slag heaps to maximally reflect the original landscape (dunes). An additional irrigation system is also in place to allow the continuity of revegetation operations during the nine months of the dry season.

Erosion and water runoff (mining sites)

At mining sites in New Caledonia, and to a lesser extent in Gabon, the major issue of water management is to prevent the entry of suspended solids (SS) into the receiving environment through run-off caused by erosion due to surface stripping.

To avoid this, the sites are equipped with sedimentation ponds that trap suspended matter to prevent their transport into the natural environment. Upstream from these works, many precautions are taken to minimise erosion: roofing of sites to prevent water entry, minimisation of open areas, conservation of natural embankments at the edges of stripping sites, organization of runoffs to reduce speed, implementation of hydraulic locks, etc. These measures are documented in the Water Management Plan.

In Gabon, the subject of erosion is less significant given the topography of the plateau deposit and the draining characteristics of the upper geological layers of the plateau. This topic still attracts attention due to the ongoing extension of the deposit into the sloping part. A specific water management plan associated with the extension of the deposit has been developed. As part of this plan, a specific environmental monitoring system is in place, which confirms the effectiveness of the measures taken and makes it possible to verify that the very limited and localised phenomenon of acid mine drainage does not have a significant impact on the natural environment.

In Senegal, protecting the dunes reconstituted after dredging against wind and water erosion is an issue. This risk of erosion is controlled by means of regeneration of the reconstituted dunes, as the revegetation stabilises the sands.

Production of waste rock and tailings

Given the considerable volume of tailings being handled at SLN operations, the storage of tailings in appropriate structures and their revegetation is a vital environmental task in order to minimise erosion and the impacts on the ecosystem and landscape.

SLN has implemented effective techniques that have been validated by the authorities, one of which is to create tailings stockpiles. The stability of these structures is guaranteed in the long term, even during exceptionally heavy rains. These tailings stockpiles are subject to continuous monitoring and regular audits by an external third party. Moreover, in order to minimise land clearing and promote site rehabilitation, SLN privileges flat-top piles in old mining pits, when the environmental conditions are favourable.

In Gabon, the problem is less sensitive since, on the one hand, the volumes of tailings being handled are much less, and on the other hand because the technique of exploitation by the successive opening/closing of extraction compartments allows the majority of tailings to be placed directly into the compartments after extraction.

The Senegal mine is not at all affected by this problem, since the sand dune is reconstituted after passing the dredge and extracting the recoverable part.

Mine tailings, which are produced in ore concentration plants at the mines in Gabon and in New Caledonia, are chemically stable and therefore are not hazardous waste within the definition of the regulations. In New Caledonia, all processing residues from enrichment plants are also commercially exploited as by-products of the mine. In Gabon, mine tailings are stored in eight basins, consisting of closed dykes. The residues of the metallurgical enrichment plant are stored in a retaining dyke. These structures are continuously monitored for their stability.

The GCO plant in Senegal produces a very small amount of residues. The residual products have characteristics which allow their return to the natural environment when the dune is reconstituted.

Risks of historical soil pollution (industrial sites)

The Group exercises the utmost vigilance against potential impacts on soils and subsoils resulting from its past, current or future activities, both in the area of its industrial and mining activities.

Over several years, the Group has developed expertise to support the cessation of activity of certain industrial sites. This expertise concerns the investigation, identification, monitoring and management of potentially impacted sites through various projects, such as the rehabilitation of industrial sites and the end-of-life of landfills or old mines. This expertise is also consulted in the context of internal audits or in advance of acquisitions and disposals. It is important to mention the implementation of a policy of systematic characterisation of soil conditions before any new project, in accordance with the Group's Sustainable Development policy.

IV. SYSTEMS TO MONITOR THE MEASURES IMPLEMENTED AND ASSESS THEIR EFFECTIVENESS

Several of the Group's systems make it possible to monitor the implementation of the measures presented in this plan and to evaluate their effectiveness.

The Group's HSE and CSR reporting system, described in section II.2 of this plan, measures the resources deployed and their results on each site. The data is collected and controlled by the Communication and Sustainable Development Department and the Human Resources Department. In the case of risk management related to the use of products across several Group departments, the Group Product Committee (described in section III.2.b.) is the body responsible for monitoring the implementation of actions.

The HSE audit system, also described in section II.2 of this plan, is a monitoring tool for each of the Group's sites, resulting in the development of recommendations. The implementation of the recommendations resulting from audits and defined as high priority is monitored on a quarterly basis by the Environment, Risk and Products Department. To supplement this HSE audit system, the Group plans to integrate human rights-related elements and develop a multi-year programme of dedicated audits, prioritising the most sensitive sites identified as part of the

human rights risk mapping exercise. For this type of risk, as well as for those related to suppliers and subcontractors, the multi-year programme also provides for the intervention and recommendations of the Group Risk Management Department and the Internal Audit Department.

