

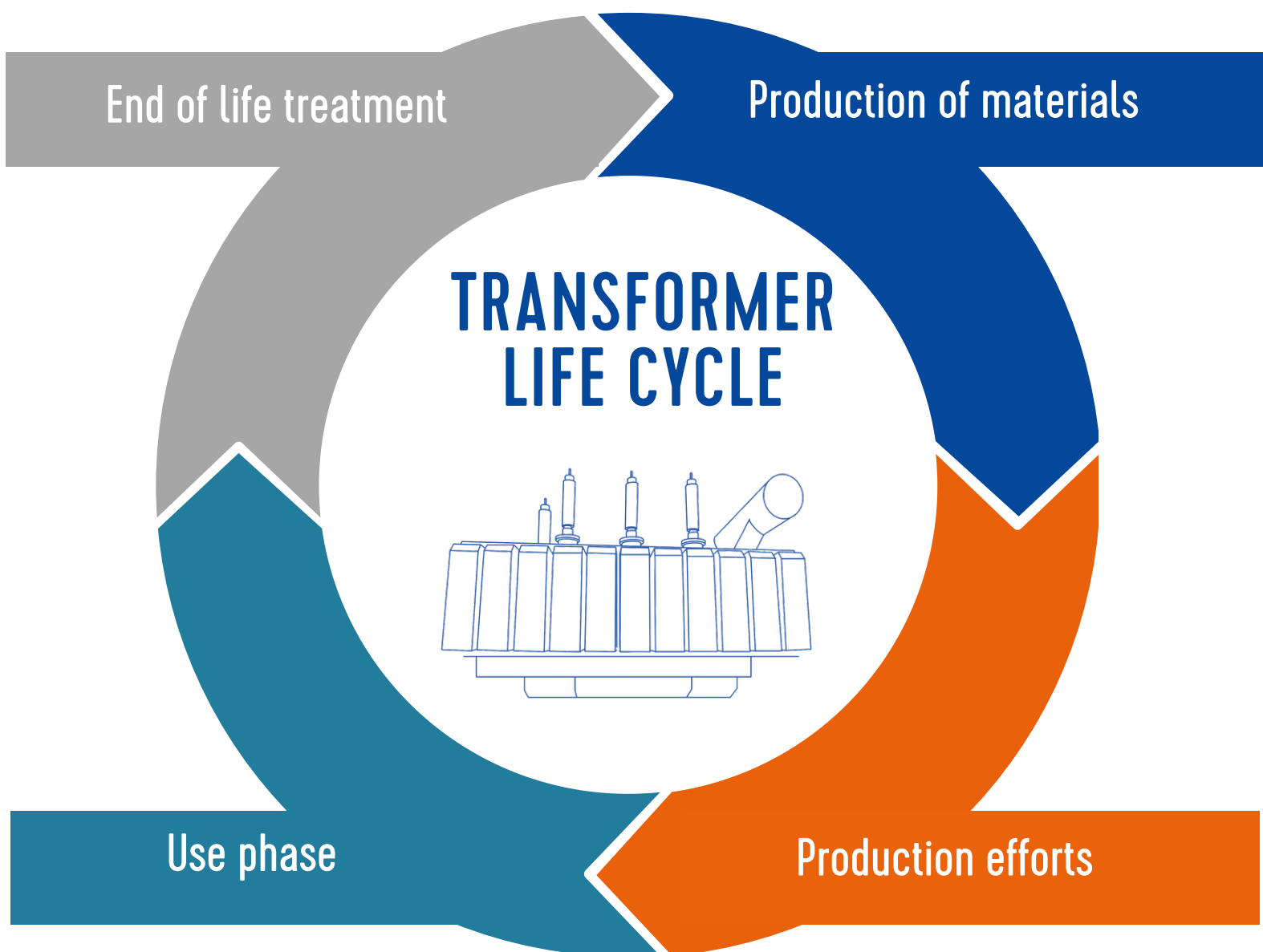
LIFE CYCLE ASSESSMENT - LCA

Our commitment to measuring and assessing the environmental impact of our products



WHAT IS LCA?

