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Sustainability Report for 2025

Gersthofen Site
April 2025

REPORT



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Company & Environmental Responsibility

Since 1995, ExOne has been developing high-performance 3D printers that deliver innovative solutions for industrial applications. As part of Desktop Metal, ExOne is among the world's leading experts in binder jetting technology (BJT). Our industrial sand 3D printers transform quartz and silica sand into highly precise molds and cores for metal casting, tooling, and applications in aerospace, automotive, and architecture. This technology reduces both time and costs, while enabling the production of complex designs that were previously unachievable.

Sustainability in mechanical engineering is a core element of our corporate strategy. BJT offers a resource-efficient alternative to conventional manufacturing methods by optimizing material usage, minimizing waste, and promoting energy-efficient processes. In addition, this technology supports localized production, reducing transportation distances and mitigating supply chain risks.

Sustainability has always played a key role at ExOne

Since its founding, ExOne has focused on advancing sustainable manufacturing technologies. To support the environmental benefits of additive manufacturing with scientific evidence, ExOne is a member of the Additive Manufacturer Green Trade Association (AMGTA), participating in independent research on sustainable production methods.

The technology enables:

- Energy savings through lightweight components for vehicles, aircraft, and machinery that would be impossible to manufacture without binder jetting.
- Reuse of materials such as recycled concrete, processed sawdust, and re-powdered metals. This supports local sourcing and the application of materials science innovations.
- Reduction of production steps to lower waste and energy consumption across the entire supply chain.
- Use of natural and silica sands that are highly recyclable and can be reused in the binder jetting process.
- Application of sustainable binders, such as BPA-free furan or inorganic binders without solvents, to avoid organic emissions during metal casting.

Legal and Regulatory Framework

ExOne's primary objective is to deliver products and services of the highest quality, reliability, and environmental compatibility that meet both customer requirements and applicable legal regulations. To achieve these goals, the company adheres to recognized environmental and quality standards that ensure its processes and products meet the highest demands.

The Gersthofen site is certified according to ISO 9001:2015 (Quality Management) and ISO 14001:2015 (Environmental Management). These certifications confirm the implementation of a robust management system that promotes continuous process improvement while taking environmental protection into account.

ExOne's management system is designed to meet the needs of customers and other stakeholders. It covers key aspects such as customer satisfaction, risk management, working environment, and environmental

protection. As part of this system, external factors—legal, technical, competitive, market-related, social, and environmental—are regularly analyzed to identify opportunities and risks.

In addition, ExOne is actively involved in the Bavarian Environmental and Climate Pact and is a founding member of the Additive Manufacturer Green Trade Association (AMGTA). These partnerships support the long-term vision of making a positive contribution to reducing CO₂ emissions and promoting sustainable resource use through the application of sustainable manufacturing technologies, enhanced resource efficiency, and the use of recyclable or environmentally friendly materials.

The ongoing improvement of environmental and quality objectives is assessed annually as part of a management review. Based on these evaluations, measures are defined to optimize processes and better meet the expectations of customers and society.

Certifications and Memberships



ExOne GmbH at the Gersthofen site is certified according to DIN EN ISO 9001:2015 and DIN EN ISO 14001:2015.



Active participation in the Bavarian Environmental and Climate Pact



Founding member of the Additive Manufacturer Green Trade Association (AMGTA)

Sustainability in Action: Environmental Measures 2024

In 2024, we achieved significant progress in our environmental program. Through targeted actions, we were able to conserve natural resources, reduce waste volumes, and further improve energy efficiency.

Material & Waste Management

- Increased sand recycling rate, resulting in a reduction of spent sand requiring disposal.
- Hazardous waste reduced by 43%, primarily due to the use of DEHP-free binders.
- Non-hazardous waste decreased by 28% thanks to optimized material usage.

