

Our Metals Future

The metals industry's 2050 vision for a Sustainable Europe

		<div>13</div> <div>Al</div> <div>Aluminium</div>		<div>29</div> <div>Cu</div> <div>Copper</div>		<div>28</div> <div>Ni</div> <div>Nickel</div>		<div>82</div> <div>Pb</div> <div>Lead</div>		<div>50</div> <div>Sn</div> <div>Tin</div>		<div>30</div> <div>Zn</div> <div>Zinc</div>			
<div>46</div> <div>Pd</div> <div>Palladium</div>	<div>45</div> <div>Rh</div> <div>Rhodium</div>	<div>79</div> <div>Au</div> <div>Gold</div>	<div>27</div> <div>Co</div> <div>Cobalt</div>	<div>25</div> <div>Mn</div> <div>Manganese</div>	<div>66</div> <div>Dy</div> <div>Dysprosium</div>	<div>42</div> <div>Mo</div> <div>Molybdenum</div>	<div>12</div> <div>Mg</div> <div>Magnesium</div>	<div>4</div> <div>Be</div> <div>Beryllium</div>	<div>14</div> <div>Si</div> <div>Silicon</div>	<div>47</div> <div>Ag</div> <div>Silver</div>					



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Foreword

2050 will be an important political year for the European Union, national governments and civil society. Policy decisions made within the tenure of the new College of Commissioners and the European Parliament will shape how the EU looks 35 years from now.

Non-ferrous metals will be centre stage in 2050's sustainable society, facilitating innovation, delivering mobility, enhancing communications, protecting products through packaging, and lowering energy consumption in many sectors. Across these applications, the multiple recyclability and durability of non-ferrous metals will be integral to achieving a circular economy.

With 2050 only one to two investment cycles away for Europe's non-ferrous metals industry, work has begun to implement the long-term solutions that will enable this transition. To support these efforts, collaboration and openness at all levels will be required to ensure that companies operating in Europe remain strong and globally competitive. Partnerships, multi-stakeholder models and continuous dialogue between all stakeholders will help create the solutions that will make the transition to a sustainable future viable and successful.

In that context, this publication has three objectives:

1. To summarise what Europe's non-ferrous metals industry must do over the next 35 years to facilitate the transition to a sustainable economy.
2. To outline the policy framework we require from European policy makers to sustain global competitiveness, and thus deliver the above.
3. To provide a clear pathway for our industry, under the umbrella of Eurometaux, to work upstream with global suppliers of primary raw materials, and downstream with value chain customers and recovery and recycling sectors, for the overall benefit of jobs, growth and the circular economy.

Our vision towards 2050 is founded on our belief that metals are indispensable assets for responding to the challenges of the 21st century and building a sustainable future. We also believe that, in the future, industry will be recognised as an integral building block of society, and not just a service provider.

Dirk Vandenberghe
President of Eurometaux

Partnerships, multi-stakeholder models and continuous dialogue between all stakeholders will help create the solutions that will make the transition to a sustainable future viable and successful.

2050 - A Milestone

Metals: indispensable assets for building a sustainable Europe

Metals do not lose their properties through recycling and can be reused repeatedly in products as pure metals and alloys.

Metals have been critical to the progress of society for thousands of years – from those at the roots of our civilisation, such as copper, gold, silver, tin, lead and iron, to those extracted in later industrial developments, such as aluminium, zinc, nickel, tungsten, platinum and, more recently, rare earths. All are essential elements for meeting the energy, transportation, packaging, housing, health and electronic challenges of the 21st century in a sustainable way.

When we extract non-ferrous metals from their ores, they become valuable assets that, if treated responsibly, have an enduring quality; metals do not lose their properties through recycling and can be reused again and again in products as pure metals and alloys in a huge variety of products.



Our vision for a sustainable Europe

In a reshaped industry ecosystem, companies will work in partnership throughout the value chain, using metals and other materials to offer sustainable solutions.

In 2050, Europe will be close to completing its transition to a sustainable economy. People will be enjoying a better quality of life, in a fair and prosperous economy, that will respect the planetary environmental limits. Consistent and supportive regulations will be providing a level playing field, and companies will be committed to delivering shared value to society. Industry will be recognised as an integral partner in society and will enjoy a relation of trust and respect with other partners.

The European non-ferrous metals industry will be key to this evolution, having long-achieved global-leading standards of environmental performance, resource efficiency and innovation. In a reshaped industry ecosystem, metals will be delivering solutions, rather than simply goods or services, and metal producers will be working collaboratively with other businesses, governments and communities to provide high-quality services and enhanced functionality, and to respond to 21st century environmental challenges.

Achieving a circular economy

“A circular economy refers to a move from linear business models in which products are manufactured from raw materials and then discarded, to circular business models where products or parts are repaired, reused, returned or recycled.”¹

Eurometaux believes that if we reduce waste and increase recycling, we can help the EU use its resources more efficiently, save costs and create jobs in both developed and developing countries. We believe that the industry should encourage organisations to take a similar view in the manufacture, use and disposal of products containing metals.

