

Sustainable recycling instead of resource depletion

Welcome to the future, where Interzero works with its customers and partners to close material loops and develop successful circular business models. The annual "resources SAVED by recycling" study illustrates how much recycling helps the environment.

How can we reach climate neutrality, secure raw materials and maintain a good quality of life on our planet for future generations? One thing is clear: we cannot do any of this without transitioning to a genuine circular economy. As one of Europe's leading circular economy service provider, Interzero consistently advocates waste prevention, reuse

and recycling. We are committed to zero waste: no wasted resources, less energy consumption and lower greenhouse gas emissions.

Researchers from the Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT have been investigating the tangible environmental impact of recycling activities for the past 15 years. Their comprehensive report on environmental performance provides a detailed comparison of primary production and recycling – including all of the necessary process steps. This standardised methodology enables us to quantify our resource and greenhouse gas savings.

Our year-end results for 2022*

- More than 2.1m tonnes of recyclables were managed in the loop
- Over 8.7m tonnes of primary resources were saved by this
- · Around 1m tonnes of greenhouse gas emissions were avoided as a result

8.7m tonnes

of **primary resources** saved. This is comparable to the **weight of**

174.267

single-family homes.**





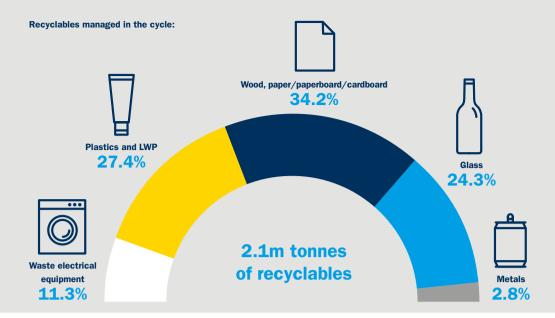
1m tonnes

of **greenhouse gases** saved.

This corresponds to the average annual **CO₂ emissions of more than**

100.000

single-family homes.***



Closing the loop with Sopro Bauchemie

Industry and the recycling sector are working hand-in-hand to ensure that waste is turned into raw materials again. Construction chemicals manufacturer Sopro, for example, has been relying on Interzero's expertise for more than 20 years in a collaboration that focuses on environmentally friendly packaging disposal and recycling.

Sustainable, low-emission, environmentally compatible

From screed to tile cement, Sopro Bauchemie GmbH's products support construction projects for healthy living. The company's high quality and environmental standards are certified by independent bodies. Closed-cycle resource management is an integral part of Sopro's sustainability strategy, which means the company recognises the importance of using recycled materials and favours recyclable or separable packaging.

As a circular economy service provider, Interzero takes care of the rest, including the take-back and recycling of transport packaging made from paper, plastic and tinplate. Sopro licenses sales packaging via the Interseroh+ dual system, which is also part of the Interzero Group. The obvious advantage of this is that Interzero acts as a single point of contact for all things relating to the circular economy – which means Sopro can enjoy an all-inclusive service and save themselves the time and effort of managing several separate processes.

Certified resource protection

This comprehensive recycling collaboration means the construction chemicals manufacturer can do more than just meet its obligations under the German Packaging Act. With Interzero's help, the company is also improving its ecological footprint – and can provide hard evidence of its own contribution to climate action and resource protection. Every year, Interzero discloses the environmental

"The 'resources SAVED' certificate confirms the environmental benefits of our partnership – and shows that we are on the right track."

Michael Hecker, Managing Director of Sopro Bauchemie GmbH

performance of each of its customers by issuing them with a certificate based on the "resources SAVED by recycling" study by Fraunhofer UM-SICHT. According to this, Sopro Bauchemie GmbH has saved several thousand tonnes of primary resources and greenhouse gases in 2022 through its cooperation with Interzero.

- *Source: Fraunhofer UMSICHT
- **Source: www.enkoy.com
- ***Source:
 Bundesumweltamt

Environmental benefits in black and white

To mark 15 years of "resources SAVED by recycling", lead author Dr Markus Hiebel from Fraunhofer UMSICHT explains why the study is so important, both now and in the future.

Together with Interzero, you created the "resources SAVED by recycling" study back in 2008. Looking back today, what are you most proud of?

The study has enabled us to quantify the environmental benefits of recycling and make these benefits tangible. Yet the study is also constantly evolving. We have added new and complex material flows such as waste electrical equipment, and can also now map out both climate protection effects and contributions to resource protection. This will also be vital for raising awareness among industry players and consumers alike in the future.

How do science and industry work together on this study?

We complement each other perfectly. The Fraunhofer UMSICHT contributes the latest research into recording environmental impacts while Interzero adds a crucial practical perspective. The study would not be possible without the data and evaluation of a recycling specialist like Interzero. How we communicate our findings is another decisive factor. Together, for example, we made it easy to understand resource savings by using illustrations such as the weight of container ships or pyramids – and got the message across to plenty of people.

Looking ahead for a moment, what potential do you see for the future?

I'm fascinated by the possibilities of digitalisation. For example, it's easy to imagine a calculator into which customers could enter their own data and calculate their individual savings. Interzero already offers a "material account" providing customers with round-the-clock access to their own raw materials that are managed in the loop. In the future, individual steps such as the disposal of plastic waste, recycling and the reuse of materials could be directly linked to savings figures. Quantifying environmental impacts also opens up exciting possibilities for other business models within the circular economy. The aim here is to close loops in a sophisticated way before we even get to the recycling stage, either by reusing materials or by refurbishing old products and devices, which is something else Interzero can help with.



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