

Copper is essential to modern life and to a sustainable, resilient future. Thanks to its high electric and thermal conductivity, copper is a strategic raw material that enables electrification, energy efficiency, and renewables and is widely used in most decarbonisation technologies. There is no transition to climate neutrality without copper, and copper is also needed to enable the growth of other key sectors such as artificial intelligence or data centres. The production of copper (both mining and recycling) is equally important because it allows the generation of other critical raw materials (CRM) and of non-metallic products, such as sulfuric acid and iron silicate, in a resource efficient way.¹

More copper will be needed as the world decarbonises and living standards improve. **Copper demand is expected to grow** by 35% in the EU² and to double globally by 2050.³ **Both mining and recycling need to be increased** to meet the projected demand.

The EU has a strong copper industry with domestic mining providing half of the EU's copper concentrate needs and EU smelters and refiners providing 80% of the refined copper required by EU manufacturers of semi-finished products and components. However, high operating costs and regulatory complexity are making it difficult for copper producers to invest in maintaining or expanding operations in the EU. Copper is a globally traded commodity and the copper price is set on global markets, which means that EU producers cannot pass on higher energy, carbon or regulatory costs to consumers. These costs are higher in the EU than in most other regions where copper is produced, which severely hinders the investment case for Europe. Copper is recognised as a strategic raw material under the Critical Raw Materials Act (CRMA). To meet the CRMA goals and secure the EU's strategic autonomy in raw materials, the Clean Industrial Deal must support the competitiveness of the copper industry in Europe and strengthen the business case both for existing production and new projects.

The Clean Industrial Deal should support the competitiveness of strategic raw material production in the EU by:



Ensuring the industry's access to competitively priced energy and electricity, together with continued protection against carbon leakage



Facilitating recycling of strategic raw materials and





All of the above should take a central place in the Metals Action Plan that the Commission will develop.

¹ The copper mining operations of ICA members in the EU produce gold, silver, zinc, nickel, lead, platinum, palladium, and tellurium, while copper recycling operations recover zinc, lead, precious metals, nickel, cobalt, and platinum group metals, in addition to copper. Copper production also generates important non-metallic products, such as sulfuric acid used in the fertilizers sector and iron silicate used notably in the construction sector.

² KULeuven, Metals for Clean Energy: Pathways to solving Europe's raw materials challenge, 2022

³ MineSpans Copper Demand Model Q3 2021



International Copper Association Europe



Competitive energy prices and protection against carbon leakage

The copper production process is energy and electricity intensive: electricity costs accounted for over a third of copper production costs in the EU in 2022.⁴ Currently copper mine and smelter production costs in the EU are some of the world's highest compared to other regions where copper is produced. This is for a large part driven by higher **energy and in particular electricity costs**.

Access to clean electricity at predictable and competitive prices is crucial for the competitiveness of EU copper producers. Process and equipment electrification is the biggest lever to decarbonize copper production, so the use of electricity is increasing further as copper production processes are decarbonised.

Due to the marginal pricing system for electricity, gas is expected to continue to set wholesale electricity prices in the EU still in the 2030's. The system was designed in the 1990's to promote investment in renewable generation, but has outgrown its initial purpose. In today's increasingly green power system, marginal pricing artificially raises the price of electricity, disincentivising electrification as a means to decarbonise homes, industries and transport; and forcing governments to spend tax payers' money to support struggling consumers and in some cases industries.

Alternative market designs should be assessed urgently to allow all consumers to benefit from the lower cost of renewables and to incentivise industrial electrification.

Next to high energy prices, the EU's stringent climate policies lead to higher operational costs for copper producers in the EU, directly through the obligation to surrender emission allowances under the EU Emission Trading System (ETS) for every ton of CO₂ emitted, and indirectly through the higher electricity prices that EU copper producers pay to power their production processes because utilities pass through the cost of carbon to their customers. Strong protection against carbon leakage must be retained for strategic raw material sectors facing global competition. Without such protection, the competitiveness of these sectors will suffer, ultimately making it difficult to secure the EU's critical raw material autonomy and deliver on its environmental goals.