However, translating the circular economy concept into practice requires business leadership, smart regulatory framework, international cooperation and the spreading of best practices along the whole value chain, while maintaining competitiveness.

Metal companies must already start broadening the skill sets of their employees; building constructive relationships with regulators, customers and other stakeholders; increasing partnerships in secondary materials markets; and helping reduce, reuse and recycle materials within their own sector as well as between industries and value chains.

Drivers for Change

In preparation for its transition to a sustainable economy, Europe must make fundamental and systematic changes, in order to bring prosperity and improve quality of life to the global population, while minimising environmental damage and risks.

In order to maintain competitiveness, metals companies must also be proactive in anticipating and strategically planning for the challenges that Europe will face over the next 35 years. Of Europe’s many challenges, four have major tangible implications on demand, production and supply routes for both primary and secondary materials:

Demographics

The global population will continue to expand up to 2050, and living standards will improve in developing countries. People will accordingly demand higher-quality services and added-value activities – and expect them to have less environmental impact.

These demographic changes will increase demand for raw materials sourced from Europe, impacting on the continent’s energy consumption and environment. Metals companies will be instrumental in delivering innovative products and solutions to meet society’s growing needs, but must also be prepared to report their progress to consumers and stakeholders in a transparent way.



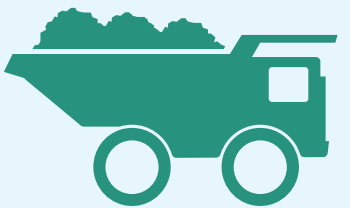
Raw Materials

As demand for raw materials increases over the next 35 years, processes and policies must enable easy access to primary and secondary raw materials in Europe.

Metals will remain essential for infrastructure, renewable energy, transportation and buildings – for instance, stronger, lighter and flexible materials will be used for ships, cars and buildings to reduce environmental impact.

Mining of primary raw materials will continue to supply a great deal of this demand, while a growing amount will be met by recycling. Industry and society will need to work in partnership to lower net consumption per capita, through increased resource efficiencies, improved product design, a circular economy and new business and waste-management models that prevent material use exceeding available resources .

Fierce global competition for resources and raw materials has significantly increased over the past few years, leading to trade distortion and practices by third countries that are detrimental to European operators.



Energy & Climate

The production of non-ferrous metals is energy-intensive and so production costs are very sensitive to energy costs. Innovation can help reduce these costs, but in order to remain globally competitive, our industry needs long-term secure access to affordable, reliable and low-carbon energy.

Once produced, non-ferrous metals are vital for generating and storing efficient and renewable energy – for example, copper in wind power generation, platinum for fuel cells and cobalt for energy storage.



Environmental Pressure

Increasingly, as production and consumption grows, society expects organisations to act sustainably and with low environmental impact. Companies must put in place solutions that strike a fair balance between environmental protection, sound risk management, reduced impact of products throughout their lifecycles, and commercial viability and responsibility.

To promote industry’s efforts, policies for chemicals management must be balanced and sustainable. The use and production of chemicals must be in harmony with international safety standards to avoid overburdening or suspending production in Europe, consequently increasing the import levels of products and chemicals.

