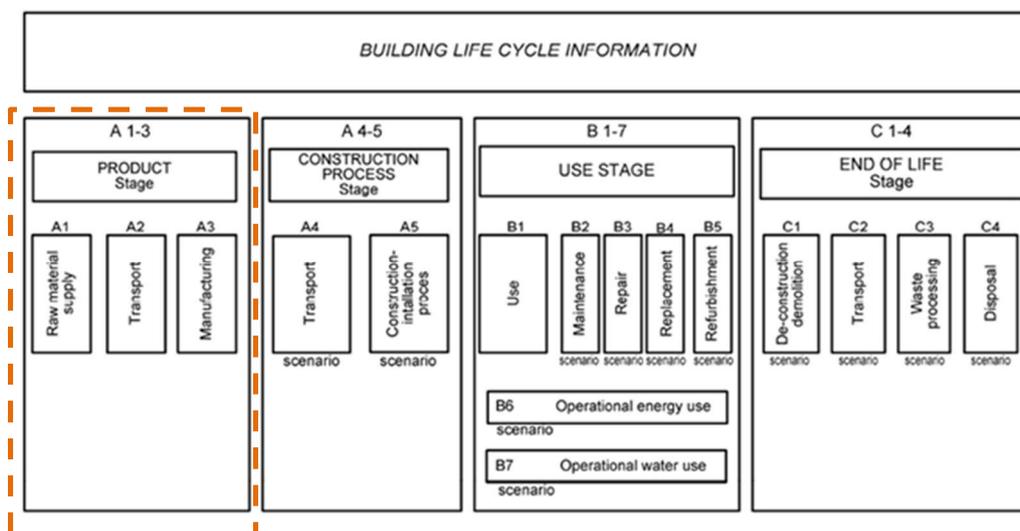


## VTT-CR-00161-21, APPENDIX 2: Carbon footprint calculation of Cupori Oy copper tube

VTT Technical Research Centre of Finland Ltd has performed a carbon footprint calculation for copper tube, produced by Cupori Oy. This copper tube is produced from recycled raw material, copper scrap. Full assessment reported in VTT-CR-00161-21 report (Vares, S., 2021. Kierrätyskuperista valmistetun putken hiilijalanjälki (in Finnish) (confidential). Calculation is based on 2019 production data. The result will be used in Finnish national carbon emissions database for construction, containing carbon footprints of building materials. The database is developed and maintained by the Finnish Environment Institute SYKE, commissioned by the Ministry of the Environment.

Calculation was performed according to EN 15804 + A2<sup>1</sup> standard. Characterization factors for carbon emissions are based on IPCC 2013 proposal. Scope of the calculation was assessment of life cycle stages A1-3, tube manufacturing from cradle to gate stage.



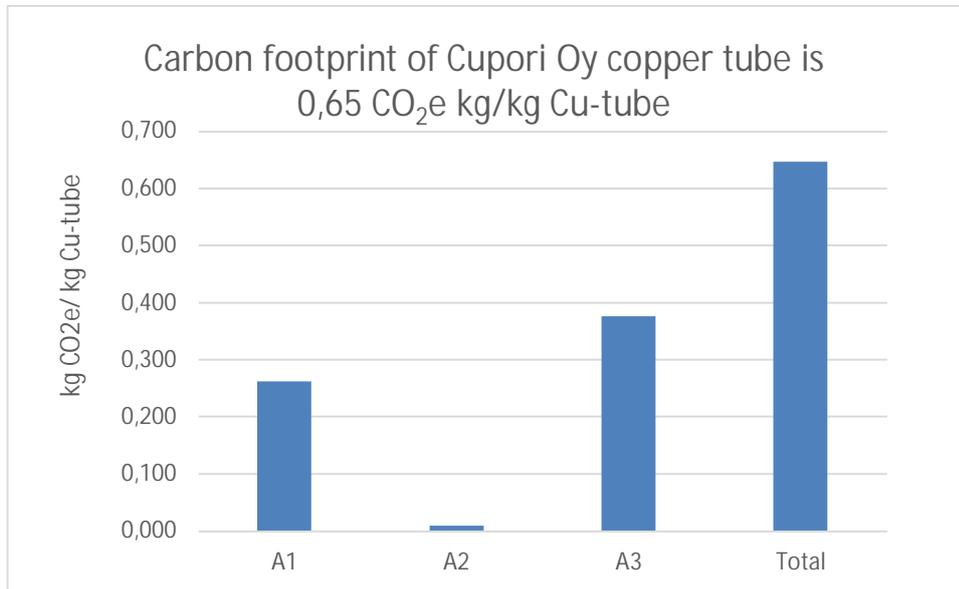
A1: raw material supply, incl. treatment of recycled raw materials and production of fuels and utility goods

A2: transport of raw materials and utility goods to manufacturing, well to tank, return included according to the scenarios

A3: manufacturing, including transport and treatment of waste, excluding possible credits from recycled wastes

<sup>1</sup> EN 15804:2012 + A2:2019. Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products. CEN, EUROPEAN COMMITTEE FOR STANDARDIZATION, Brussels (The European Standard EN 15804:2012+A2:2019 has the status of a Finnish national standard).

**Result for 1 kg average Cupori Oy copper tube**



Espoo, 6.4.2021

Author:



Sirje Vares  
Senior scientist

Approved by



Jussi Rönty,  
Team leader