

SELF-DECLARED ENVIRONMENTAL CLAIM

(TYPE II ENVIRONMENTAL LABEL)

concerning
environmental aspects and potential life cycle impact

copper cathode HMG-S

PRODUCER:

KGHM Polska Miedź SA

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BACKGROUND INFORMATION:

Date of the study: 10.03.2023

Normative reference: PN-EN ISO 14001:2015

Prepared on the basis of: results of the LCA environmental life cycle assessment study*

Method LCIA: EF 3.0 Method (adapted) V1.03 / EF 3.0 normalization and weighting set

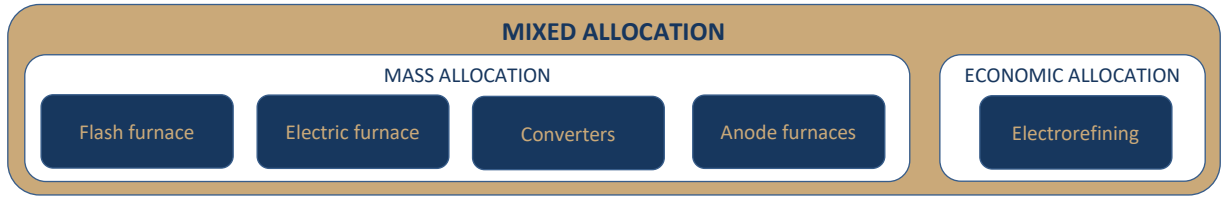
Analysis scope: from cradle to gate

Type of analysis: self-declared environmental claim (#3.1.16 PN-EN ISO 14021:2016-06)

Declared product life: 10 years

Functional unit: 1 ton copper cathode HMG-S

* Report on the study; MEERI PAS; Cracow 2023



INPUTS AND OUTPUTS FOR PRODUCTION OF 1 TON COPPER CATHODE HMG-S

	AMOUNT	UNIT
PROCESS INPUTS		
Thermal energy	-0.82	GJ
Electricity	5.02	GJ
Natural gas	3.67	GJ
Industrial water	15.14	m ³
Drinking water	0.64	m ³
PROCESS OUTPUTS		
Emission CO ₂	1.86	Mg
Waste	0.01	Mg

POTENTIAL ENVIRONMENTAL IMPACT OF 1 TON COPPER CATHODE HMG-S
 CHARACTERIZED RESULTS OF IMPACT CATEGORY INDICATORS

IMPACT CATEGORY	AMOUNT	UNIT
CLIMATE CHANGE	2960.63	kg CO ₂ eq
ACIDIFICATION	1343	mol H ⁺ eq
EUTROPHICATION (FRESHWATER)	0.24	kg P eq
OZONE DEPLETION	0.00025	kg CFC11 eq
PHOTOCHEMICAL OXIDATION	7.87	kg NMVOC
RESOURCE USE, MINERALS AND METALS	0.54	kg Sb eq
RESOURCE USE, FOSSIL	37758.52	MJ
WATER USE	2875.32	m ³ depriv.

As part of the sensitivity analysis, modeling was performed using a different type of allocation.



ENVIRONMENTAL CERTIFICATE

Mineral and Energy Economy Research Institute of Polish Academy of Sciences
certifies that

KGHM Polska Miedź SA
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in terms of
copper cathode HMG-S

identifies environmental aspects and assesses potential environmental impacts using a Life
Cycle Thinking (LCT)
taking into account
PN-EN ISO 14040:2009 and PN-EN ISO 14044:2009

results communicate as
SELF-DECLARED ENVIRONMENTAL CLAIM
(TYPE II ENVIRONMENTAL LABEL, PN-EN ISO 14021:2016)
being an integral part of this certificate

Date of issue: 10.03.2023
Due date: 10.03.2026

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