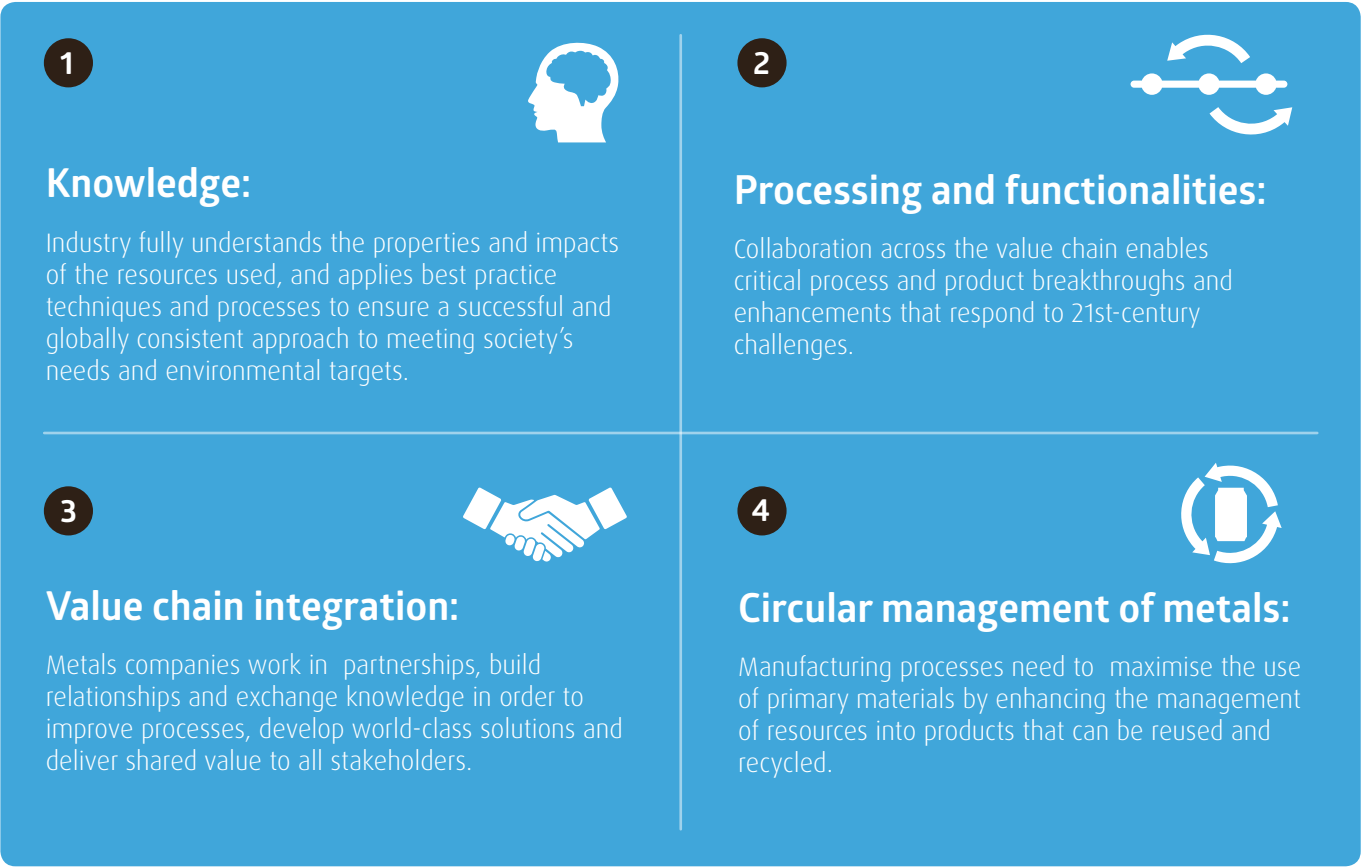


Framework for Europe's Non-Ferrous Metals Industry

Four conditions of success

In the medium- to long-term, assuming a supportive policy framework is in place, Eurometaux's membership commits to assisting Europe's transition to a prosperous, inclusive, low-carbon and resource-efficient economy.

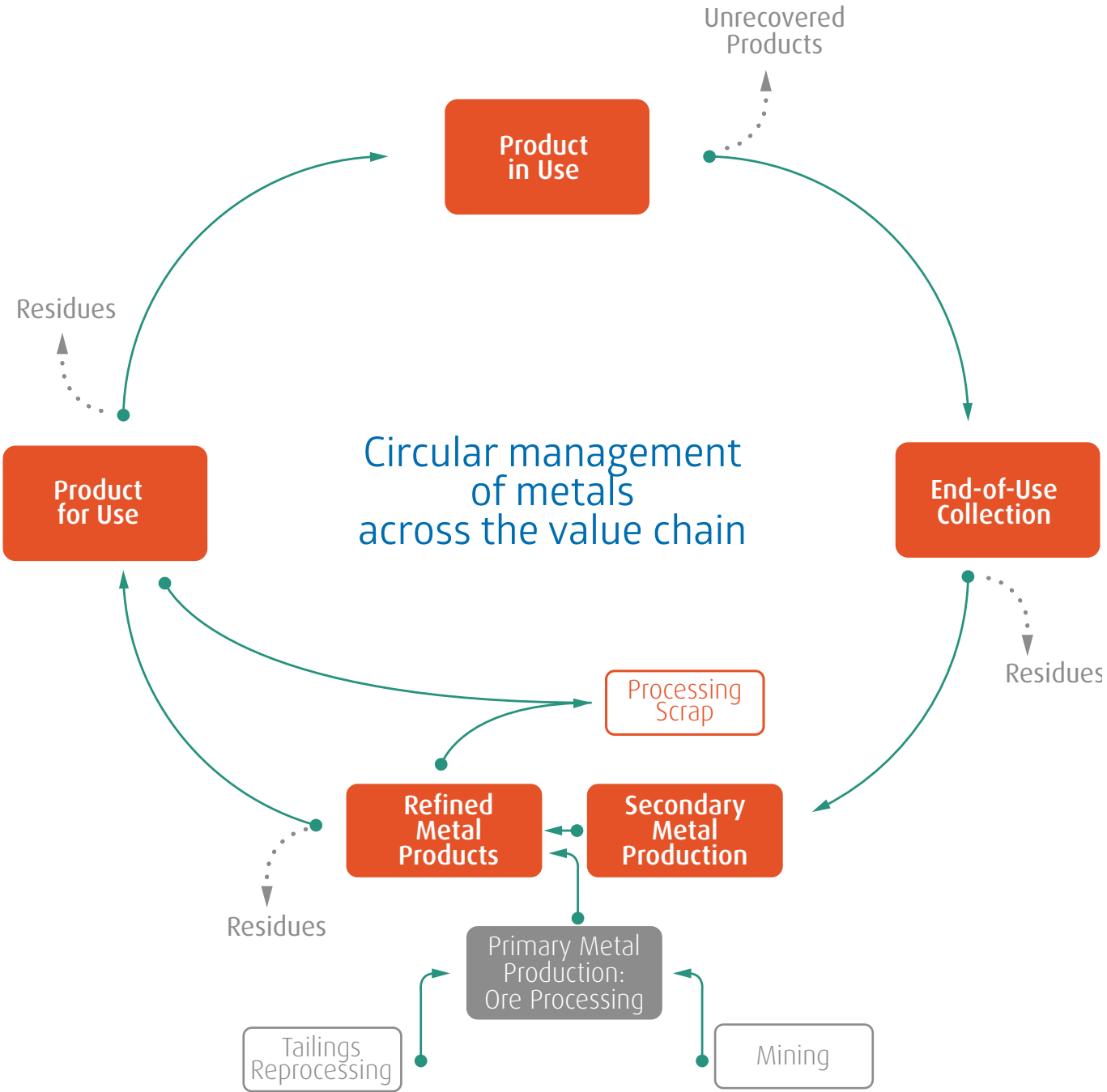
There are four main conditions which will enable our industry to contribute fully to building a sustainable Europe:



Progress requires investment in research and innovation, particularly in planning for future applications of products. This includes supporting processes and technologies for manufacturing, maintenance and repair that extend the life of metals; maximise the use of waste and by-products; improve yield rates; and mark materials so that they can be quickly identified for re-use at the end of life. Furthermore, metals companies must support efforts to increase recovery rates by improving processing capabilities and engaging with players within the scrap market.

Organisations must also equip their people with the competencies needed for the future sustainable economy, including the skills to build multi-stakeholder relationships and seek efficiencies across the product value chain.

The figure below shows how a circular economy will help us manage metals with a minimum of residues and a strong integration of all the steps in the value cycle, from mines to end-of-use recovery.



Over the page, we outline how we will measure success in 2050 against our four conditions of success. We list the potential milestones that we believe will smooth the transition to a sustainable world. In order to reach these milestones, Eurometaux members must now share their vision and goals with governments, communities and consumers, and establish appropriate partnerships and networks throughout the value chain to drive innovation, add value and seek efficiencies.

By adopting innovative approaches and establishing action plans that look ahead to these milestones, Eurometaux members will collectively lead our industry towards its 2050 vision



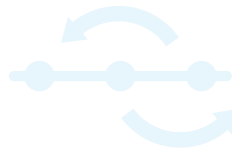
1 Knowledge

Our vision for 2050

Industry will possess, develop and share a deep knowledge of metals' properties and their impacts, risks and functionalities. Data and best practice will be globally consistent and reliable sources for education, innovative solutions, product development and resources management.

Some milestones along the journey

- Lifecycle and product assessments, combined with socio-economic analyses, form a scientific methodology for identifying the value, impacts and benefits of metals; informing business strategies; and measuring performance against industry standards.
- Detailed metal-by-metal spatial and temporal information about stocks and flows are part of a holistic management of metals value chains – from mines to products to secondary recovery loops.
- Indicators for primary and secondary production, products and impacts are made consistent worldwide, and the EU collects data based on these.
- Robust risk-assessment methodologies are applied industry-wide, ensuring operations are carried out in line with consistent, Europe-wide sustainable risk-management policies.
- Industry cooperates with stakeholders, customers and education centres to ensure that the right knowledge is available in Europe to innovate and meet societal needs. Needs are translated through a product approach that extends from design through to recycling and scrap. Global metal risk management increases consumer protection and product quality.



2 Processing And Functionalities

Our vision for 2050

A combination of R&D, innovation and collaboration across the value chain will have improved processing, and all partners will take a holistic view of metallurgical systems for primary production and secondary metals recovery. Industry will be producing metals with reduced environmental footprint and contributing to innovative end-use functionality and enhanced resource efficiency during products' full lifecycle.

Some milestones along the journey

- Designers and technicians consider material sciences and integrated system features. Innovation clusters, supported by public-private funding, enhance the performance of large-volume equipment and critical applications.
- All value chain partners work to guidelines for optimal functional design and resource use and recycling, encouraging innovation in product development and manufacturing.
- Industry offers increasingly innovative processes and products for new technologies, such as 3D manufacturing and a safe range of nano materials products for downstream sectors, new alloys, compounds and smart composite materials.
- Metal alloys and hybrid materials provide new functionalities and trigger the development of new applications.
- Global metal risk management increases consumer protection and product quality.



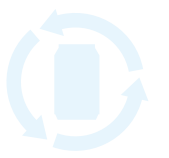
3 Value Chain Integration

Our vision for 2050

The stewardship of metal assets will be strengthened through collaboration between all participants in their value chain.

