

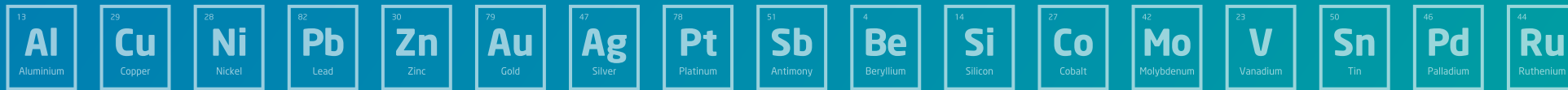


Eurometaux
European Association of Metals



RAW MATERIALS 2030:
**A RALLYING CALL FOR
EUROPEAN RESILIENCE**

A lasting recipe for Europe's Critical Raw Materials Act success over the next six years

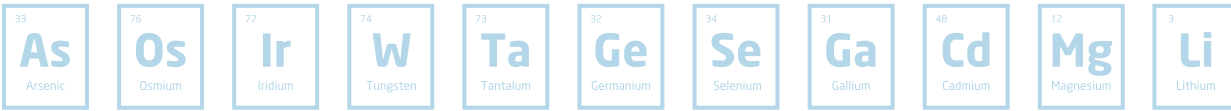


Six key ingredients for a 2030 resilient Europe...

- ◆ New capacity development
- ◆ Reviving production
- ◆ Maximizing recycling
- ◆ Securing global supplies
- ◆ Greening electricity
- ◆ Increasing skilled labour

And the best-in-class 'industrial kitchen' for getting us there:

- ◆ A leading Executive Vice President
- ◆ New EU-level finance
- ◆ Globally competitive energy
- ◆ Regulatory alignment
- ◆ Assertive trade agenda
- ◆ Market incentives



2030 IS ONLY AROUND **2000 DAYS** FROM NOW, AND COUNTING

Our 2030 trajectory is clear: The Critical Raw Materials Act sets ambitious goals for Europe to grow its metals resilience to supply the energy transition. Now, of course, the challenge is delivering on this, and with speed.

We have an achievable, six-part recipe for metals resilience, mapping out what concretely needs to happen before 2030 to really shape Europe's success.

Europe's metals industry is ready to deliver this success: We've got a rich existing industrial base and over 70 supply chain projects, ready to go across 15 countries to achieve the EU's 2030 goals for mining, processing, and recycling. We're committed to the highest environmental performance and delivering real local value.

Yet we're not the only cooks around. We're currently facing an ever-larger competitiveness gap with other regions who have so far better equipped their companies for success. Our industrial ambitions are at risk.

WE CALL FOR the next European Commission to act with urgency to make sure we in Europe have the same well-equipped kitchen that unlocks us to fully realise our raw materials potential.

That means a flagship Industrial Deal that improves the fundamental business case for Europe's strategic industries, led by a new First Vice President.



NOW OR NEVER

THE NEXT FIVE YEARS WILL DEFINE OUR CONTINENT'S INDUSTRIAL FUTURE



We want to lead the charge alongside policymakers

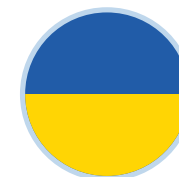
The last three years have brought unprecedented geopolitical challenges, with the path to 2030 likely to be an equally turbulent one. Securing the raw materials Europe's climate goals need will be of ever-growing strategic importance.

We have a clear window of opportunity to position resilience at the front and centre of the energy transition. And it's through thriving European industrial value chains and diversified supply that we'll deliver this, with raw materials at the foundation

But where does Europe stand today on this? Unfortunately, not where we need to be. We're currently falling behind in the race for clean technology leadership and relinquishing our core industrial strengths. At home, half of the EU's existing metals capacity and many planned raw material projects are at tangible risk of leakage.

Meanwhile, the US Inflation Reduction Act's incentives provide the simplicity and certainty that Europe can't yet equal. Already, metals investment has started to redirect, with overall investments in US manufacturing doubling since the end of 2021. Japan, South Korea, Canada, and Australia have all announced their own critical minerals investment packages in the last year.

We need a true European solution for industrial growth, avoiding a patchwork of Member State efforts. We need a real leap forward in the clean energy race.