Water & Resource Consumption

- Water-saving measures in sanitary and cleaning areas led to further reductions in water usage.
- The replacement of BPA-based binders was advanced wherever technically feasible

Energy Efficiency & CO₂ Emissions

- Conversion to LED lighting in our production halls contributed to reduced electricity consumption.
- Smart heating control systems resulted in an 11 % decrease in heating energy use.

These achievements reflect our ongoing commitment to environmentally responsible production and sustainable manufacturing practices. The progress made over the past four years in each environmental category is illustrated in the following trend charts.



2019 AFS Casting of the Year

The casting was produced using ExOne's 3D printing technology, combining 11 components into a single part. This resulted in a weight reduction of 1 kg. No conventional tooling was required for production.

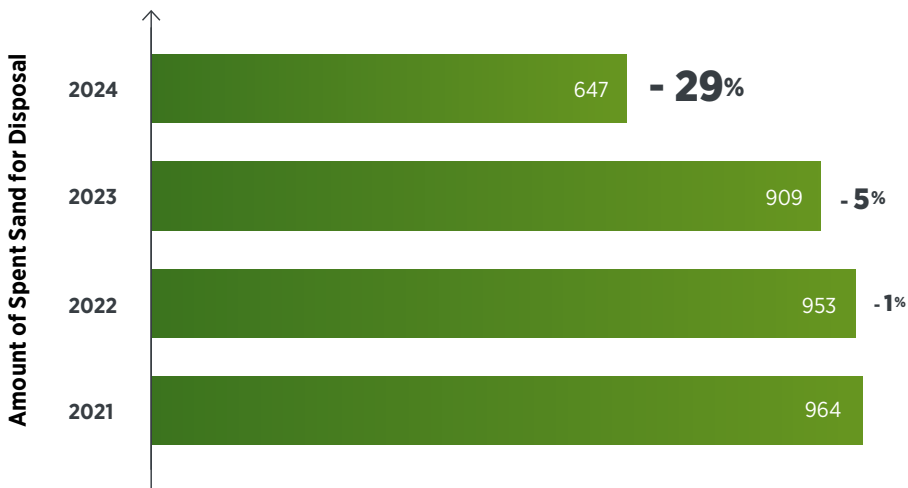


*„In nature, nothing is wasted—everything is reused. Inspired by this principle of perfect sustainability, we **strive to optimize our operations** to minimize our environmental impact. **Sustainability is the future.**“*

