Regulatory Issues for the Copper Industry in Europe – an update

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The purpose of this presentation is to exchange information about the copper industry and to provide attendees with information to make independent business decisions.
Context – a complex web of regulations

A HEALTHY AND SUSTAINABLE EUROPE

- Controlled production and use of chemicals
  - Cu under EU chemical regulations
  - Cu in water
  - Exposure to Cu at the workplace
  - Air quality
  - IMO regulations on ore transport
  - Cu as a substance
  - Cu products/systems

- Resource efficiency & circular economy
  - Product Environmental Footprint
  - Lead metal candidate for REACH authorisation
  - Lead in Directive for Restriction of Hazardous Substances (RoHS) and in End-of-Life Vehicles (ELV)
  - Zero Pollution Strategy

- Energy transition to a climate-neutral economy
  - Emission Trading System
  - Containment of transition cost borne by the industry (including innovation and investment costs)

- Green and healthy buildings
  - Drinking Water Directive
  - Sustainable finance (access to investment funds)

NEW EUROPEAN GREEN DEAL
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1. Controlled production and use of chemicals

1.1. Lead metal candidate for REACH authorisation

**Description**

The EU zero-pollution agenda and REACH regulation ban or restrict the use of substances of very high concern.

In June 2018, lead has been put on the list of candidates for authorisation under REACH.

Worst case hypothesis: sunset date for the use of lead in 2nd half of 2024.

**Importance to the Industry**

- Impact on (1) alloys and (2) copper recycling.
- If EU confirms lead is authorizable, lead metal cannot be used any more on its own or in mixtures (above the specific concentration limit – 0.3% for solid, 0.03% for powder) unless a specific authorisation for that use is granted.

**ECI activity**

- Clarification of exposure scenarios through Downstream User Chemical Safety Report at 3 major fabricator companies in Europe: risks related to the use of lead in copper alloy manufacturing are properly controlled.
- Convey key advocacy messages and respond to public consultations, in coordination with the International Lead Association and Eurometaux, including the illustration of socio-economic impacts of authorisation.

* inclusion in Annex XIV of REACH
1. Controlled production and use of chemicals

1.2. Exposure to copper at the workplace

**Description**

European Union and several Member States propose to drastically reduce the occupational exposure limit (“OEL”) to copper to 10µg respirable copper per m³ (for 8h TWA).

**Importance to the Industry**

- An overly-conservative limit would significantly increase the operating costs for industry to comply and generate a risk of substitution due to perceived health risks.

**ECI activity**

- Independent European scientific panel established to provide guidance to ECI in developing a research plan:
  - Solubility tests on copper compounds and powders
  - In vitro investigation
  - Epidemiological and medical data investigations on site

**Conclusions:** Human data shows no evidence of exposure related effects in vitro studies show no evidence of toxicity at levels about the current OEL.

- **Publication** of comprehensive research findings in peer-reviewed research journals.
## 2. Product Environmental Footprint (PEF)

### Description
LCIA (Life Cycle Impact Assessment) recognised by the EU as the preferred methodology to define the environmental performance of products. EU pilot established Product Environmental Footprint (PEF) category rules to identify the most relevant environmental impacts and activities along the life cycle for a respective product category

- impact on material selection for products, systems and services

### Importance to the Industry
- Opportunity to establish fair rules for metals to compute their environmental performance, including appropriate end-of-life properties (recycling)
- Opportunity to establish fair LCIA criteria for copper when compared to substitute materials such as plastics

### ECI activity
- Monitor directives and standards linked to PEF implementation (Eco-Design directive, Green Public Procurement directive, …)
- Educate regulators and policy influencers about the shortcomings of the current Life Cycle/Environmental Footprint methods
- Ensure the right data are used about copper when running LCI assessments
## 3. Energy transition to a climate-neutral economy

**Emission Trading System (ETS)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Current ETS under revision by the EU Commission (Phase IV – 2021 to 2030) with as intent:</th>
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<tbody>
<tr>
<td></td>
<td>a/ further reduction of GHG* emission by 43% (50-55%?) by 2030</td>
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<tr>
<td></td>
<td>b/ limitation of sectors eligible for compensation of indirect emission costs</td>
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| Importance to the Industry | • Increase in copper smelting and refining costs through rise of carbon price and reduction of free allowances rise of electricity costs (due to ETS, renewables charges, balancing costs, ...) |
|                           | • Increase of copper recycling costs (currently higher CO₂ emission)                     |
|                           | • Lack of level-playing field vs alternative materials                                  |

| ECI activity | • Continued advocacy, together with Eurométaux, for a continued fair treatment of the copper industry: |
|             | a/ continued recognition of the « price-taker » character of the industry, leading to automatic risk of carbon leakage |
|             | b/ continued eligibility of the copper industry to indirect cost compensation, due to high intensity of electricity use |

*GHG = Greenhouse Gas

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Conclusion

Mega-trends trigger additional regulations

- opportunities for additional applications or higher intensity of copper use
- constraints for the copper industry

BEING PART OF THE DEBATE IS KEY