



“resources SAVED by recycling”

Added value through circular economy – measurable relief
for resources and climate

Securing the future through circular economy

Together with its customers, Interzero develops successful business models for a sustainable, future-proof circular economy. The concrete environmental benefits of circularity are demonstrated each year in the company's study "resources SAVED by recycling".

By 2050, Europe aims to become the first climate-neutral continent. In Germany, the target of achieving climate neutrality by 2045 is now enshrined in law. To reach these ambitious goals, there is no alternative to building a functioning circular economy.

resources and greenhouse gas emissions are saved (see also reverse page).

The latest results: In 2024, Interzero kept around 1.94 million tonnes of materials in circulation, saving approximately 8.09 million tonnes of primary resources. At the same time, Interzero's recycling activities avoided a total of 1.04 million tonnes of greenhouse gas emissions. This is comparable to the CO₂ emissions generated by about 3.2 million one-way car journeys between Interzero sites in Warsaw and Valencia.**

Our 2024 results *

- 1,94 million tonnes of materials kept in circulation, thus
- 8,09 million tonnes of primary resources conserved and
- 1,04 million tonnes of greenhouse gas emissions avoided.

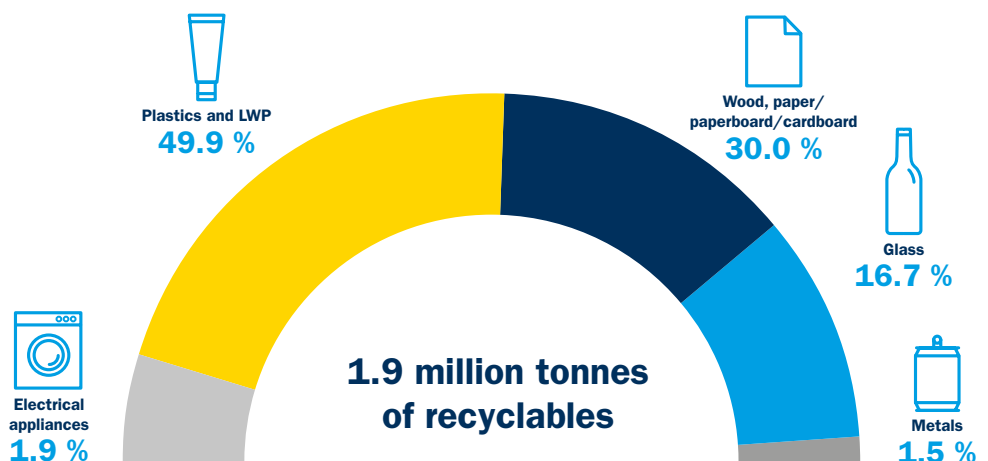
Our contribution to climate and resource protection

For more than 15 years, Interzero has had the ecological impact of recycling assessed by the Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT. The researchers conduct a comprehensive life cycle assessment – and by comparing primary production with recycling, they can calculate precisely how many

Recycling makes a difference – and that difference is felt worldwide: As calculated by the Global Footprint Network on the basis of the Fraunhofer study, Interzero and its customers were able to push back Earth Overshoot Day 2025 by 10 minutes and 28 seconds. More circularity and resource efficiency, less strain on our planet – that is what we will continue to work for with combined efforts in the future.

*Source:
Fraunhofer UMSICHT

**Source:
Calculation basis:
Average CO₂ emissions
of newly registered cars
in Germany in 2024
according to the Federal
Motor Transport Authority,
www.kba.de





Recyclates enter mainstream

A milestone for sustainable cosmetic packaging: For its oxidising agent bottles used in hairdressing, premium cosmetics manufacturer La Biothétique will in future rely on post-consumer recyclate (PCR). “Sustainable packaging is, alongside mobility, digital training concepts and product use, one of the four key levers for achieving our climate targets,” says Dr Christian Ader, COO of Laboratoire Biothétique Kosmetik GmbH & Co. KG. By 2030, the company aims to reduce its CO₂ emissions by 20 per cent compared with 2019 – continuing to align itself with the Paris Agreement’s 1.5°C climate goal.

To make its extensive product portfolio more sustainable, the cosmetics manufacturer has already had all packaging categories assessed in line with the Interzero “Made for Recycling” standard. As part of a strategic partnership, La Biothétique and Interzero are now also driving forward the use of recyclates: “So far we have used recycled plastics of industrial origin – Interzero now enables us to process PCR, i.e. material from end consumers. For us, this is the next logical step towards a genuine circular economy,” says Dr Ader.



Including CosPaTox certification

A clear advantage of the cooperation: Interzero accompanies sustainable packaging innovations from start to finish, ensuring access to the required recyclates as well as to the expertise of its internationally renowned in-house laboratory. In the current project, one challenge lay in the fact that hydrogen peroxide in the packaging can lead to gas formation and pressure build-up. “We had to ensure that the recycle bottle was stable enough and met all the requirements of the CosPaTox industry consortium for cosmetic packaging,” explains Dr Ader. “The CosPaTox certification, carried out in the Interzero laboratory, confirms the product safety and suitability of the packaging for cosmetic use. This clears the way for series production.”

Looking ahead, La Biothétique intends to switch its packaging portfolio as far as possible to recyclates and PCR. Through its collaboration with Interzero, the company is also on the safe side with regard to the EU Packaging and Packaging Waste Regulation (PPWR) – while at the same time making a valuable contribution to environmental protection. According to the “resources SAVED” study, in 2024 some 1,253 tonnes of resources were conserved and 134 tonnes of greenhouse gas emissions avoided.

***Source:
<https://www.austoscout24.de/informieren/ratgeber/kfz-technik/gewicht-von-autos-frueher-und-heute/>






Data analysis proves the benefits of recycling

Scientific calculations as a basis for sustainable action: The annual “resources SAVED by recycling” study conducted by Fraunhofer UMSICHT is based on the internationally recognised method of life cycle assessment (LCA). This environmental assessment compares every step of primary production with those of recycling – from extraction and processing through to reuse.

The researchers draw on both primary data from Interzero – such as sorting and recovery volumes, average transport distances and the energy

consumption of sorting and treatment facilities – and secondary data from Sphera databases (LCA for Experts). These contain validated figures on greenhouse gas emissions and raw material inputs incurred during the primary production of new goods – for plastics, for example, through crude oil extraction, transport, and processing. The comparison of these data provides a precise picture of the ecological impact of recycling.

The graphic below illustrates the methodological basis of the Life Cycle Assessment (LCA):

Methodological Fundamentals		General Approach: <ul style="list-style-type: none">• Only quantities in which Interzero is involved by more than 50% as of 31/12/2024 are considered• Double counting is excluded
		Functional Unit (Reference Unit): <ul style="list-style-type: none">• Collection and treatment of one tonne of a specific waste stream
		System Boundaries: <ul style="list-style-type: none">• Waste input with zero burden, consideration of a single recycling cycle• Collection, sorting, processing, transport, and recovery (material and thermal), including credits
		LCA Software and Databases: <ul style="list-style-type: none">• Software: LCA for Experts (Sphera)• Databases: MLC (Sphera), Ecoinvent 3.10
		Selected Impact Category / Life Cycle Inventory Category: <ul style="list-style-type: none">• Resource use (inventory-based)• Greenhouse gas emissions – climate impact (IPCC AR6 GWP100, excluding biogenic CO₂) [IPCC-2021]

Source:
[IPCC-2021] - IPCC (Hg.) (2021): Climate Change 2021: The Physical Science Basis. Working Group I Contribution of to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.