











# The Kupferverband – What does it actually do? => Knowledge transfer



In November 2021, the German Kupferinstitut merged with the Copper section of the GDB-association to the Kupferverband.

The institution has been transferring copper knowledge for more than 90 years and represents member companies in international committees,

It provides access on copper know how and researches as well as market data and analysis with its informations, events, projects, platforms and its global network **Advice** 

**Puplication** 

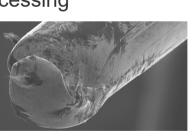
Laboratory-service

Research

It advises and analyzes as a neutral specialist authority on copper processing and application.



















## The Kupferverband – What does it actually do? => Knowledge transfer



\_defense \_\_analysis

\_stengthening

kupfer\_

understanding

\_industry and \_market

\_extension \_\_transfer

\_36 members

\_> 100 R&D + network partners











### Sustainability – attempt at an industry-related definition



#### **Dictionary definition:**

Original meaning: lasting effect

Forestry principle according to which no more wood may be felled than can grow back (18th century; Hans Carl von Carlowitz)

Today: Principle according to which no more may be consumed than can grow back, regenerate and be made available again in the future.

=> Consideration for future generations (suitability for grandchildren)

"Sustainable development is development that meets the needs of the present without risking that future generations will not be able to meet their needs."

Bruntland Report, UN 1987







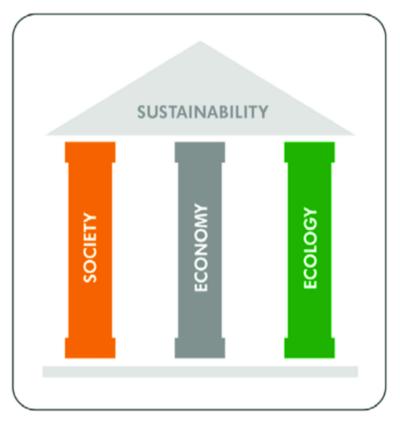




### 3-pillar model of sustainability



Conference Αt the on Environment Development in Rio de Janeiro – better known as the Earth Summit or Rio Conference – representatives from 178 countries met in June 1992 to discuss issues relating to the environment and development in the 21st of Rio, the sustainable century. In concept development was recognized as an international guiding principle. Behind this was the recognition that economic efficiency, social justice and the security of the natural basis of life are equal, vital interests that complement each other.