Some milestones along the journey

- Value chain platforms use reliable supply chain indicators that collectively reduce carbon and waste and water intensity, and increase recovery rates. Through partnerships, stakeholders throughout the metal value chains take joint responsibility for meeting stricter environmental standards.
- Value chain partners take joint responsibility for each application, and work together to implement transparent reporting processes, while maintaining competitiveness, product development and safety and environmental awareness.
- The extraction and manufacturing of metals improves through automated mining processes and new technologies, and remains competitive, partly thanks to integrated value chain approaches and industrial symbiosis.



4 Circular management of metals

Our vision for 2050

Industry will apply a circular management to all metals – designing products in such ways that most elements can be recovered and reused, rather than disposed of. This minimises losses, limits the use of primary raw materials – although the use of primary raw materials remains essential for meeting growing demand – and ensures a secure supply of both mined and recycled metals for society's sustainable growth.

Some milestones along the journey

- Recycling becomes a more efficient and simplified process throughout the value chain, thanks to several developments:
 - Industry players work more closely together, seeking synergies.
 - New business models and improved planning extend the life of materials through future applications and improve collection and recycling at end of life.
 - Technologies and know-how can recover metals from even the most complex end-of-life products.
 - New business models and increased controls reduce landfilling, illegal exports of some end-of-life products and the incineration of recyclable products.
- EU quality standards become a benchmark for recycling worldwide and all waste from Europe is treated against those standards. The value of secondary material increases.
- Metals are recovered from historical landfills and tailings in Europe.
- Critical and strategic raw materials are recycled at significant rates and joint public-private "pilot plants" for critical and strategic metals enable significant progress.

Innovation and competitiveness

Critical decisions must be made soon – on industrial and policy fronts. Our 2050 target for a sustainable world is not even two investment cycles away.

There are two fundamental levers, or requirements, for our four conditions of success to be realised: innovation and competitiveness. One does not work without the other. Our metals and our know-how are central to creating a sustainable society.

Our financial forecasts and strategies for research, resources development, operations and facilities look ahead 20 or 30 years, so our 2050 target for a sustainable world is not even two investment cycles away. Therefore, critical decisions must be made soon – on industrial and policy fronts.

Non-ferrous metals can be crucial for giving new technologies enough scale for commercialisation. Metals companies must seek out opportunities to integrate innovation development throughout the value chain, in order to decouple growth and value from environmental impacts, and turn waste material into valuable resources. Additionally, the metals industry must even more than before engage with policy-makers to influence consistent and flexible policies that provide value for the broad stakeholder community and secure our access to reliable and affordable energy and raw materials.

Our industry and the reindustrialisation of Europe needs stable and consistent compliance mechanisms. In our dialogue with policy-makers, we must help shape a level playing field, with free and fair international trade rules and globally consistent policies. This is critical to our vision, especially in areas such as carbon pricing, for processing, and for waste and recycling standards.

Call for Action to Policy Makers

The call for short-term action

Investment planning in the non-ferrous metals industry requires a consistent and stable regulatory framework. It should recognise our commitment to continuous improvement and high operating standards.

For our industry's 2050 ambition to be achieved, we are dependent on strong and supportive EU industrial policies that facilitate our global competitiveness and sustainable growth.

Although demand for non-ferrous metals continues to grow worldwide, production in Europe has become more costly than in competing regions – particularly in terms of regulatory, labour and energy costs – and our competitiveness has suffered. In international markets, where prices are set globally, it is not possible to pass these EU-specific extra costs to customers.

Rectifying this situation requires us to collaborate with EU policy-makers to implement a workable policy framework that stimulates new investments in EU metals production.

1. Long-term predictability and stability

Investment cycles in the non-ferrous metals industry last over 20 years, and so decisions are already being made towards 2050. Metals companies require long-term predictability to secure investment in Europe.

As we continue to lower emissions and improve environmental performance, the EU should provide long-term protection against the direct and indirect impacts to our industry of the EU's Emissions Trading System (ETS). The completion of the EU's internal energy market should also be prioritised, in order to deliver competitive and stable electricity prices for industry, with restrictions removed on long-term supply contracts.

2. Coherent, consistent and enforced regulation

Investment planning in the non-ferrous metals industry requires a consistent and stable regulatory framework. Smarter regulation should not impede our industry's competitiveness, and must avoid unnecessary overlaps or contradictory measures. It should also recognise our commitment to continuous improvement and high operating standards.

We call on EU policy-makers to prioritise and harmonise their existing policy objectives around issues including reindustrialisation, climate change ambition, environmental protection and resource efficiency. All legislation should be underpinned by robust science and lifecycle strategy, with wider socioeconomic impacts taken into account.

We will provide accurate and comprehensive data for our metals. In return, we ask for the EU to regulate substances on the basis of risk, rather than only considering their hazardous properties. Thorough exposure and risk assessments will avoid damaging bans or stigmatisation, and would recognise our industry's own work to manage risks.