In the specific case of Group projects, the implementation of environmental and societal impact management action plans is monitored on a continuous basis as part of project support provided by the Environment, Industrial Risks and Products Department.

Finally, all the reinforcement measures described in this Vigilance Plan are included in multi-year action plans validated by the Group's Executive Committee, and their implementation is subject to a mid-year review. The Group's Board of Directors, through the Strategy and CSR Committee and the Audit, Risk and Ethics Committee, also monitors the implementation of these measures on an annual basis.

In accordance with the requirements of French law, the report on the effective implementation of the Vigilance Plan will be published annually in the Group's Management Report.

V. IDENTIFICATION AND MANAGEMENT OF RISKS RELATED TO SUPPLIERS AND SUBCONTRACTORS

The Eramet Group's activities involve the significant use of external purchasing and, to a lesser extent, outsourcing. The entire Eramet Group spends about 60% of its turnover on the purchase of goods and services. As a result, the Group pays particular attention to CSR issues related to its upstream value chain.

1. Risk mapping and supplier and subcontractor assessment procedures

Risk mapping

As part of its responsible purchasing approach, in 2017, the Group conducted a risk mapping exercise to identify the risks generated by the activities of its suppliers and subcontractors in relation to human rights and fundamental freedoms, health and safety of people, and the environment ("CSR risks").

In order to develop this risk map, an approach based on the business categories of the various suppliers and subcontractors was chosen. The ISIC (International Standard Industrial Classification of All Economic Activities) nomenclature developed by the UN was used. This nomenclature contains several hundred categories. The Group's suppliers fall into 66 of them, each of which was assessed according to two criteria: the CSR risk of the category and the importance of the category for the Eramet Group:

- for the assessment of the CSR risk of the business categories, Eramet availed of the expertise of an external company, proposing a CSR risk rating for each business sector. This rating is the result of data analysis and sectoral studies on the impacts and practices specific to each business category. These risks are analysed in the four areas: working conditions and respect for human rights, the environment, ethics and fair practices, and issues related to the supply chain of the sector itself;
- the assessment of the importance of the purchase categories for Eramet is based on several Group-specific criteria. These criteria include the purchase volume, the number of potential suppliers or subcontractors in the purchase category, or the impact of the purchased product on the quality of the products marketed by the Group.

The combination of these two assessments made it possible to position the 66 categories into four risk areas, and in particular to identify seven purchase categories that are both important for the Group and pose CSR risks:

- manufacture of non-metallic mineral products;
- manufacture of coke and refined petroleum products;
- metallurgy and processing of basic precious and non-ferrous metals;

- recovery of materials (waste treatment consisting of secondary raw materials, recovery by sorting material from non-toxic waste);
- wholesale trade of solid, liquid and gaseous fuels and related products;
- wholesale trade of metals and ores;
- mining of coal and lignite.

This mapping exercise, whose methodology will evolve as part of a continuous improvement approach, will be renewed every year.

Procedure for assessing the situation of suppliers and subcontractors with regard to CSR risks

The Eramet Group also has a procedure defining the methods for assessing suppliers according to the risk level of the business category to which they belong.

Eramet has chosen to focus its assessment efforts on the Group's 180 or so suppliers in the seven highest-risk business categories. These assessments will be gradually extended to suppliers belonging to lower-risk but potentially sensitive categories as part of a multi-year action plan. In the event that a new supplier or subcontractor belonging to one of these categories applies to be listed with Eramet, the same rules apply.

For all suppliers in these seven categories and for which purchases exceed a certain amount, the assessment is in the form of a questionnaire whose answers are analysed by an external third party. This questionnaire, adapted according to the sector of activity and the size of the Company, covers the four areas: working conditions and respect for human rights, the environment, ethics and fair practices, and the supply chain of the sector. The companies questioned are required to provide documents to support their declarations (certifications for example). For the other suppliers in these seven high-risk categories, the CSR assessment is being progressively incorporated into the global supplier assessment standards (quality, financial rating, HSE management, etc.) already used by the Group's entities.

In parallel with this process involving all Group purchases, specific assessments are made for tungsten purchases. Some of the Group's activities require the use of tungsten in metallic form, in limited quantities, in their manufacturing processes. This metal comes from ores that can be called "conflict" ores if their exploitation is used to finance armed groups and fuel civil wars in some parts of the world. Eramet is therefore very attentive to the conditions of supply of these materials and in particular to compliance with the specific provisions of the "US Dodd Frank Act", as well as the guidelines set by the OECD for multinational companies.