⁴ Wood Mackenzie, 2023.

TO ENSURE AFFORDABLE ENERGY SUPPLY TO STRATEGIC INDUSTRIES, THE CLEAN INDUSTRIAL DEAL SHOULD:

Commit the Commission to assessing electricity market design options to decouple fossil fuel prices from electricity prices as part of the review of electricity market design under Art.69(2) of the revised Electricity Markets Regulation (due by June 2026).

In the short term, given that a revision of market design will take time to implement:

- 2 Require electricity suppliers to supply a minor share of subsidised production through PPAs at 'production cost plus mark-up' to industries subject to global competition, as suggested in the Draghi report.⁵ This should allow strategic energy intensive industries (EII) to sign power purchase agreements (PPA) at globally competitive price levels.
- 3 Maintain compensation for indirect carbon costs, i.e. the increased electricity prices that Ells pay as a result of carbon costs that utilities pass on in the electricity price, until when the EU grids are largely decarbonised.
- Cap the cost of electricity taxes and levies on Ells. Expand the current state aid guidelines that allow member states to limit the cost of levies for Ells to 0,5% of Gross Value Added to cover the most impactful taxes, levies and charges such as network tariffs and capacity mechanisms. Further options should be considered to also cap the impact of balancing costs on Ells.
- Allow Member States to put in place temporary electricity price support schemes for Ells in sectors most exposed to international competition (as suggested in the Draghi report).
- **Focus support measures in the run up to 2040 on deploying system flexibility solutions** (storage, dispatchable generation) that are increasingly needed to balance the power system, **more than the deployment of variable renewables**. Acknowledge the limits of industrial flexibility / demand response which must remain voluntary and adequately remunerated.

TO ENSURE CONTINUED PROTECTION AGAINST CARBON LEAKAGE:

The scope of the **Carbon Border Adjustment Mechanism** (CBAM) should not be extended until the measure has been shown to deliver protection for carbon leakage, including for EU exports. The extension of CBAM should be carefully assessed for each potential new sector and any new sectors to which CBAM may be extended should have the same phase in period for the application of CBAM and the phase out of free allocation under the ETS as the first set of sectors in scope. Sufficient carbon leakage protection must be maintained for strategic sectors under the ETS as long as no effective alternative protection measures are in place.

⁵ Mario Draghi: The future of European competitiveness, p. 37.



A Circular economy for critical raw materials

Copper is an inherently circular material that lends itself perfectly to a circular economy. Copper can be recycled repeatedly without any loss of performance or quality. Recycled copper has the same quality as copper from primary, mined sources and can be used in the same applications.

Around half of the copper in use in the EU today comes from recycling. Both mining and recycling need to be increased to meet rising demand for copper. It will not be possible to meet this demand only through recycling, largely because of the long lifetime of copper in the applications where it is used (on average 25-30 years).

Copper produced from recycled materials can save up to 85% of the energy needed for copper produced from mined material. While the exact quantity of energy and greenhouse gas savings depends on the recycling route and the quality of secondary input materials, copper production from secondary sources can significantly **reduce GHG emissions on a lifecycle basis**, because the mining and concentration processes account for about 60% of the total GHG emissions of copper cathode production. Copper recycling also contributes to resource efficiency as it allows the recovery of many other valuable metals. However, the increasing complexity of end-of-life products and the presence of carbon in e-waste leads to higher CO_2 emissions during the smelting and refining stage. For recycling

to continue in the EU, it is essential that these operations are not exposed to excessive carbon costs for the related process emissions.

Copper producers in the EU are facing great demand for recycled copper from their customers. Today, all the copper that can be recovered from end-of-life products in an economically and technically viable way is recycled. This shows that **there is a well-functioning market for secondary copper** and therefore no need for policy measures (such as recycled content targets for end use products) to stimulate demand.

