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Metals industry: Initial proposals for EU Circular Economy 2.0

Introduction

Europe's non-ferrous metals industry fully supports the transition to a true Circular Economy. Our companies are responsible for recycling the metals from Europe's cars, buildings, packaging, e-waste, batteries and much more.

Metals are permanent materials which can be recycled an infinite number of times. Achieving a metals Circular Economy will allow Europe to save energy, reduce import dependency and increase its domestic supply of raw materials for strategic value chains.

Europe already has a position of global leadership in metals recycling, and we have achieved a high level of circularity. Today around 30% of all the world's recycled metals are produced in Europe, and we have developed state-of-the-art processes for recovering over 25 metals from Europe's urban mine.

However, collectively we can do more to make sure Europe's waste metals reach high-quality recyclers. Too many are still discarded, exported, or improperly recycled, despite EU metals demand increasing in line with the climate transition.

This paper provides the metals industry's initial recommendations for the European Commission's Circular Economy Package 2.0. We consider that Europe should make it a priority to build on its recycling leadership and improve the supply of metals and other strategic materials for the climate transition.

Our key recommendations for Circular Economy 2.0:

Climate 2050 Strategy and Circular Economy – Improve metals circularity across existing and new applications, to lower the carbon footprint though the life cycle and increase Europe's domestic raw materials supply for low-carbon technologies.

Global Trade and Circular Economy – Address challenges from the global recycling market, including the leakage of European scrap without a guarantee of proper recycling, and impacts of the China waste ban.

Waste and Circular Economy – Improve the flow of waste metals to European high-quality recyclers, through improvements to collection and sorting infrastructure and streamlining of waste shipments legislation.

Product Design and Circular Economy – Improve product design and boost innovation to facilitate the recycling of metals that are contained in products, especially those that have high value, even in low quantities.

Chemicals Management and Circular Economy – Promote the safe recycling of hazardous substances in a Circular Economy and ensure coherence between circularity and chemicals objectives.

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Climate 2050 Strategy and Circular Economy

A European Circular Economy for metals will offer two major contributions to the EU's 2050 climate-neutral strategy.

- **Raw materials supply:** Higher metals recycling volumes will help Europe to improve its domestic supply of raw materials for low-carbon technologies including batteries, clean mobility, wind turbines and solar panels. For example, the cobalt contained in the world's mobile phones would be enough to power 1.5 million electric vehicle batteries, but only 10% of phones are properly recycled at the end-of-life.

- **Improved carbon footprint and resource efficiency**: Higher metals recycling volumes will help Europe to lower the carbon footprint of metals produced (in complement to existing levels of primary production). Metals recycling requires significantly less energy on a lifecycle basis than extraction and primary production operations. For example, Europe's aluminium recycling volumes are projected to rise from 4.5 million tonnes in 2015 to 9 million tonnes in 2050, avoiding 800-1500 million tonnes of CO_2 (compared with equivalent primary production). However, it should be noted that recycling of some metals from complex waste fractions could incur a higher energy requirement due to low metal concentrations and/or small volumes.

We consider that European Commission should make it a strategic priority to use its Circular Economy 2.0 strategy for improving domestic raw materials supply and lowering lifecycle greenhouse gas emissions.

We also note that by 2030, the metals scrap market will change significantly due to the influx of end-of-life materials derived from low-carbon technologies (electric vehicle batteries, solar panels, wind turbines, etc.). The EU must act now to encourage investments into the required recycling capacity for these applications, ahead of increasing global competition.

Key takeaways

- Ensure that the Circular Economy 2.0 contributes fully to Europe's 2050 climate-neutral strategy, including a focus on increasing metals recycling rates to:
  - Improve Europe's domestic supply of raw materials for its low-carbon value chains;
  - Mitigate and avoid extra greenhouse gas emissions from Europe's rising metals demand.
- Support pre-emptive industrial investments into Europe's recycling capacity for low-carbon technologies, where significant end-of-life volumes will only be available from 2030 onwards (e.g. electric vehicle batteries, solar panels)

Global Trade and Circular Economy

The Circular Economy Package 2.0 should stimulate free and fair trade of all materials in a global market. Europe is a net-exporter of metals scrap, with 20% of scrap aluminium and 30% of scrap copper shipped to other countries, as well

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as at least 15% of electronics waste and an unknown quantity of vehicles. The global metals scrap market has been further impacted by China's waste ban in recent years.

Our main concern remains that Europe has no guarantee that its exported scrap (and end-of-life products) is recycled to adequate environmental as well as health and safety standards – resulting in a likely loss of material and harm to third country communities. We can tackle this situation by continuing to investigate a robust but workable system for validating that Europe's waste exports are recycled under equivalent conditions (i.e. by making CENELEC EN 50625 standard for WEEE collection, logistic and treatment legally binding via the WEEE Directive).

We must also do a lot more to clamp down on illegal waste exports on an EU and Member State level, notably for electronics, end-of-life vehicles (ELV) and other high-value products containing metals.