RUSSIAN INVASION

-50%

of Europe's aluminium, zinc, silicon capacity taken offline by the energy crisis



2022

FEB



US IRA & SUBSIDIES

2-3X

more expensive to build a European battery materials refinery vs US and Asia, with 20-50% higher operating costs



CHINA EXPORT BANS

4X

export controls from China, on gallium, germanium, graphite, and rare earths equipment

CRITICAL RAW MATERIALS ACT



Two years of global turbulence



SHORT-TERM OVERSUPPLY

+50%

drop in certain battery material prices after China's aggressive investment



JUNE

2023

MAR

SUMMER

2024 ▶

2030

A CLEAR RECIPE:

SIX KEY INGREDIENTS FOR A 2030 RESILIENT EUROPE

The Critical Raw Materials Act's 2030 production goals set the right trajectory. We're ready to cook up Europe's metals resilience here, with over 70 projects across 15 European Member States. But what does that look like in practice?

We propose a clear six-part recipe to ensure Europe's raw materials resilience, which we will report on in the next six critical years up to 2030. This recipe must be delivered while nurturing what we already have, setting the groundwork for further projects and action towards 2050.

1 OPENING NEW CAPACITY

Taking a quantum leap forward

Despite a growing project pipeline, we have opened no mines in the last 15 years, and only a handful of refining and recycling plants.

Europe needs to open a minimum of:

10^{NEW}

mines

15^{NEW}

processing facilities

15^{NEW}

recycling facilities

for key strategic raw materials - with high sustainability performance

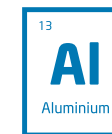
2 REVIVING PRODUCTION

Restoring our strong industrial base

Europe already has a vibrant metals industry, but we've been hit hard by the energy crisis, with 50% of our aluminium, zinc, and silicon production switched off today

Europe needs to bring back online:

20^{CURTAILED}



facilities

3 MAXIMISING RECYCLING

Managing our waste locally and well

Today, we're on track to have the recycling capacity we need, yet leakage of our metals waste is still too high.

Europe needs to ensure a:

>10%

increase in recycling's supply contribution, per material wherever feasible, through collection, sorting, shipment improvement

2030 indicators are based on KU Leuven's 2022 Metals for Clean Energy study and further industry data sources. They are designed as feasible goals for Europe to aim for, reflecting the current project pipeline and industrial base in Europe.

4 SECURING GLOBAL SUPPLY

Funding for the partnerships we need

Today, in contrast with our global competition, the EU funds no raw materials projects in resource-rich third countries.

Europe needs to fund at least:

15 third-country raw materials-related projects through the Global Gateway programme or other tools on the basis of priority strategic partnerships and a robust trade strategy



5 DECARBONISING ELECTRICITY

Providing access to abundant, decarbonised electricity

Metals is Europe's most electrified industry, yet currently misses the decarbonised electricity it needs.

Europe needs to supply:

 **110TWh** of globally competitive, decarbonised electricity

to its strategic metals supply chains
(The equivalent to the Netherlands' annual consumption)

6 INCREASING SKILLS

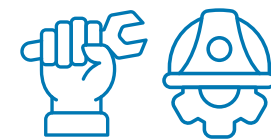
Training and attracting skilled workers to bridge the skills gap

If we continue on our current course, we'll face a critical shortage of skilled workers.

Europe needs to train:

10 000s

of new workers with the right skills, from geologists to metallurgists to engineers



RESILIENCE POTENTIAL:

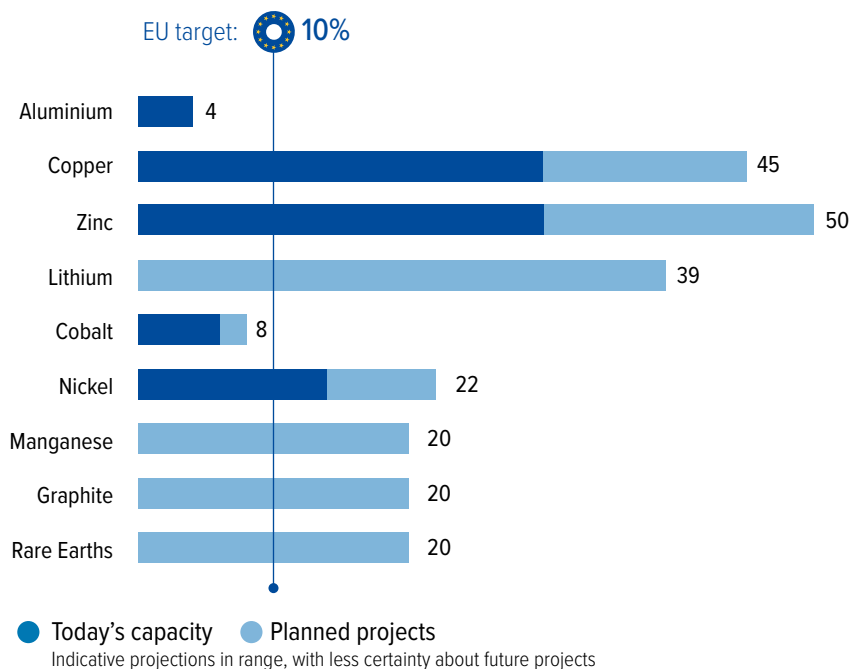
EUROPE'S 2030 RAW MATERIALS PROJECT PIPELINE

