ECI - the European component of the Copper Alliance

**Strong Coordination Mechanisms:**

- ECI CEO acts as ICA Director for Europe and Africa
- ICA members active in Europe are automatically members of ECI
- Global approach to global issues, with regional input and adapted regional execution when required
Context – a complex web of regulations

**Theme: European initiative**
- **Chemicals Management**
  - Non-toxic Environment
    - Classification (CLP)
    - Lead metal as candidate for authorisation
  - OEL*
  - Drinking Water Directive
  - REACH after 2018
- **Circular Economy & Resources Efficiency**
  - Life Cycle Impact Assessment
  - Waste
  - Innovation
- **Climate Change**
  - Emission Trading System (ETS) after 2020
  - Clean Energy Package
    - Energy Efficiency Directive
    - Renewable Energy Directive
    - Governance and Market Design
- **Global License to Operate**
  - International Maritime Organisation (IMO)
  - Responsible Sourcing

**Concerns**
- **Hazard vs Risk Management**
- **Competitiveness of the European Industry**
- **License and cost to operate**
- **Consistency and Complementarity of Legislation**

* OEL = Occupational Exposure Limit
Context – a complex web of regulations

**Chemicals Management**
- Non-toxic Environment
  - Classification (CLP)
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- Emission Trading System (ETS) after 2020
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**Global License to Operate**
- International Maritime Organisation (IMO)
- Responsible Sourcing

**TOPICS**
- Hazard vs Risk Management
- Competitiveness of the European Industry
- Consistency and Complementarity of Legislation

* OEL = Occupational Exposure Limit
1. Non-toxic Environment

### 1.1. Lead metal as candidate for authorisation

**Description**

The EU non-toxic environment 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 mid-2024.

**Importance to the Industry**

- Impact on (1) alloys and (2) copper recycling
- After 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**

- Take the leading role in developing the scientific cases regarding copper alloys and recycling
- Design an advocacy strategy after clarifying exposure scenarios
- Convey key advocacy messages and respond to public consultations, in coordination with the International Lead Association and Eurometaux.

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* inclusion in Annex XIV of REACH
1. Non-toxic Environment

1.2. Occupational Exposure Limit

**Description**
European Union and several Member States propose to drastically reduce (by a factor 100) the current occupational limit to Copper respirable particulates and fumes.

**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 to permit the derivation of a measured OEL for copper for incorporation into European Chemical agents at work directive 98/24/EC.
- **First success booked**: ECI successful in convincing key scientific influencers that the controversy on the adversity of the effect observed in animals should be put on hold until more science (such as evidence from humans/workers, mechanism of action) becomes available.
## 2. Life Cycle Impact Assessment (LCIA)

<table>
<thead>
<tr>
<th>Description</th>
<th>LCIA recognised by the EU as the preferred methodology to define the environmental performance of products + EU methodology published for computing the Product Environmental Footprint (PEF), as a tool to improve resource efficiency</th>
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</table>
| 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 | • Participation –as technical secretariat and with Eurometaux - in the pilot PEF project on « Metals sheets for various applications »  
• Participation in the pilot PEF project on « Hot and cold water supply pipes » now withdrawn due to issues with the resources assessment methodology (abiotic depletion potential) |
3. Emission Trading System (ETS) after 2020

Description
Current ETS under revision by the EU Commission (Phase IV – 2021 to 2030) with as intent:

a/ further reduction of GHG* emission by 43% by 2030
b/ 2.2% annual reduction in emission cap (currently 1.74% till 2020)

Importance to the Industry

- Increase in copper 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)
- Inadequate carbon leakage protection

ECI activity

- Continued advocacy – via 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 (despite reduction of the sector’s indirect emission intensity)

* GHG = Greenhouse Gas
4. **Clean Energy Package**

**Description**
Comprehensive initiative by the EU Commission with several components:
- renewable energies
- energy efficiency
- energy performance in buildings
- energy market design
- governance
- security of supply

EP* committee approval
legislation adopted 14/05/18
still under negotiation

**Importance to the Industry**
A **significant** opportunity to position copper as the metal of choice for the energy transition (« more renewables and higher energy efficiency »):
smart grids, electric vehicles, electric motors, wind mills, heat pumps, electricity storage, …

**ECI activity**
- Continue advocacy (position papers, meetings with EU institutions, …) to get proposed amendments (30) integrated in the final texts
- Run multi-annual advocacy campaign promoting 20 **copper-based**, **market-ready** technologies that bring a significant contribution to the energy transition, through sustained innovation
- Run a comprehensive study to assess the impact of the energy transition on the long-term industry competitiveness («**decarbonisation pathways**»)

* EP = European Parliament
5. **International Maritime Organisation (IMO) regulations on bulk marine transport**

**Description**
- Shippers self-classify their solid bulk cargoes under IMO legislation
- Recent challenge: metal concentrates classified as « corrosive to metals »
- Testing method proposed by IMO was developed for liquids, but was never adapted for application to solid materials

**Importance to the Industry**
- Classification of copper concentrates may lead to increased sea transport costs and onwards land transport, due to additional safety precautions, increased insurance fees, reduced choice of shipping companies.

**ECI activity**
- 2017: ECI developed refinements to the test method, considering the specific properties of solid materials. This adaptation will lead to most copper concentrates not being classified as « corrosive »
- Q1 2018: Global Industry Alliance (ICMM) agreed on a refined test method, fully in line with the outcomes of ECI’s testing program
- Q3 2018: refined test method accepted « in principle » by IMO
  - Process for adoption must be followed; formal approval ~ Q3 2019
6. Responsible Sourcing

**Description**
- UN Sustainable Development Goal (SDG) 12: Responsible Production and Consumption (+ other SDGs relevant to copper)
- Increased scrutiny by financing institutions and end users regarding the responsible behaviour of companies
- Negative elements in the reputation of mining and metals: environmental impact, pollution, workers' safety

**Importance to the Industry**
- Providing assurance that copper is produced responsibly
- Leveraging the UN SDGs to demonstrate the significant contribution copper can bring to fulfilling these goals

**ECI activity**
- Develop strong stories that demonstrate the positive contribution of copper to a sustainable society (reputation building)
- Work with organizations like the OECD, ICMM and LME to ensure a favorable position for copper
- Create a strategic framework to communicate and verify copper’s contribution to sustainability as a response to Responsible Sourcing requests from downstream users
Conclusion

Transforming an issue into an opportunity

Copper is a key contributor to a sustainable world

REACH
IMO
OEL
ETS
Responsible Sourcing