Key takeaways

- Ensure a global playing field for European high-quality recyclers, through further actions to better control waste exports (including a robust mechanism for assessing "broadly equivalent conditions" in destination countries)
- Continue to clamp down on illegal exports, including capacity-building at Member State level
- Take stock of global developments including the China waste imports ban, and assess how Europe can act to stimulate the flows of its high-value waste to domestic recyclers

Waste and Circular Economy

In 2018, the EU has approved an ambitious Waste Legislation package including the following pieces of legislation: Waste Framework Directive, Landfill Directive, Packaging Waste Directive and WEEE/ELV/Batteries Directives. The new rules have a great potential to maintain Europe as the global front-runner in waste management and recycling, if they are well implemented at national level.

We now see a high potential to improve recycling rates for specific metals-containing waste streams from the upcoming reviews of the Batteries Directive and End-of-Life Vehicles Directive – including improving collection rates for portable batteries and preventing undocumented exports of end-of-life vehicles.

We are also advocating for Europe to establish a mandatory certification scheme for recyclers of electronics waste (on the basis of CENELEC EN 50625) to guarantee efficient material recovery and environmental protection.

In addition to the above, we also see a need to set targets for preparing for reuse and recycling of construction and demolition waste (CDW) and its material-specific fractions. Waste from construction and demolition should be turned into new resources, not backfilled on sites where it will never get recycled.

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Lastly, our sector recommends that the European Commission uses its upcoming Waste Shipments Regulation review to reduce the red-tape for transporting hazardous waste shipments within Europe and imports into Europe. Currently it can take several months for a planned intra-EU shipment to receive approval from all concerned authorities, and over a year from outside Europe. Shipments are further delayed by a lack of harmonised definitions across Member States.

Key takeaways

- Use upcoming policy reviews (in 2020) to bring in concrete actions and improvements in Waste Shipment Regulation, Batteries Directive and End-of-Life Vehicles Directive.
- Include provisions for establishing a mandatory EU certification scheme for e-waste in order to provide the required framework for quality recycling.
- Lower the administrative burden for intra-EU waste shipments and imports.
- Encourage Member States to advance and improve their collection and sorting infrastructure (e.g. for e-waste and portable batteries).
- Follow up on a national-level to secure coherent implementation of the waste legislation acquis.

Product Design and Circular Economy

Metals-containing products, and especially electronic devices, are getting increasingly complex. They contain precious and specialty metals in very low quantities, with recovery depending on product design, the quality of recycling operations, and economic and technical viability.

Europe should keep taking measures to address the full lifecycle management of complex products already at the design stage, in order to increase materials recovery at their end-of-life. Value-chain platforms are an effective way to improve this situation.

In addition, Europe's research programme should also focus on developing new technologies and processes for recovery of low-volume specialty metals, taking into account the economic and technical feasibility.

Lastly, Eurometaux would like to stress that moving into the direction of "recycled content" in a product would not be appropriate for non-ferrous metals. Primary and secondary metals have an identical quality and price, and they are often mixed together before reaching the market. The aim must be to improve recycling efficiency while assuring safe, performing and competitive metals-containing products.

Key takeaways

- Support the implementation of generic EU regulatory requirements on recyclability in product design, with a flexible approach to implementation for each product group.

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- Focus the EU research agenda on developing new technologies and processes for recovery of less recycled metals.

Chemicals Management and Circular Economy

A growing number of the metals and minerals required for Europe's economy are regulated under EU chemicals legislation (REACH and CLP) due to their hazardous properties. As the ultimate goal of the Circular Economy is to bring materials back to the loop, they should be carefully managed during the whole life cycle.

Metals recyclers are equipped to process a variety of complex input materials, including those containing hazardous substances. We have a high level of knowledge on material composition throughout the recycling process. Our recycling output is delivered against strict quality specifications. Recycled metals need to meet the same quality/purity as primary metals, meaning that the same rules are to be applied for virgin and recycled materials, when it comes to protection of human health and environment.

The hazard classification (and SVHC status) of many of our metals and their unavoidable presence across different recycling streams means that decisions under REACH can be burdensome or disruptive to industrial processes, including recycling.

In our view, these challenges can be solved by integrating other policy objectives within a full assessment of risk management options for targeted substances under EU chemicals policy and by recognizing that a functioning Circular Economy will by necessity include hazardous substances that are safely managed.

Key takeaways:

- Safe production, use and recycling of chemicals should be prioritised to secure a true Circular Economy.
- Industry and policy makers should set a long-term framework for controlling chemicals exposure, including further collaboration on improving data on chemicals.
- Today's thorough chemicals management shouldn't be hindered by rushed scrutiny under chemicals legislation and only focus on hazard. Europe's industry needs predictability of investments for battery metals and other materials necessary for the climate transition.

ABOUT EUROMETAUX

Eurometaux is the decisive voice of non-ferrous metals producers and recyclers in Europe. With an annual turnover of €120bn, our members represent an essential industry for European society that businesses in almost every sector depend on. Together, we are leading Europe towards a more circular future through the endlessly recyclable potential of metals.

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