The Eramet buyers in charge of these supplies thus systematically require their suppliers to provide information concerning the origin of the ores used for the manufacture of tungsten metal sold to Eramet. They are also asked what due diligence measures they have put in place to verify this origin. To this end, the Group's buyers use the "Conflict Minerals Reporting Template" (CMRT), supplied and updated regularly by the Responsible Minerals Initiative (RMI), previously known as the Conflict Free Smelter Initiative.

2. Risk management

Risk management policy and organization

Eramet has adopted a Responsible Purchasing Charter, which formalises the Group's desire to strengthen the integration of sustainable development issues related to procurement, and promotes a dynamic of continuous improvement. Eramet's expectations with regard to its suppliers, subcontractors and service providers primarily target three main areas: Human Rights and working conditions, environment and products, and good business practices. The Charter is also available on the Eramet website.

In order to oversee the Group's responsible purchasing approach, Eramet has established a Responsible Purchasing Committee, bringing together the Division's Purchasing Managers and representatives of the Communication and Sustainable Development Department and the Group Legal Department. This Committee is an integral part of the Group's ethics compliance organization, led by the Ethics Officer.

Risk management actions

Compliance with the principles set out in the Eramet Group's Responsible Purchasing Charter forms part of Eramet's contractual requirements for all its suppliers and subcontractors. The charter specifies that audits may be carried out by Eramet at suppliers' premises to verify compliance with the principles stated therein.

All subcontractors operating on Eramet's sites must also comply with the rules in force at these sites in relation to environmental, health and safety risk management.

Moreover, at the end of CSR assessments, more targeted risk management actions must be implemented for suppliers whose rating is below a certain threshold. The Group first of all engages in discussions with the supplier with a view to defining corrective measures to be implemented by the supplier according to a defined schedule. In case of refusal or the impossibility of the supplier to implement corrective actions, Eramet reserves the right to terminate the contractual relationship, this case being also provided for in the Responsible Purchasing Charter.

3. System to monitor the measures implemented and assess their effectiveness

For actions related to responsible purchasing, the monitoring of the implementation of measures and the assessment of their effectiveness is carried out both on the supplier side (risk management measures) and internally (implementation of the approach).

In the first place, compliance by suppliers with the requirements of the Responsible Purchasing Charter or the corrective measures requested as a result of CSR assessments is monitored by means of supplier audits. The procedure and the audit reference framework for suppliers and subcontractors of the Alloys Division include components relating to environmental management, and employee health and safety. These audits are carried out with a sample of suppliers in accordance with an

annual audit plan. In order to supplement this existing system, supplier audit procedures and an audit reference framework must also be developed for the sites of the Nickel and Manganese Divisions, by integrating feedback from the audits conducted by the Alloys Division sites.

Internally, performance indicators relating to the updating of risk maps, the roll-out of assessments, and audits of suppliers are monitored by the Responsible Purchasing Committee. Some of these indicators are associated with objectives that are part of the Group's multi-year CSR plan, the implementation of which is the subject of a mid-year report to the Group's Executive Committee and the Strategy and CSR Committee of the Board of Directors.

VI. WHISTLEBLOWING AND REPORTING MECHANISM

The Ethics Charter and the Group's ethics programme have formulated a set of rules and principles for actions and behaviours that apply to everyone and include a professional whistleblowing system. This system allows each employee to notify the Group Ethics Officer or the Ethics Compliance Officer (ECO) of his/her entity of any events that may violate the principles and commitments of the Ethics Charter and the laws or rules relating to ethics. In particular, the Group encourages employees to disclose acts of discrimination and harassment at work, any conduct contrary to the Group's policies and standards in relation to health, hygiene, safety at work and the protection of the environment, and any violation or risk of violation of human rights of Group employees or external persons affected by the Company's business activity.

The whistleblowing procedures are made available to employees in the Ethics Charter available on the Group's intranet and are displayed on the premises of each entity. These alerts can be submitted anonymously.

The alert is managed according to a procedure that can be viewed on the Group intranet. This procedure guarantees that the employee initiating the alert has complete confidentiality, and insofar as the employee acts selflessly and in good faith, it also guarantees that no action can be taken against him or her as a result of the use of this mechanism.

In addition to the Group's whistleblowing mechanism, and depending on their potential impacts on the environment and local residents, some sites have also set up dedicated systems to receive and respond to concerns, questions or complaints from local residents. These site-level mechanisms ensure the local management of complaints, whose receipt, processing and resolution procedures are adapted to the cultural context of the entity and the nature of the impacts that may affect local residents. To complement existing systems and harmonise practices across the Group, the Group Standard for Responsible Project Management, currently under development, includes criteria for setting up these local complaint management mechanisms.

VII. REPORT ON THE EFFECTIVE IMPLEMENTATION OF THE VIGILANCE PLAN IN 2019

The purpose of this publication is to comply with the obligations of Law No. 2017-399 of 27 March 2017 on the duty of vigilance of parent companies and contracting companies relating to the publication of the report on the effective implementation of the plan published in 2017 and reproduced above.