It is a methodology used to evaluate the potential environmental impact of a transformer throughout its **life cycle**, from raw material extraction to production, use, and disposal.



WHAT IS THE SOURCE OF THE DATA?

Our Life Cycle Assessment (LCA) tool was developed in collaboration with our partner EBP, independent consulting enterprise specializing in sustainable solutions. Information comes directly from the database of Ecoinvent v3.7.1, the foremost life cycle inventory (LCI) database. Ecoinvent encompasses a diverse range of products, services, and processes and is widely acknowledged as the most extensive, consistent, and transparent LCI database currently available.



Please note that the presented LCA data is not identical to an EPD (Environmental Product Declaration), and any further certification can be obtained upon request.

WHY LCA?

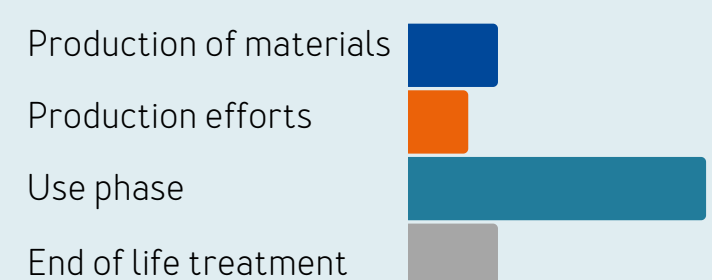
1. We recognize the importance our customers give to make **informed decisions** based not only on performance but also on the broader environmental impact and sustainability aspects of the transformer they intend to purchase.
2. We are committed to **transparency** and reducing our carbon footprint as well as improving our production processes.

WHAT TYPE OF INFORMATION CAN BE FOUND IN OUR LCAs?

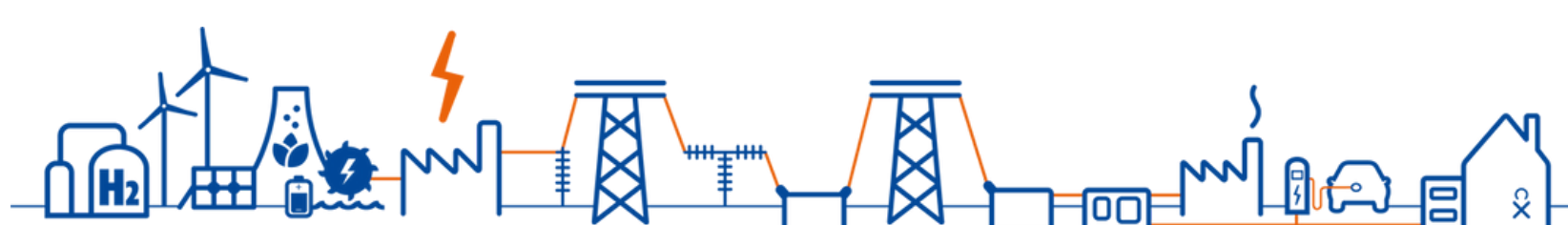
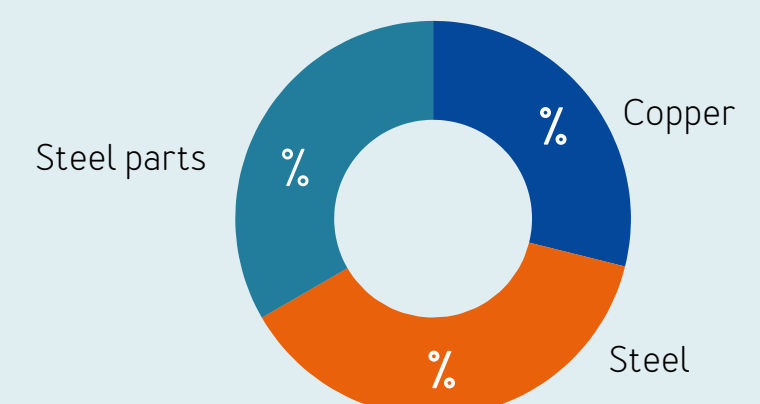
1. Product composition [kg]

Materials	Amount [kg]	Origin of material
Copper	XX	XX
Steel	XX	XX
Insulation material	XX	XX