Through securing final investments and reviving production, Europe can meet some or all of its Critical Raw Materials Act benchmarks for aluminium, cobalt, copper, lithium, nickel, and silicon. More projects are still needed for EU 2030 goals, especially for mid-stream refining, e.g. graphite, manganese, gallium, germanium, magnesium, rare earths

For some critical metals, like platinum group metals, Europe only needs to strengthen the strong base and trade links it already has. A thriving metals ecosystem will ensure Europe's resilience not only for the metals designated as strategic or critical, but also all those others necessary for our transitioning economy - from zinc to lead to silver.

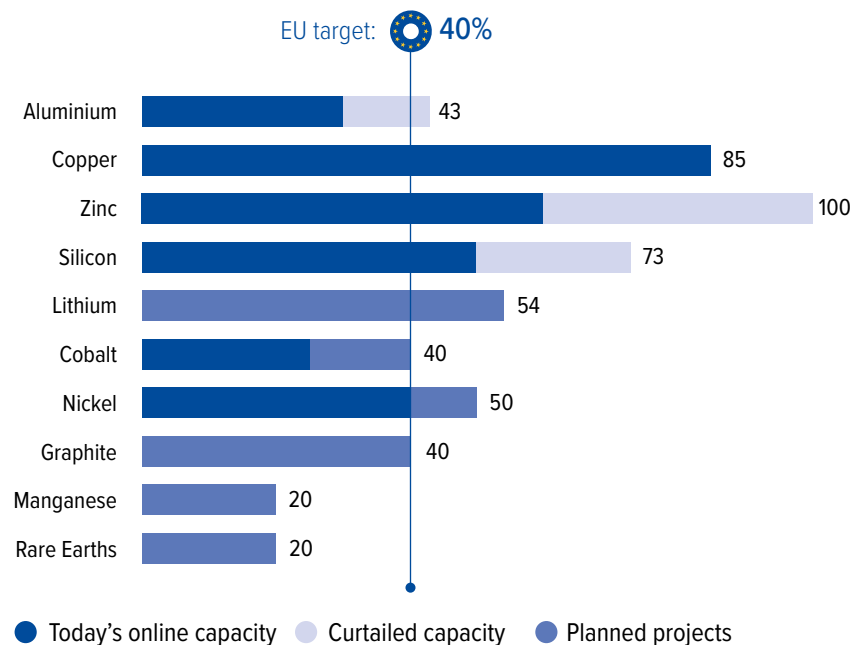
EUROPE'S MINING POTENTIAL (% of 2030 mined needs)

From opening new mines and expanding existing ones



EUROPE'S PROCESSING POTENTIAL (% of 2030 processed needs)

From opening new processing plants and reviving curtailed capacity



Europe = EU + EEA, Lower aluminium, silicon production today reflects idling of smelters.

Data projections are taken from KU Leuven's 2022 Metals for Clean Energy report, updated to reflect latest project announcements. Recycling projections are based on a forecast of available scrap and optimised recycling systems, including pre- and post-consumer sources.