The main obstacle to increasing copper recycling in the EU is the availability of secondary input materials. It has been estimated that half of the copper contained in end-of-life products in the EU remains locked in those products mainly due to poor collection rates or product design. Significant copper losses also occur during recycling, often due to waste treatment processes that impede the recovery of raw materials. For example, nearly 2 kg of copper is lost in steel scrap from every end-of-life vehicle that is recycled. The availability of secondary input materials is also hindered because of burdensome administrative procedures that restrict and slow down the shipment of CRMcontaining waste within the EU and disincentivise the import of such waste into the EU.

TO FACILITATE COPPER RECYCLING, THE CLEAN INDUSTRIAL DEAL AND THE NEW CIRCULAR ECONOMY ACT SHOULD:

- **Encourage products' design for circularity, increase the collection rates of end-of-life products containing CRMs and improve sorting and treatment processes to enhance the quality and quantity of recovered materials.** More decisive action should be taken to limit illegal exports of scrap and EoL products containing CRMs, including end-of-life vehicles. Collection, dismantling and sorting infrastructure and technologies should be improved to increase the flow of metal-containing waste to high-quality recyclers and minimise losses of CRMs. This could include separate collection of waste streams at their source, product specific collection targets, quality standards for the pre- and end-processing steps for some products. Mixing different waste streams during shredding operations should be avoided if it results in copper or other CRMs becoming unrecoverable. Member States should be encouraged to do more to engage citizens and raise awareness of the benefits of proper waste disposal and to facilitate and incentivise consumers to return products at end of life.
- 2 Facilitate intra-EU shipment of waste containing CRMs, as well as imports into the EU. The need to notify waste shipments results in delays that lead to unpredictability and increase costs, which can disrupt recycling operations. European recyclers compete with global players for access to these valuable materials. Shipments tend to flow toward countries with the easiest access and lowest treatment costs, which is a concern for European recyclers who, as shipping procedures to and within the EU grow more burdensome, risk facing reduced access to these resources.
- Bensure that EU climate legislation (ETS) does not disincentivise recycling of complex waste. Recycling of complex metalcontaining waste leads to higher CO₂ emissions for the smelting and refining stage. With progressively stronger climate legislation, which only considers direct emissions as opposed to taking a life-cycle perspective, the production of refined copper from recycled material risks being subject to higher carbon costs than primary smelting, while at the same time the EU is trying to increase recycling of raw materials. The Clean Industrial Deal must take steps to ensure that this inconsistency between circularity and climate goals does not hinder recycling in the EU.
- Promote risk-management and safe recycling of hazardous substances and ensure coherence between circularity and chemicals objectives.
 - Boost innovation and the use of new technologies in metals recycling. Support should be given to the development and improvement of advanced material recovery and copper recycling methods, and the use of AI and automation to improve waste management systems.



A simpler, fit for purpose legislative framework

Excessive regulatory and administrative complexity make the EU a less interesting place for businesses and investors than other parts of the world because they bring higher costs and uncertainty. EU policies and legislation are in many instances inconsistent, overlapping or outright conflicting, with insufficient consideration given to the cumulative impact of the overall EU acquis on economic operators, or to areas where policy objectives or requirements are incompatible and require trade-offs.

When it comes to raw materials, **the CRMA objective of improving the EU's strategic autonomy in critical raw materials is not supported by key sectorial policies**: chemicals policy that regulates substances on the basis of their intrinsic properties without taking account of the potential exposure to the substance places a significant burden on CRM production; while energy legislation that maintains higher than necessary electricity prices reduces global competitiveness of CRM producers.