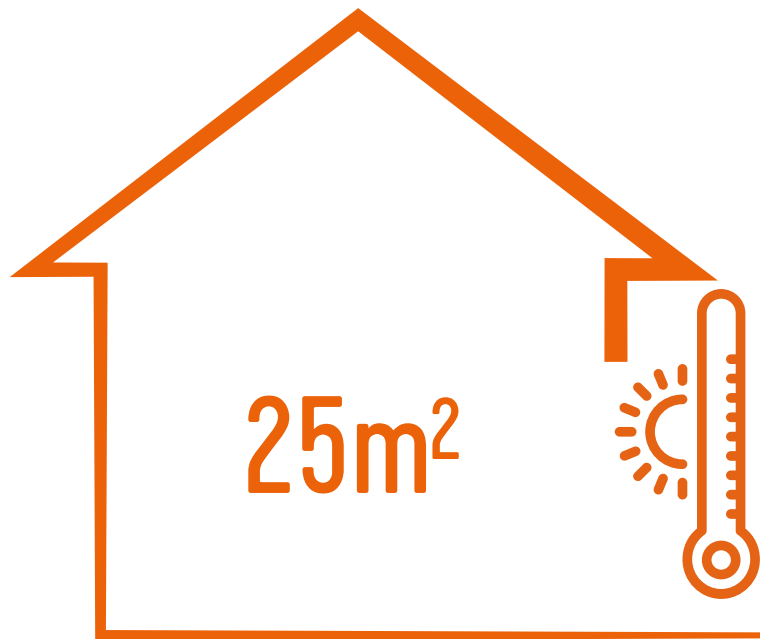
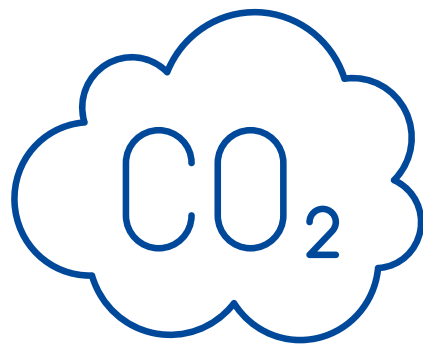
2. Total calculated CO₂-eq for the Transformer [kg CO₂ eq.]



3. Contribution from different materials to Global Warming Potential [%], [kg CO₂ eq.]



WHAT IS A TON OF CO₂?



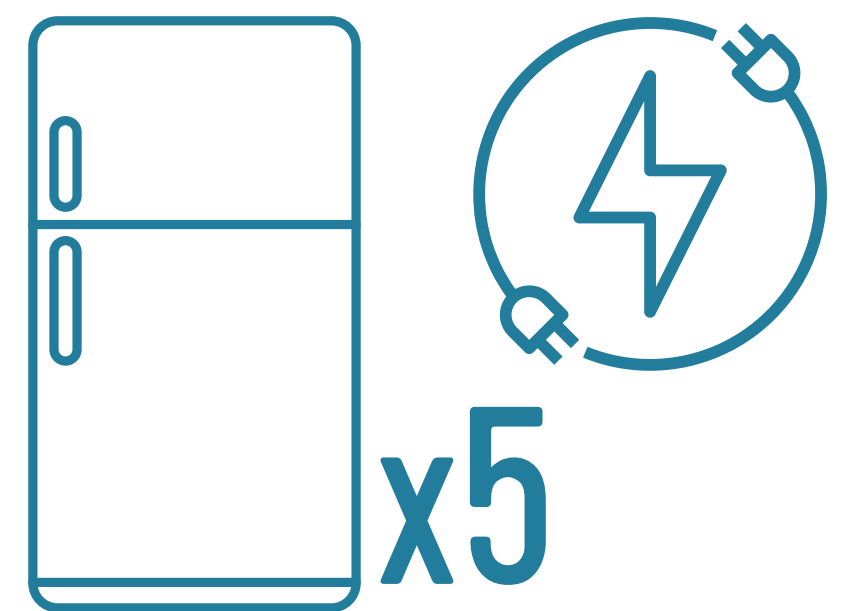
1 YEAR OF ELECTRICAL HEATING FOR A 25m² APARTMENT

Heating relies on fossil fuel-based electricity generation, which emits carbon dioxide when burned. The energy-intensive nature of electrical heating, compounded by efficiency losses in generation and transmission, contributes to the significant carbon footprint.