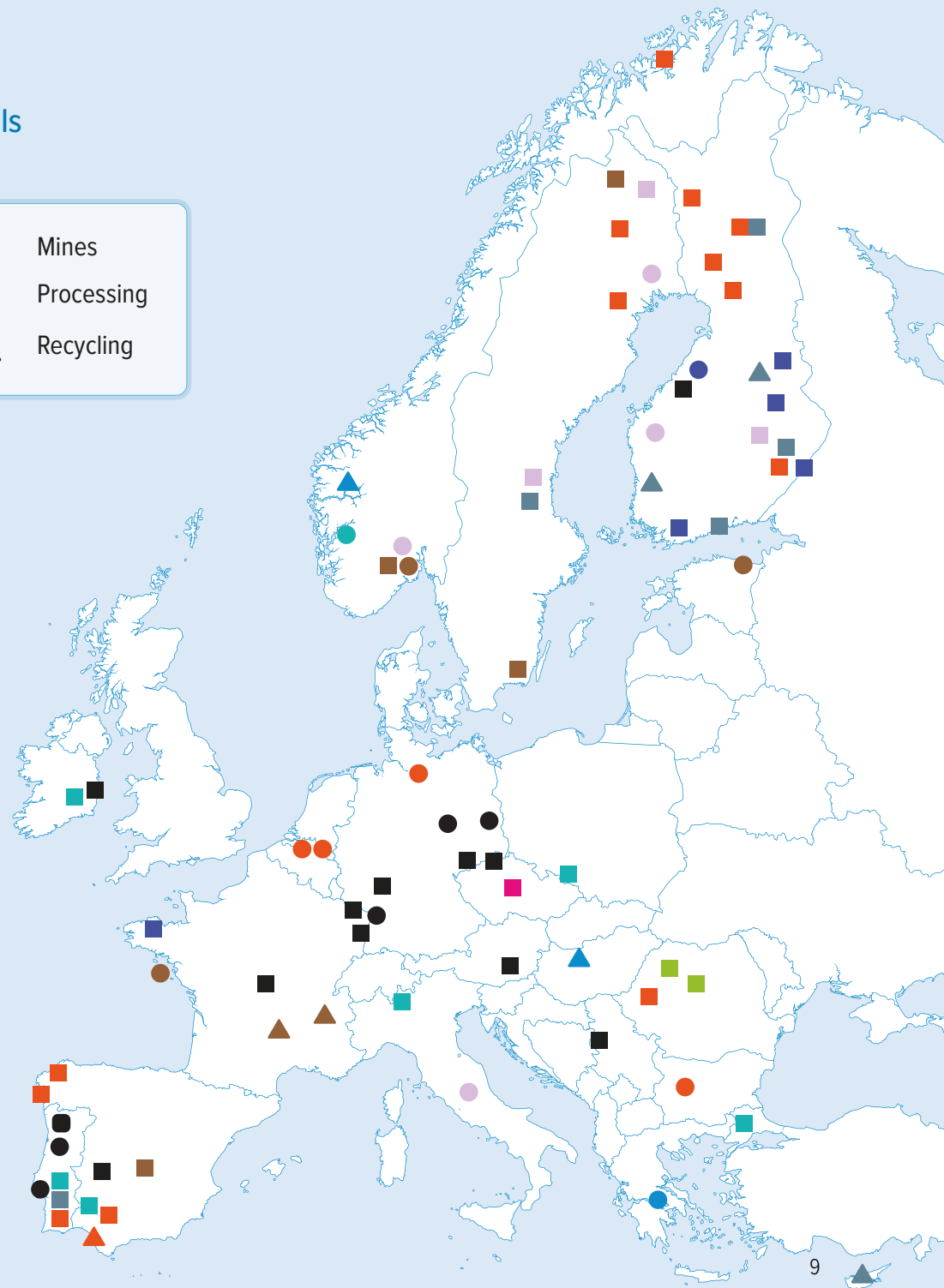
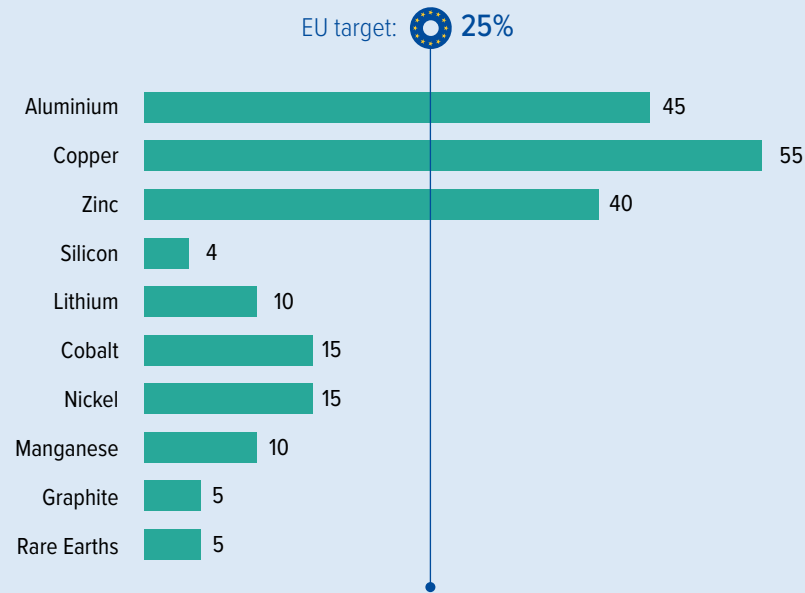
Europe's 2030 projects pipeline for strategic metals and minerals