3. Level-playing-field conditions for all operators

Fair competition should be secured for all EU operations, through level-playing-field conditions for trade, carbon, waste and chemicals. This will ensure fair access to markets and resources and avoid unnecessary costs for European producers, while also allowing our industry's high standards to be translated to a global level.

In this respect, the EU should play a proactive role in its promotion of level-playing-field conditions among operators in the metals sector worldwide. As an example, international criteria for recycling facilities should be developed, to guarantee that secondary materials exported out of the EU are treated under acceptable environmental conditions.

4. Support to sustainable resource management

There remains significant further potential to advance our contribution to a circular economy. This can be realised through an ambitious policy framework that addresses the entire value-chain, manages metals as valuable assets across their lifetime, and supports synergies in production, product design and end-of-life management.

The EU should incentivise high-quality recycling, encouraging the recovery of valuable materials and their circular management. Product policies should use lifecycle-based methodologies that recognise the intrinsic sustainability benefits of non-ferrous metals, including their durability and multiple recyclability.

5. Ambitious innovation strategies

Europe's non-ferrous metals industry leads innovation in the efficient use of energy and raw materials, and has invested continually in technologies that generate higher productivity and improved environmental performance.

To encourage continued innovation, the EU's research agenda should recognise the importance of metals to a low-carbon and resource-efficient economy. It should provide our industry with support to continue improving efficiency along the entire value chain, from exploration to extraction, metallurgy and recycling.

6. Conditions for free and fair international trade

Our industry competes on a global level, and so relies on the EU to take a proactive role in implementing conditions for free and fair international trade. Action is needed to guarantee market access for our global exports, and to secure fair access to primary and secondary metals on the EU market.

We look for these principles to be followed multilaterally at World Trade Organization level and in ongoing free-trade initiatives with partner countries. At the same time, the EU's Trade Defence Instruments should be modernised, in order to effectively defend EU market production whenever it is justified. More specifically, regulation on the trade of certain minerals originating from conflict areas must be proportional and effective, while not jeopardising our competitiveness.

The Process And Way Forward

Next steps for Eurometaux

We can contribute to defining and implementing solutions through dialogue with European policy-makers and stakeholders. These relationships build knowledge and help create achievable business models.

The non-ferrous metals industry strongly believes that the future is about establishing and building multi-stakeholders partnerships and collaborative networks that deliver shared value to industry, governments, customers and society.

We believe we can contribute to defining and implementing solutions through regular dialogue with European policy-makers and stakeholders. These relationships and discussions build knowledge of the challenges and opportunities within the sector, and help create appropriate and achievable business models in a safe operational environment.

Our next step is to start conversations with stakeholders along our main value chains. We will engage with regulators, NGOs and consumer groups about our vision and sustainability strategies, and about European policy and its implications. Industry is keen to build and contribute to an open and constructive dialogue with public authorities to benefit both Europe and industry. We will report annually on progress and the challenges we face.



Short-term projects

Eurometaux is already conducting short-term projects that will support the move towards a sustainable economy. The following are just a few examples of actions, research and projects that the industry and Eurometaux are involved in. The list is not exhaustive and will be updated regularly.

Product Environmental Footprint

The three-year Product Environmental Footprint pilot project, coordinated by Eurometaux and involving different metal commodity associations and companies, aims to develop a robust methodology to assess the impact of metals through the lifecycle of various products.

Defining and benchmarking certification schemes

Eurometaux is coordinating a project to define the conditions for certification schemes for the pre- and end-processing of waste electrical and electronic equipment and spent batteries, covering quality, environmental, health and efficiency criteria. This project will also set a benchmark for measuring and quantifying the impacts of these certification schemes, as well as improvements in collection and recycling.

Macro-economic indicators

Eurometaux has finalised a set of macro-economic indicators that will measure industry performance and allow measurement and reporting on progress.

Water regulation knowledge-sharing

Eurometaux will launch a project to inform Member States about the impact of new water regulations on permits and other requirements. It will use scientific knowledge, training tools and materials that outline the presence and toxicity of metals in water, and guidance on implementing bioavailability models to harmonise national approaches to metals.

Eurometaux and Metals

Eurometaux at a glance

Brussels-based Eurometaux represents the enterprises and organisations that make up the broad non-ferrous metals supply chain in Europe – from mining and refining, processing, fabrication and recycling.

The non-ferrous metals industry is driven by core values of safety, performance, integrity and innovation. These are at the heart of our work, guiding both Eurometaux and the membership.