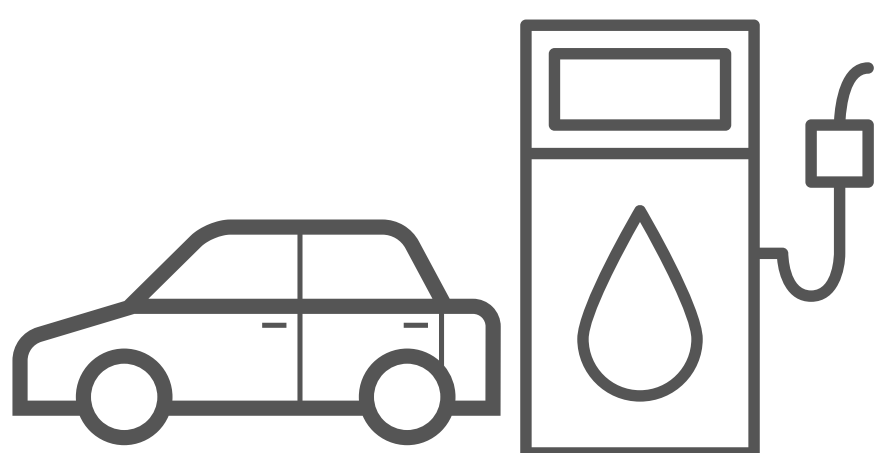
[Source: CO2-Rechner. Bayerische Landesamt für Umwelt \(BLfU\)](#)

1 YEAR OF POWERING FIVE STANDARD REFRIGERATORS

Refrigerators run continuously, consuming significant electricity over time. The energy required for cooling, coupled with the carbon intensity of electricity generation, results in substantial emissions, especially if the electricity comes from fossil fuel sources.



[Source: Calculateur Carbone - GoodPlanet](#)



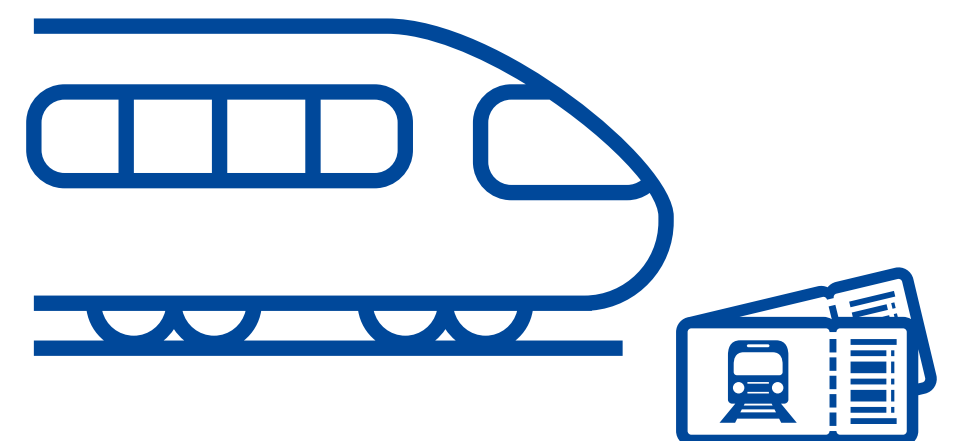
5.800 km BY DIESEL CAR

Driving a diesel car generates CO₂ due to the combustion of diesel fuel, which releases carbon dioxide. The carbon content in diesel fuel, along with the inefficiencies in combustion engines, contribute to significant emissions.

[Source: Our World in Data 2023](#)

250.000 km BY HIGH-SPEED TRAIN (ICE)

Traveling by high-speed train generates the least amount of CO₂ compared to other transportation means. While trains are generally more energy-efficient than cars or airplanes, the carbon footprint increases with longer distances traveled, particularly if the electricity used to power the trains comes from fossil fuel sources.



[Source: Our World in Data 2023](#)