Note: Electric Vehicle battery recycling projects not included on map, but the main recycling source for lithium, cobalt, nickel, manganese etc.



EUROPE'S RECYCLING POTENTIAL (% of 2030 needs)

From securing investment and optimising sorting, collection, and shipments



Europe = EU + EEA, silicon also well recycled in aluminium alloys, nickel well recycled in stainless steel

URGENCY:

AN INDUSTRIAL DEAL, LED BY AN EXECUTIVE VICE PRESIDENT



LET'S BE CLEAR, Europe's next policy cycle is 'make or break' for our continent's industrial future in the energy transition.

Introducing an EU Industrial Deal by June 2025 means we'll have fewer than 1,700 days to reach our 2030 raw materials and clean tech targets.

Urgency: Europe simply can't afford to wait a single day longer to put in place a robust EU Industrial Deal led by an Executive Vice President, with a top-down policy agenda implemented across all Directorate Generals.

A truly ambitious EU Industrial Deal means creating a 'European kitchen' that rivals the world. This 'European industrial kitchen' needs five central components to lead the way.

1

NEW EU-LEVEL FINANCE

WHY:

Europe's clean supply chain goals will require new and simplified EU-level finance to compete against the US IRA and other global programmes.

HOW:

- Deliver a **Sovereignty Fund** for manufacturing, including a strong raw materials focus, capable of rivalling our global competitors.
- Set up a **Raw Materials Bank** inspired by the Hydrogen Bank, which provides time-limited output-based support, applicable both to operating and capital costs of strategic projects.
- Introduce a new package of **State Aid guidelines** focused on OPEX as well as CAPEX, including scaling-up critical raw material production, emission reduction projects, and facilitating consumption of decarbonised electricity.

2

GLOBALLY COMPETITIVE ENERGY

WHY:

European investment and competitiveness requires real action to address today's ongoing high energy prices, especially for the electricity-intensive raw materials supply.

HOW:

- Massively accelerate the **roll-out** of low-carbon, renewable and nuclear energy capacity, including removing barriers to **renewables power purchase agreements** and their uptake by electricity-intensive industries (e.g. shaping and firming costs).
- Create a bridging solution for keeping electricity-intensive industries viable while power prices remain high, **through new tools** and the different national support actions from the last two years ensuring an EU level playing field.
- Preserve the Emissions Trading System **indirect cost compensation scheme** until at least 2030, to partially offset **the indirect carbon costs paid even when consuming fully decarbonized electricity**.

3 REGULATORY ALIGNMENT

WHY:

Europe's CEOs this year ranked Europe's regulatory complexity and incoherence as its biggest competitiveness barrier.

HOW:

- Deliver an overall proposal for measures to **eliminate contradictions and unnecessary complexity** in existing EU legislation.
- Add a clearer focus on **investment predictability** into Europe's chemicals policy and other upcoming waste/product legislation, while streamlining the implementation of the Green Deal's existing policies.
- Apply caution in the introduction of the **Carbon Border Adjustment Mechanism**, making sure that the mechanism is capable of working as intended, keeping a level playing field for European producers and avoiding excessive costs.
- Apply a **systematic competitiveness stress test** against which each new policy should be evaluated, including all pieces of legislation awaiting implementation.

4 ASSERTIVE TRADE AGENDA

WHY:

As geopolitical tensions escalate, Europe needs to secure its place in the new global order, especially for responsible securing critical raw materials.

HOW:

- Strengthen the use of **EU trade defence measures** to address proven global distortions in raw materials supply chains, including faster protection for those most at risk of dumping – as well as other trade policy tools.
- Launch a dedicated **Global Gateway raw materials investment plan** for financing overseas projects in the EU, backed by the European Investment Bank, export credit agencies, development finance institutions, and others.
- Act further to **keep strategic raw materials recycled in Europe** - especially through the right classification and shipment facilitation for emerging waste streams like battery black mass.

