

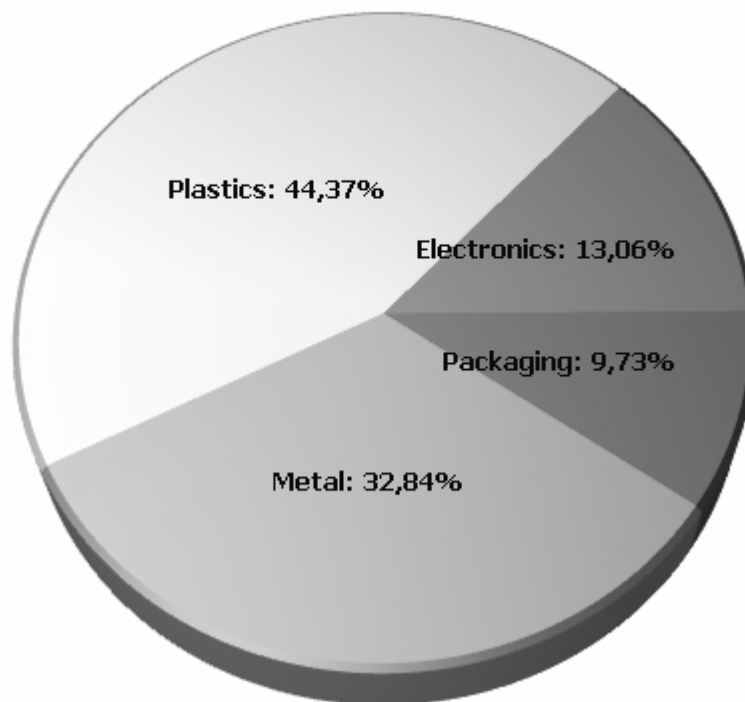
Constituent materials

Composition of used materials for production:

Material	Share of mass (if possible)
Electronics	13,06%
Plastics	44,37%
Metal	32,84%
Packaging	9,73%

In case of negative numbers, additional semi-finished products are created besides the product.

Substance assessment



Substance assessment

Products of this range are designed in conformity with the material restrictions according to Directive 2011/65/EU (RoHS 2), including Delegated Directive 2015/863/EU. In addition, the products comply with the requirements of Annex XIV and Annex XVII under Regulation (EC) No. 1907/2006 (REACH Regulation).

Details of ROHS and REACH standard followed by Phoenix Contact

Website: [Product Compliance | Phoenix Contact](#)

Life cycle stages - Overview

Manufacturing

Our production sites are certified according to the environmental management system of DIN EN ISO 14001:2015. The focus is on resource-saving processes. In addition, the company uses 100% green electricity for manufacturing.

Use

The use phase is excluded from the system boundary and determined not to be applicable.

Distribution to Customer

The information on transport distances and means was provided by our logistics department. As a result of the logistics data, an average distance of 800 Km to the customers is assumed. The weight and volume of the packaging have been optimized, based on the European Union 's packaging directive.

End of life

The product end of life factors is considered during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse.

Framework / Calculation rules

System approach

Life cycle assessment has been performed on the following life cycle phases: Upstream and Manufacturing (M), Distribution (D) and End of life (EoL). Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

Modelling hypothesis and method:

The preparation and calculation were carried out in accordance with the current standards DIN EN ISO 14040 and DIN EN ISO 14044. Eco database and primary data were used to determine the emission factors.

Data quality level:

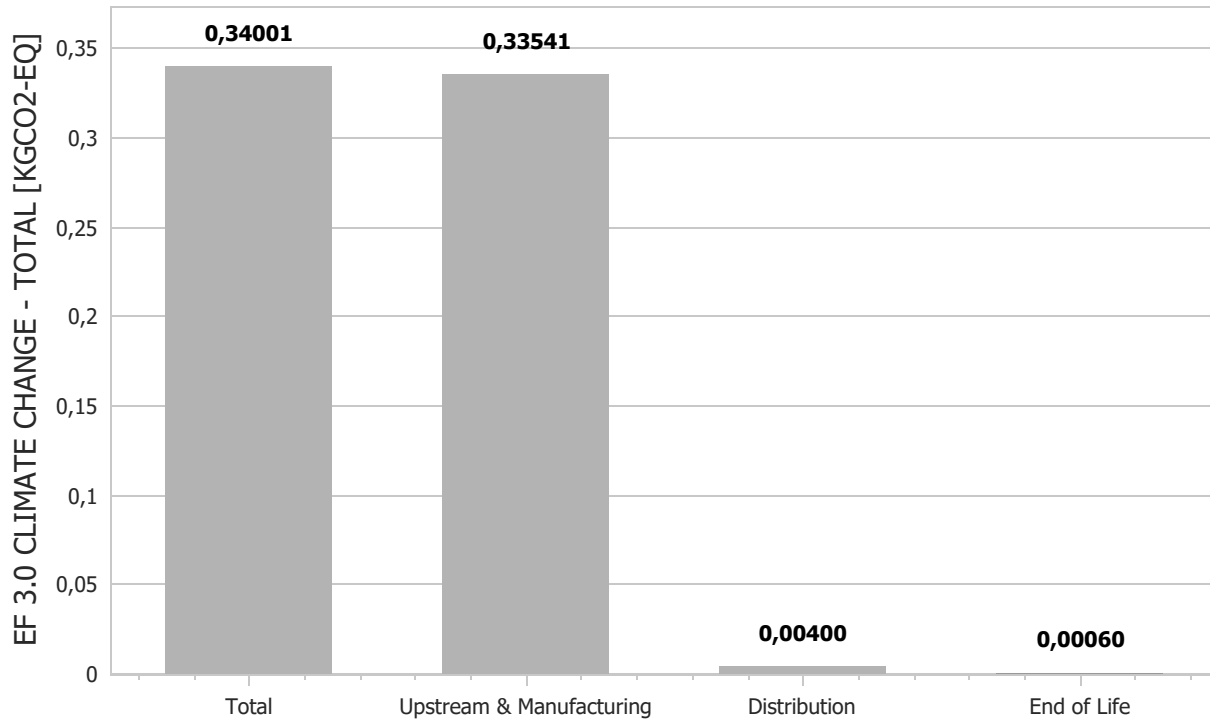
Emission factors from general eco databases as well as emission factors submitted by our suppliers were used to calculate the product environmental footprint. The quality level of the calculated environmental indicators indicates how granular the results are for Phoenix Contact. The average level for the quality level of the product is calculated based on the mass balance and quality level of each component.

Data quality level	Description
0	No data available
1 - 30	Indicators based on average values for industries
31 - 59	Indicators based on eco-database values
60 - 69	Indicators based on individually for this product modelled information
70 - 79	Indicators based on supplier values
80 - 100	Indicators based on primary supplier values including a third-party certification

Results

Environmental indicators:	Unit	Total	Upstream + Manufacturing	Distribution	Use	End of Life
mol H+ Eq	Acidification	n/c	n/c	n/c	n/a	n/c
kg CO2 Eq	Climate Change Global Warming Potential	3,400E-01	3,354E-01	4,000E-03	n/a	5,966E-04
kg CO2 Eq	Climate Change Biogenic	n/c	n/c	n/c	n/a	n/c
kg CO2 Eq	Climate Change Fossil	3,354E-01	3,354E-01	n/c	n/a	n/c
kg CO2 Eq	Climate Change Land Use And Land Use Change	n/c	n/c	n/c	n/a	n/c
CTUe	Ecotoxicity Freshwater	n/c	n/c	n/c	n/a	n/c
MJ	Energy Resources Non Renewable	n/c	n/c	n/c	n/a	n/c
kg PO4 Eq	Eutrophication Freshwater	8,889E-04	8,889E-04	n/c	n/a	n/c
kg N Eq	Eutrophication Marine	n/c	n/c	n/c	n/a	n/c
mol N Eq	Eutrophication Terrestrial	n/c	n/c	n/c	n/a	n/c
CTUh	Human Toxicity Carcinogenic	n/c	n/c	n/c	n/a	n/c
CTUh	Human Toxicity Non Carcinogenic	n/c	n/c	n/c	n/a	n/c
kBq U235 Eq	Ionising Radiation Human Health	n/c	n/c	n/c	n/a	n/c
dimensionless	Land Use	n/c	n/c	n/c	n/a	n/c
kg Sb Eq	Material Resources Metals Minerals	n/c	n/c	n/c	n/a	n/c
kg CFC-11 Eq	Ozone Depletion	n/c	n/c	n/c	n/a	n/c
Disease incidence	Particulate Matter Formation	2,199E-04	2,199E-04	n/c	n/a	n/c
kg NMVOC Eq	Photochemical Ozone Formation Human Health	n/c	n/c	n/c	n/a	n/c
m3 world eq. deprived	Water Use	1,363E-03	1,363E-03	n/c	n/a	n/c
Data Quality level: climate change		30,00				

Climate Change impact over life cycle



Glossary

Climate Change / Global Warming (GW) The global warming of the planet is the result of the increase in the greenhouse effect due to the sunlight reflected by the earth's surface being absorbed by certain gases known as „greenhouse- effect „gases. The effect is quantified in gram equivalent of CO₂.

n/a (not applicable) n/a means not applicable. If we do not have emission factors for environmental indicators, process emissions are not quantifiable, or lifecycle phase excluded from the system boundary the results table indicates n/a.

n/c (not calculated) n/c means not calculated. If environmental indicators could not be calculated, e.g., due to non-existing emission values or missing information, n/c was used.

Definitions and information on the other environmental indicators can be found on the page of the European Platform on Life Cycle Assessment: https://eplca.jrc.ec.europa.eu/LCDN/EF_archive.xhtml

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