We welcome the commitment of Ursula von der Leyen's second Commission to stress-test the EU acquis to eliminate overlaps and contradictions, to reduce administrative and reporting burdens and to improve stakeholder consultation processes. In the stress-test exercise, the EU's strategic autonomy in critical raw materials should be considered a key objective and the impact of legislative proposals and policies on this objective should be assessed and addressed.

THE COMMISSION'S WORK TO STREAMLINE AND SIMPLIFY LEGISLATIVE REQUIREMENTS SHOULD:

AS PART OF THE STRESS-TEST, introduce a process to regularly assess the cumulative impact of EU legislation and of new legislative proposals on the competitiveness of strategic raw material value chains. Impact Assessments produced by the European Commission should assess the impact of policy options on the CRMA objectives and the costs and benefits for the competitiveness of CRM sectors, putting forward policy options that minimize and mitigate negative effects. Similar to the SME Test process, the Commission Vice President for Prosperity and Industrial Strategy should have the final say where policy options fail to consider ways to reduce negative impacts.

AS PART OF THE 'OMNIBUS' PROPOSAL on reporting requirements:

- Amend the EU Taxonomy process and framework to ensure usability of the criteria. There are serious concerns about the usability of the EU Taxonomy framework which is meant to help channel finance to sustainable economic activities. While the framework imposes burdensome reporting requirements on companies, banks and investors have raised concerns that they see limited benefits from it and believe that business investment decisions cannot be based on the Taxonomy framework.⁶ At the same time, the process to develop the criteria to define sustainability for different economic activities that relies on the Platform for sustainable finance is problematic: criteria are developed without proper involvement of the impacted sectors and sometimes based on a limited understanding of the industrial processes and sectors. The process and criteria should be reviewed to ensure that the criteria can be implemented, otherwise investors will not be able to use the Taxonomy to guide investment decisions.
- Ensure proportionate reporting requirements under the Corporate Sustainability Reporting Directive (CSRD) and a stronger alignment between European Sustainability Reporting Standards (ESRS) and the Global Reporting Initiative (GRI) in particular as regards sectorial standards. The EU's sustainability reporting framework places a significant burden and compliance cost on companies. The number of data points to be reported should be streamlined considering the difficulties experienced by companies, and the consistency and clarity of the overall framework should be improved. To avoid duplicative reporting requirements, ESRS should focus only on those aspects that complement the GRI framework.
- Take measures to facilitate the implementation of the Corporate Sustainability Due Diligence Directive by companies. Companies need clear, principle-based, non-prescriptive guidance from the Commission in a timely way to clarify the expectations on what constitutes reasonable implementation of the risk-based due diligence requirements. The Commission should also ensure that the application of CS3D is consistent with existing due diligence requirements under OECD due diligence guidance as well as the EU Corporate Sustainability Reporting Directive (CSRD), the Battery Regulation, the Conflict Minerals Regulation, and the EU Forced Labour Regulation. Finally, the important role that voluntary schemes can play in facilitating compliance with due diligence requirements must be recognized. A process should be established to allow to deem voluntary schemes recognized under the Battery or Conflict Minerals regulations as recognised also under CS3D.
- As part of the new Chemicals Industry Package, revise the REACH Regulation to ensure that regulatory action under the REACH framework is focused on those substances and uses that present unacceptable risks for human health or the environment. Identified risks should be addressed in the most cost efficient way and the REACH restriction or authorization processes should not be applied if risks can be more efficiently addressed through other frameworks such as the Industrial Emissions Directive which lists the best available techniques for industries to abate emissions. EU legislation on chemicals must also recognise that copper and other metals are different from most chemicals because they occur naturally. Copper is an essential element for all life on earth. These specificities must be considered when deciding on any risk management measures for copper.

⁶ Deutsches Aktieninstitut, "Companies & ESG: Transformation or just reporting?", June 2024

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International Copper Association Europe

About the International Copper Association Europe

ICA Europe is the European branch of ICA and represents companies that mine, smelt and recycle copper for use across the economy, in the electricity system, buildings, transport and industry.

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