5 MARKET INCENTIVES

WHY:

Europe needs to incentivise its downstream industries to buy higher cost low-carbon and local materials, especially those strategic raw materials most vulnerable to global pricing shifts.

HOW:

- Publish a dedicated **strategy on low-carbon products**, using evidence-based methodologies for lifecycle carbon accounting.
- Evaluate the use of **Contracts for Difference** to ensure stability for prospective producers of specific critical raw materials which are the most vulnerable to global pricing distortions from China's market dominance.
- Propose **VAT exemptions** or other market incentives for products supplied with low-carbon materials and/or locally-produced strategic raw materials.

GETTING THE LONG-TERM PATHWAY RIGHT FOR SUSTAINABLE MATERIALS



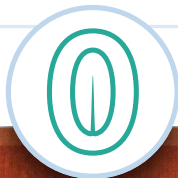
WE ARE actively supporting the European Commission's delivery of a Metals Industry Transition Pathway later in 2024, to ensure these six ingredients are delivered coherently with the wider Green Deal.

The energy transition away from consumable fossil fuels is also a materials transition towards permanent metals that will remain in circulation for decades.

This has major lifecycle benefits. But to ensure sustainability, Europe must address the potential for adverse impacts at each stage of the metals lifecycle.

Achieving 2050 climate-neutrality

Integrating decarbonised electricity to reduce our carbon footprint by 81%, combined with direct emission breakthroughs



Minimising our direct environmental footprint

Controlling our emissions to air, water, and soil, while keeping our workers healthy



Ensuring responsibility across global supply chains

Using due diligence and certification schemes to guarantee high ESG standards from our global suppliers



Involving our local communities

Maintaining a transparent dialogue with the communities around our operations, addressing their concerns and ensuring local benefits





WE ARE striving to be responsible material stewards for the energy transition, from the mine through multiple product lifecycles.

Europe's resilience goals are an opportunity to take better control of raw materials sustainability, avoiding unhealthy dependencies.

WE ARE committed to mine, process and recycle the EU's strategic metals with a best-in-class footprint, minimising impacts of the energy transition on environment and health.

For us, the **Circular Economy** is a major long-term driver in improving Europe's self-sufficiency



Further advancing our recycling technologies and processes



Working with customers on reducing material intensities



Minimising waste across our operations



MEMBERS

Commodity Associations

European Aluminium

International Copper Association
Europe

Nickel Institute

European Precious Metals
Federation

International Lead Association

International Zinc Association

Euromines

Cobalt Institute

National Members

Agoria Belgium

Association of Finnish Steel
and Metal Producers

Assomet Italy

BAMI Bulgaria

A3M France

ElvalHalcor Greece

IGMNiR Poland

Johnson Matthey UK

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Metaal Nederland

Alro Romania

WVMetalle Germany

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Associate Members

European Powder Metallurgy
Association

EuroAlliages

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International Antimony Association

Recharge

Vanitec

Arsenic Consortium

Boron Consortium

Catalysts Europe

European Carbon and Graphite
Association

European High Temperature
Insulation Wool Industry

Frit Consortium

International Lithium Association

International Molybdenum
Association

IMAT

Iron Consortium

Rare Earth Consortium

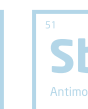
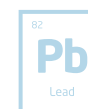
Selenium/Tellurium Consortium

Tin Consortium

Titanium Dioxide Industry
Consortium

Borates Consortium

International Platinum Group
Metals Association



Company Members

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The Chemical Company

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MYTILINEOS

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 nyrstar

RioTinto


Sibanye
Stillwater
we are one

 speira

 SQM

TOPSOE

trimet

TESLA*


umicore

 VALE

Wieland

27 Co Cobalt	42 Mo Molybdenum	23 V Vanadium	50 Sn Tin	46 Pd Palladium	44 Ru Ruthenium	33 As Arsenic	76 Os Osmium	77 Ir Iridium	74 W Tungsten	73 Ta Tantalum	32 Ge Germanium	34 Se Selenium	31 Ga Gallium	48 Cd Cadmium	12 Mg Magnesium	3 Li Lithium
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* Entry-level member



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Eurometaux is the united voice of European non-ferrous metal miners, processors, transformers, and recyclers - representing over 1000 production sites and projects, and employing 500,000 workers. Our materials supply the energy and digital transition, and we are committed to responsibility and security for Europe.