The risk assessment work used by Eramet to formalise its Non-Financial Performance Statement has provided the Group with a very precise view of the challenges it faces. The material risks for which the Group must annually present risk control policies and measures and their results include

violations relating to the environment, human health and safety, human rights and fundamental freedoms, for the Group and its supply chain (see 6.1.2 "CSR risk assessment").

The table below presents for each category of risks expected in the vigilance plan and the risks identified, the elements of the Non-Financial Performance Statement, published in the management report, making it possible to report on risk control actions and their results, supplementing or amending the information presented in the vigilance plan above.





CROSS-REFERENCE TABLE VIGILANCE PLAN – NON-FINANCIAL PERFORMANCE STATEMENT

Items vigilance plan	Risks identified	Integration with the Non-Financial Performance Statement
Environment	Water consumption (industrial and mining sites)	6.2.4.3 Optimisation of water consumption 6.2.6.3 Water management
Environment	Emissions into water (industrial sites)	6.2.3.2 Aqueous waste 6.2.6.3 Water management
Environment	Atmospheric emissions (industrial sites)	6.2.3.1 Airborne emissions
Environment	Energy consumption/greenhouse gas emissions (industrial sites)	6.2.5 Fight against climate change
Environment	Production of hazardous waste (industrial sites)	6.2.4.1 Optimisation of the consumption of primary raw materials 6.2.4.2 Waste prevention and recovery
Environment	Risks of historical soil pollution (industrial sites)	6.2.3.3 Rehabilitation of closed industrial sites
Environment	Production of waste rock and tailings (mining sites)	6.2.6.2 Responsible resource management 6.2.6.4 Tailings and mine waste management
Environment	Impact on biodiversity (mining sites)	6.2.7 Preservation of biodiversity
Environment	Erosion (mining sites)	6.2.6.3 Water management 6.2.6.4 Tailings and mine waste management 6.2.6.5 Rehabilitation of mining sites
Health and Safety	Safety	6.3.2.1 Employee safety 6.3.2.1.1 Main safety issues and risks 6.3.2.1.2 Safety governance 6.3.2.1.3 Risk prevention strategy 6.3.2.1.4 Safety performance
Health and Safety	Health	6.3.2.2 Employee health 6.3.2.2.1 Main health issues and risks 6.3.2.2.2 Health Governance 6.3.2.2.3 Risk prevention strategy 6.3.2.2.4 Health Performance
Human rights and fundamental freedoms	Human rights in the workplace: Discrimination and harassment	6.3.2.4.4 Equal opportunities – measures to foster non-discrimination and diversity
Human rights and fundamental freedoms	Rights of communities bordering Group sites	6.3.3 Commitments to host communities 6.3.3.1 Objectives, organization and instruments 6.3.3.2 Impact management and risk prevention for local communities 6.3.3.3 Dialogue with local communities
Risks for suppliers and subcontractors	Non-compliance with ILO conventions in the supply chain	6.4.2 Responsible value chain 6.4.2.1 Governance 6.4.2.2 Responsible purchasing
Whistleblowing and reporting mechanism	N/A	6.4.1.3 Risk prevention strategy/Whistleblowing system 6.3.3.2.4 Local complaint management mechanisms

10.7 CONCORDANCE TABLE WITH THE GLOBAL COMPACT PRINCIPLES – ERAMET COP

In the context of the commitments made by Eramet as a signatory to the UN's Global Compact, each year, the Group publishes its Progress Report. Thus, Eramet publishes information about its contribution to the Global Compact principles, through its *Déclaration de performance extra-financière* (DPEF – Non-Financial Performance Report) and Vigilance Plan. These two annual publications allow Eramet to reflect the policies, actions and results which the Group implements as part of its approach to CSR.



Global Compact Principles	Eramet DPEF		Eramet Vigilance Plan	
HUMAN RIGHTS 	6.3.1 6.3.2 6.3.3	Commitment to Human Rights Social commitments to employees Commitments to communities	2.2.1.a 2.3.2.a 2.5	Risks of violations of human rights and fundamental freedoms Management of risks of human rights violations Identification and management of risks related to suppliers and subcontractors
INTERNATIONAL LABOUR STANDARDS 	6.3.2	Social commitments to employees	2.2.1.b 2.3.2.b 2.5	Risks of harm to the health and safety of people Management of risks of harm to human health and safety Identification and management of risks related to suppliers and subcontractors
ENVIRONMENT 	6.2	Environmental protection	2.2.1.c 2.3.2.c 2.5	Risks of damage to the environment Management of risks of damage to the environment Identification and management of risks related to suppliers and subcontractors
FIGHT AGAINST CORRUPTION 	6.4.1	Ethics, Compliance and Anti-Corruption	/	

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