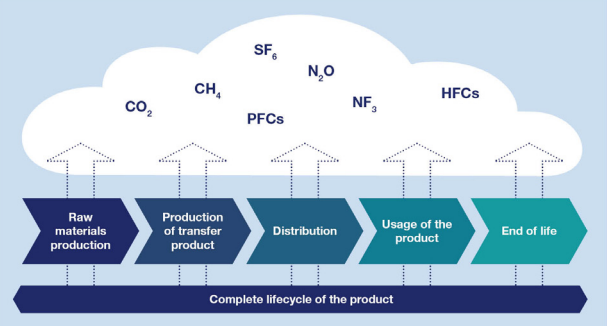
Reducing CO_2 Emissions at KURZ

Transparency. Efficiency. Circularity.

Reducing greenhouse gas emissions is a central part of KURZ's sustainability strategy. Across our production processes, materials, and recycling systems, we continuously work to lower emissions, improve resource efficiency, and strengthen circular solutions.

These measures are supported by environmental management systems, defined reduction targets and continuous optimization processes. (For detailed information, please see our sustainability report.)



Reducing Emissions in Production

KURZ systematically reduces emissions at its production sites in Fürth and Sulzbach-Rosenberg through targeted energy and process optimization.
Within our ISO 50001-certified energy management system in Fürth und Sulzbach-Rosenberg, energy consumption and energy flows are continuously monitored to identify efficiency potential and implement improvement measures.
This ensures a lower CO_2 intensity of our products – directly contributing to your Scope 3 reduction targets.

Our long-term objective is to **reduce CO_2 emissions drastically in Scope 1 and 2.**

Key measures include:
- Continuous improvement of energy efficiency
- Transition to renewable energy sources
- Expansion of in-house energy generation
- Reduction of onsite emissions
- Ongoing optimization of production processes

Scope 1 emissions primarily result from solvent use in production processes and natural gas consumption. Through process optimization, lower solvent usage, and targeted efficiency measures, these emissions are continuously reduced, helping to lower the CO_2 footprint of the products you source from us.

At LEONHARD KURZ Stiftung & Co. KG Germany, **Scope 2** emissions have already been significantly reduced through the use of green electricity and internal energy generation.

In addition: **Scope 3** emissions also remain an important focus area across the value chain.

Material Efficiency that Reduces Your CO_2 Footprint

Reducing material input is one of the most effective ways to lower emissions of our product and conserve resources. KURZ slim technology is designed to significantly reduce material consumption while maintaining high product performance and process reliability.

By reducing the PET carrier thickness of our products for the graphic industry from 12 µm to 10 µm in hot stamping and down to 6 µm in cold transfer, we significantly decrease material usage – resulting in up to 50 % less PET waste, as fewer PET is needed for our transfer products.

An ultra-thin aluminum layer of just 0.02 µm ensures consistent, high-quality results with minimal resource input.

This directly benefits your operations:
- Lower material consumption reduces your waste volumes and disposal costs
- Reduced weight lowers transport-related emissions and logistics costs
- Improved CO_2 footprint due to reduced resource consumption

At the same time, product design for cardboard packaging remains compatible with existing recycling systems, allowing you to maintain recyclability without changing your processes.

Closing Material Loops with RECOSYS®

RECOSYS® is KURZ's own take-back and recycling system for residual PET carrier materials and an important component of our circular economy activities.

Used KURZ PET carriers are collected separately by the customer and returned to KURZ, where the recycling process is carried out under controlled conditions. This ensures consistent recycling while balancing environmental and logistical efficiency.

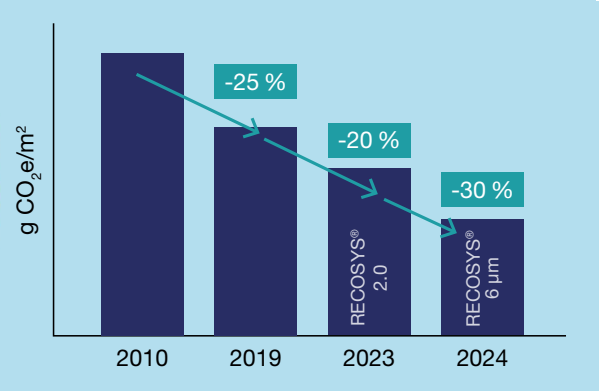


Recycling PET carrier materials helps return valuable raw materials to the material cycle and reduce resource consumption.

The environmental impact is measurable:

Embellishment with KURZ reduced PET carrier (6 µm) can save up to 40 % CO_2e when this material is recycled within our RECOSYS® program. Reducing the PET carrier thickness and returning the carrier to the material cycle prevents the use of virgin PET, and therefore resulting in savings of CO_2e emitted during the production of virgin PET. With RECOSYS® 2.0, the Scope 3 emissions, based on the end-of-life calculation of the transfer product, can be reduced by up to 90 % when 1 kg of the residual PET transfer product is recovered through the RECOSYS® 2.0 program compared to thermal recovery.

The reduction is achieved due to the fact that far less CO_2e is emitted for the production of energy needed for the RECOSYS® process than CO_2e emitted during the combustion process of thermal recovery. All relevant GHG emissions generated by energy consumption, waste, transport, etc. are included in the calculation. RECOSYS® enables you to actively reduce downstream emissions and strengthen your sustainability performance. Learn more about our RECOSYS® system: Your Sustainably Embellished Product



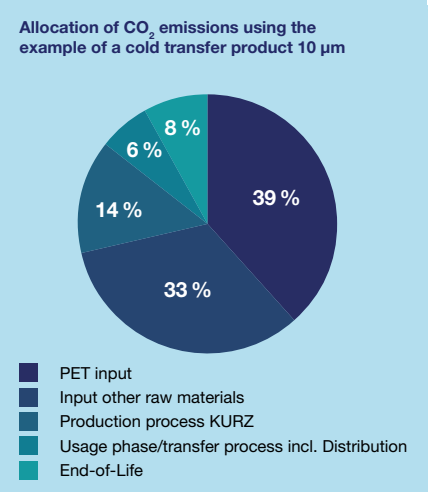
Development of the PCF of a cold transfer product

2010: First creation
2019: Conversion to green electricity and updates
2023: Main impact of the reduction: RECOSYS® 2.0
2024: Consideration of the slim program (reduction from 12 µm PET layer to 6 µm PET layer)

Lifecycle-Based CO_2 Transparency

Understanding where emissions occur is essential for effective reduction measures.

KURZ conducts Product Carbon Footprint (PCF) assessments in accordance with ISO 14067 for selected products and applications. The assessment covers all life cycle stages, from raw material extraction through the production and processing phases to end-of-life (cradle-to-grave).



The manufacture of the PET carrier and the relevant production materials account for a significant proportion of our PCF.

- For a 10 µm cold transfer product this means, that around two-thirds of the emissions come from the upstream value chain.
- Only ~14 % of emissions are generated within our own production processes

Reducing CO_2. Delivering Customer Value.

KURZ takes a pragmatic and measurable approach to CO_2 reduction. By combining material efficiency, energy management, and circular solutions, we reduce emissions where we can have the greatest impact.
If you would like to learn more about our sustainability activities and environmental initiatives, please visit:
www.kurz-world.com/en/sustainability