Description:
The data set is part of a LCA study on copper products. The study is based on recent industry data supplied by the European copper industry, and thus reflecting the reality in copper semis fabrication. In comparing copper architectural sheets with other roofing and facade materials by means of Life Cycle Assessment should be based on the functional unit, with a sheet thickness of 0.6 mm. This thickness is the most commonly available in the market today for roofing purposes. The use phase of copper roofing is one of the longest, easily reaching well beyond 100 years. Copper church roofs still functional after more than 500 years are known. The type of covering and the inclination of the roof should also be considered. The mass of one m² of sheet may not necessarily be equivalent to one m² of roof or one m² of building surface. The specific properties of each material, the underlying support structures and the design all need to be considered. Many cradle to grave life cycle assessment studies have shown that the environmental aspects from the use and end of life phases of products are often significant. The economic value of copper scrap, based on its ability to be recycled 100% without any loss in performance, must be included in comparative assessments. Technical Purpose: Copper sheet is typically used in building and construction (roofing, cladding, etc.). For industrial use e.g. electrical engineering the thickness is in general finer. Geographical Representation: EU-25

Contributors:
- Pennington, David david.pennington@ec.europa.eu
- Fazio, Simone simone.fazio@ec.europa.eu

How to cite:
Fazio, Simone; Pennington, David(2011): Copper sheet; technology mix; market mix, at plant; 0,6 mm thickness; Hot and Cold Rolling based on melting and casting a mix of Copper cathode and Copper scrap; Technology and Market Mix for Sheet fabrication representing main European production countries, Market Mix for Copper cathode in Europe (primary and secondary Cu cathode production in Europe as well as Cu cathode import into Europe); 1000 kg Copper sheet (Location: EU-25). European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu/89h/jrc-eplca-1323a7e6-7841-47db-8da1-06355432a908

Keywords:
Material production, Metal production, Processes, Production

Related resources:
Data access
- Full ELCD Database
  Landing Page to download the full ELCD Database.

Additional information:
Issue date: 2011-01-01
Geographic area: European Union
Temporal coverage: From: 2011-01-01 – To: 2020-12-31