#### Tasks of the EU Green









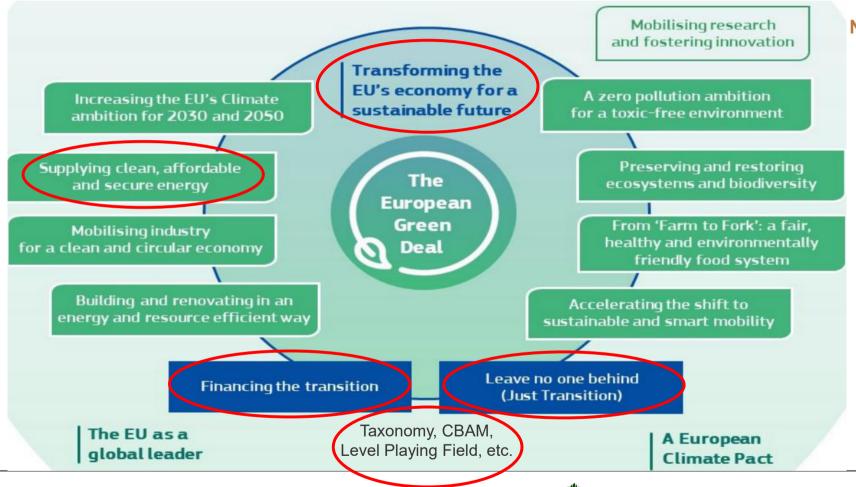






#### Tasks of the EU Green









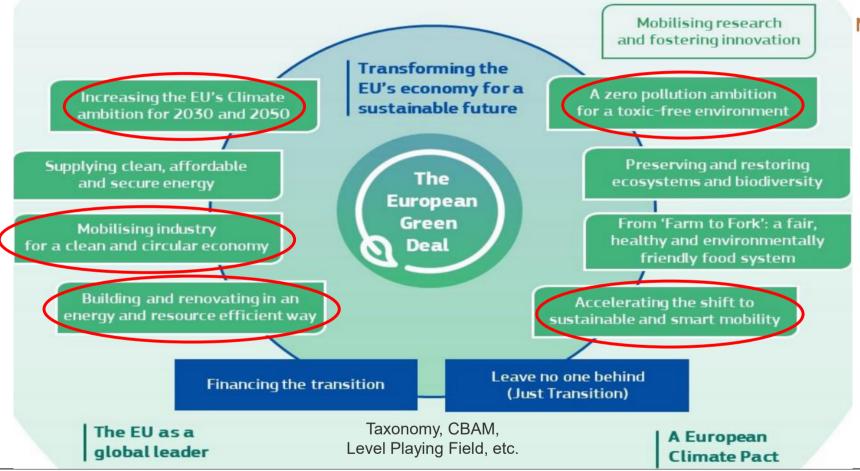






### **EU-Green-Deal - Impact on the wire industry**















# Non-ferrous wire products – enablers of the energy and mobility transition



#### Non-ferrus wire products are enabler for:

Electromobility (e-cars, charging infrastructure, etc.)

Renewable energy production from wind, sun, etc.

Decarbonization (heat pumps, etc.) etc.











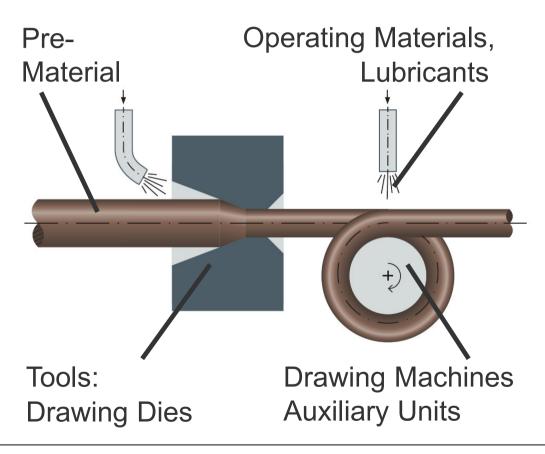


### System elements of the drawing process

























Sustainable and responsible sourcing

**Economy of resources** 

Recycling and secondary use of materials and energy (circular economy, process heat)

**Avoidance of emissions** 













#### Sustainable and responsible sourcing:

Sustainable energy supply
-Green electricity, green hydrogen, etc.

Sustainable supplier selection
-Funding and production conditions, etc.

Sustainable material selection
-Secondary and primary materials

Sustainable tools, auxiliary materials and operating materials















#### **Economy of resources:**

Saving energy

-Saving of electrical energy (engine efficiencies, steam - gas, bows on stranding machines, etc.)

Economical material consumption of materials

Economical material consumption for auxiliary and operating materials

- -Avoidance of packaging
- -Avoidance of waste and excessive material consumption (filter fluid, drawing dies, service life, etc.)

Avoidance of water consumption and wastewater production

-Cascade sink, vacuum evaporator, etc.













#### Recycling and secondary use of materials and energy:

Waste heat utilization

-Machine heat, cooling circuit, etc.

Use of "waste"

-Copper abrasion, metal dust, old emulsion, packaging, etc.

Recyclability of the product and packaging

- -Variety purity, end-of-life separation, etc.
- -Circular economy













#### **Avoidance of emissions:**

CO2 reduction in processes -no fossil fuels, etc.

Dust avoidance -Filters, cleaning, etc.

Avoidance of contamination and releases -Filters, afterburners, etc.

Reduction in transport
-Inline processes, vertical integration, etc.











### System elements of the drawing process