Driving economic growth and innovation¹



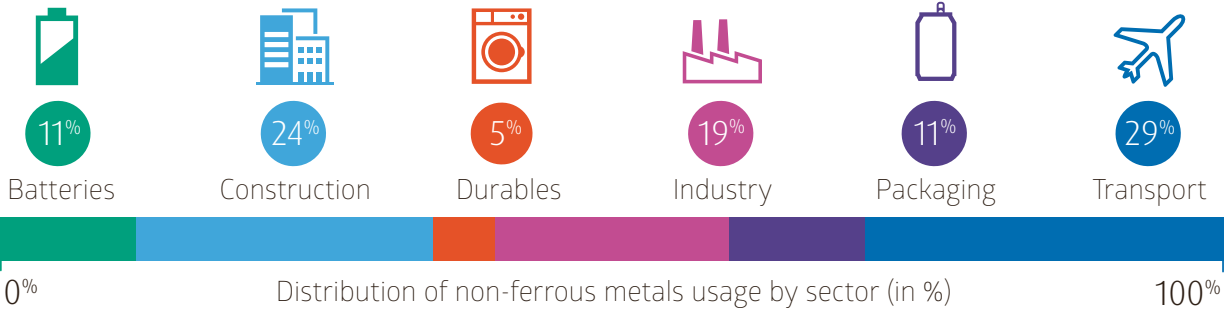
47million tonnes of annual production



At the forefront of a future circular economy:



Providing a foundation for Europe's main value chains to grow:



Non-ferrous metals are essential materials for Europe's leading manufacturing sectors. In Europe, the use of non-ferrous metals is split across the six main sectors above.

¹ Data based on 2012 values

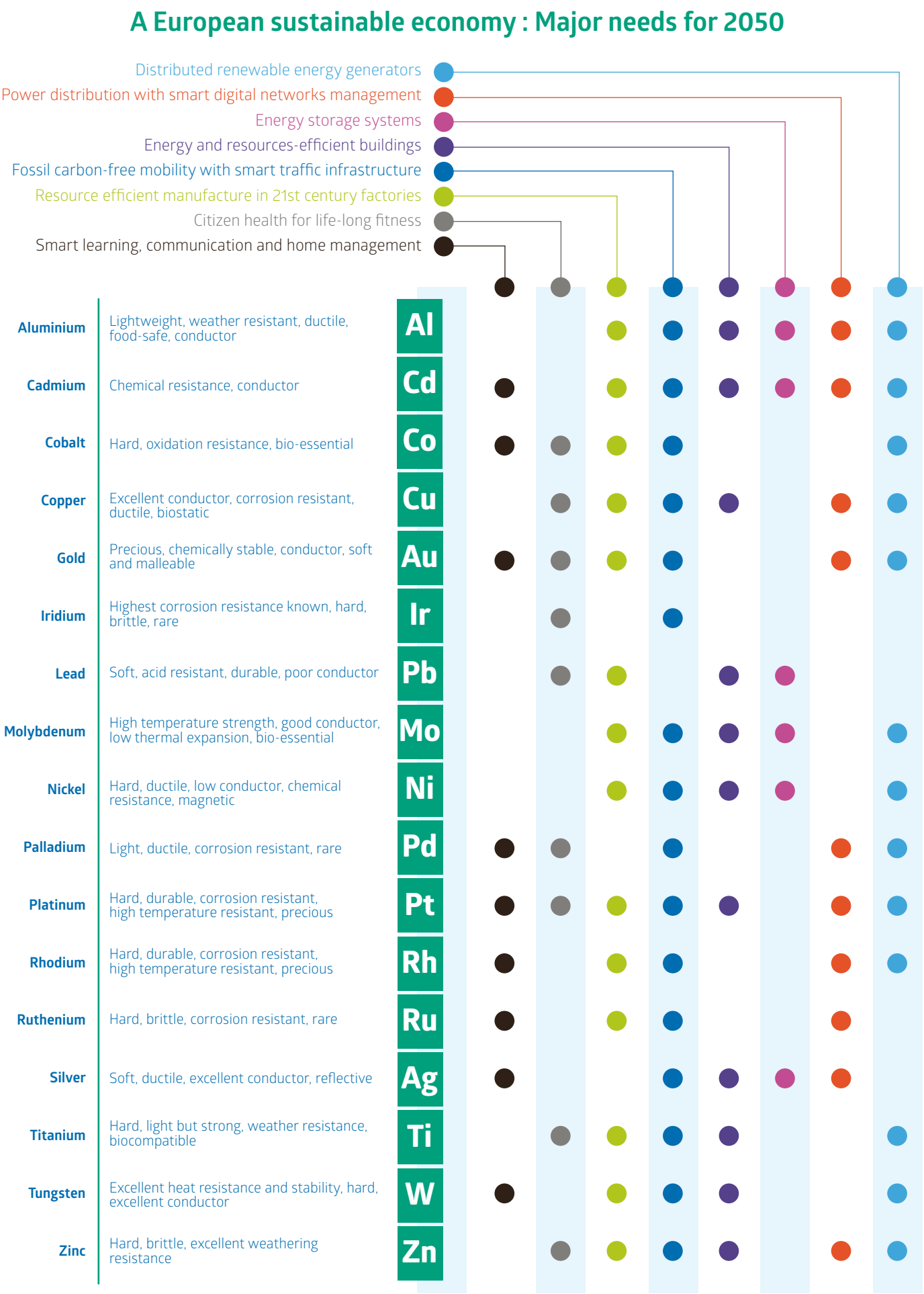
Metals Use

Industries across Europe are using metals to create more sustainable products, services and infrastructures. This includes the following notable examples:

- **Renewable energy sources** - Renewable energy technologies such as photovoltaic cells, solar thermal systems and hydroelectricity need metals such as nickel, zinc, copper and potassium to function. Metal components account for nearly 90% of the weight of a modern wind turbine.
- **Low-carbon transport** - Metals such as aluminium or magnesium can make vehicles lighter in weight, reducing their fuel consumption, without compromising safety. Precious metals such as platinum are also critical to catalytical converters, while batteries using lead, lithium, nickel, copper and cobalt are used to improve fuel efficiency in hybrid and electric vehicles.
- **Sustainable buildings** - The recyclability, durability and strength of metals contribute in critical ways to the construction of safe and sustainable buildings. Aluminium, copper, lead, nickel and zinc are resistant to corrosion and can last 100 years or more without maintenance. Metals with conductive or semi-conductor properties are also essential to efficiently use electricity and electronics in modern buildings.
- **Efficient communications** - Recent innovations using metals such as nickel, cobalt, copper or lithium have significantly improved the battery life of devices like cellular phones and laptops, while innovative technologies are also using metals to create smaller, more resource efficient devices.
- **Countless other applications** - For example, non-ferrous metals will also continue to be integral for resource-efficient packaging (aluminium) and for improving human health through medical equipment and as trace elements in modern medicine.



This table shows in more detail how non-ferrous metals will enable a sustainable Europe.



Eurometaux Member List

National Members

Agoria (Belgium)
AFA (Association française de l'Aluminium (France)
Association of Finnish Steel & Metal Producers, Metallinjalostajat (Finland)
Association Suisse des Métaux Précieux (Switzerland)
Assomet (Italy)
BAMI (Bulgarian Association of the Metallurgical Industry) (Bulgaria)
FEDEM (France)
IGMNiR (Polish Economic Chamber / Association of Non-Ferrous Metals & Recycling)
Johnson Matthey (UK)
Norsk Industri (Federation of Norwegian Industries) (Norway)
SveMin (Swedish Assoc of Mines, Mineral & Metal Producers) (Sweden)
Unicobre (Spain)
VNMI (Vereniging Nederlandse Metallurgische Industrie) (NL)
WVM (WirtschaftsVereinigung Metalle (Germany)
WKO (Association of the Austrian Non-Ferrous Metals Industry) (Austria)
European Non-Ferrous Metals Commodity Associations
EAA (European Aluminium Association)
ECI (European Copper Institute)
EPMF (European Precious Metals Federation)
ILA-Europe (International Lead Association Europe)
IZA-Europe (International Zinc Association Europe)
Nickel Institute

Company Members

Alcoa Europe	Eramet	Plansee
Anglo American	Fesil	Rio Tinto Alcan
Atlantic Copper	Finnfjord	Umicore
Aurubis	Hydro	Vale Inco
BHP Billiton	KGHM Polska Miedz	Wieland Werke
Boliden	Metallo Chimique	Asturiana de Zinc, a Glencore company
ECO-BAT Technologies	Norilsk Nickel Finland Oy	
Elkem	Nyrstar	

Associate Members

BeTS (Beryllium Science & Technology Association)
CDI (Cobalt Development Institute)
EPMA (European Powder Metallurgy Association)
Euroalliages
EUROBAT (European Storage Battery Manufacturers Association)
I2a (International Antimony Association)
IMoA (International Molybdenum Association)
LME (London Metal Exchange)
RECHARGE (International Association for the Promotion & Management of Portable Rechargeable Batteries)
Tin Technology Ltd. (ITRI)
VANITEC (Vanadium International Technical Committee)

About Eurometaux

Eurometaux is the European association of the non-ferrous metals industry. It is composed of a wide network of companies producing, transforming and recycling non-ferrous metals in Europe. Our members also include national federations, and European and International commodity associations. Our objective is to enable the entire value chain of the non-ferrous metals industry to prosper in the EU and contribute towards more sustainable societies.

The Metals Industry: Commitment to Sustainability

The non-ferrous metals industry, especially in Europe, has made continuous progress in reducing its environmental impact by improving its resource and energy efficiency. Overall, the metals industry in Europe outperforms most other regions in the world. It will continue to operate with the highest standards.

Metals: Driving economic growth and innovation in Europe

The non-ferrous metals industry contributes to a significant 2% of gross domestic product in the EU. Metals enable European innovation by providing a wide range of other industries with essential materials to invest in research and development. The industry employs more than 400,000 people directly, and another 1,000,000 indirectly.

www.eurometaux.eu