Franz Oharek, Quality and Environmental Management Representative, ExOne

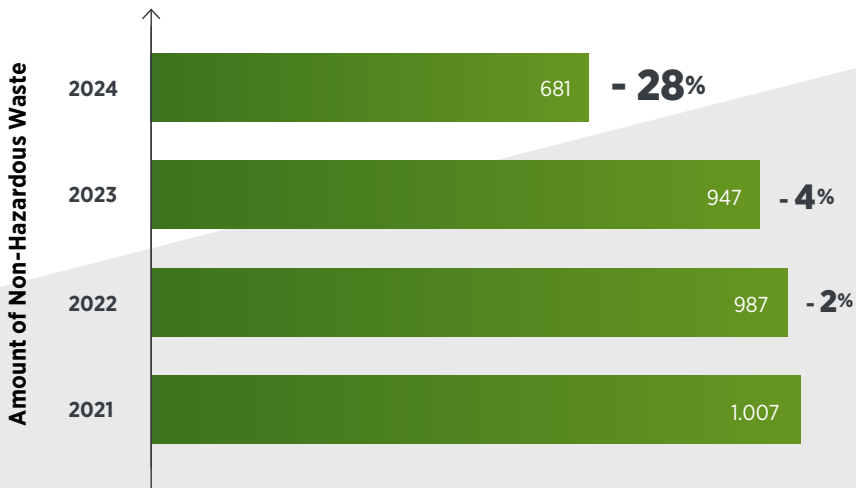
Sustainability in Figures

Material and Waste Management



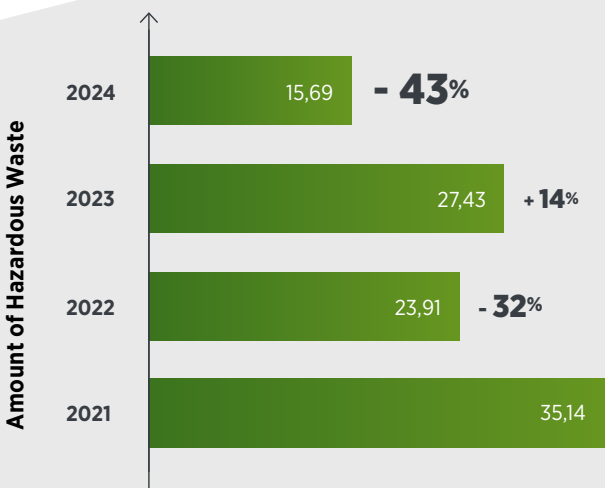
Casting Molds and Sands Free of Hazardous Substances (t)

Note: The volume of spent sand generated was reduced through the gradual increase of the recycling rate and improved printing processes.



Total Non-Hazardous Waste (t)

Note: The total volume of non-hazardous waste—including steel, iron, wood, sand, and paper—was significantly reduced by 28% in 2024.



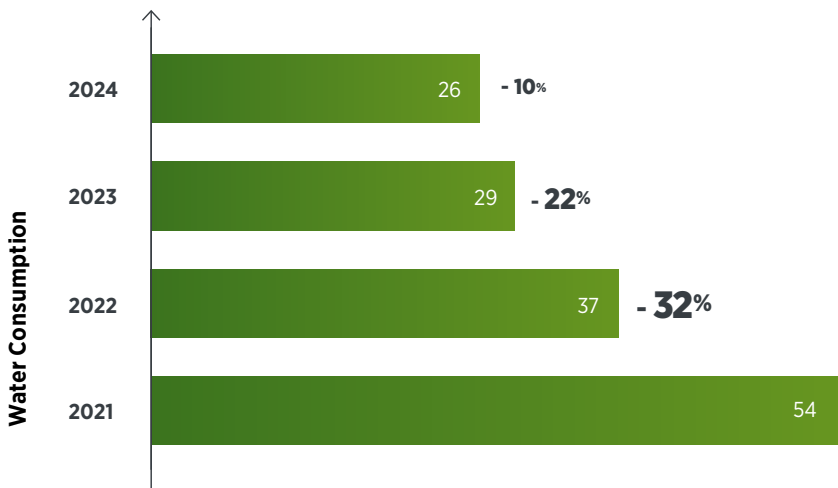
Total Hazardous Waste (t)

Note: Primarily due to the reduction of DEHP-based binders, the total amount of hazardous waste was reduced by 43% in 2024.



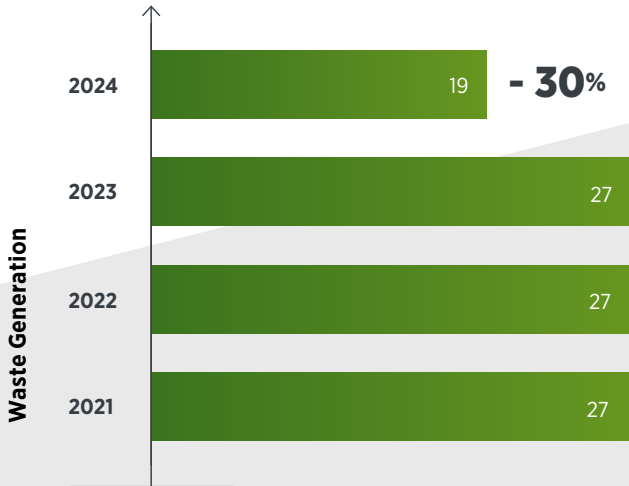
Sustainability in Figures

Water & Resource Consumption



Water Consumption per Employee (liters/employee/day)

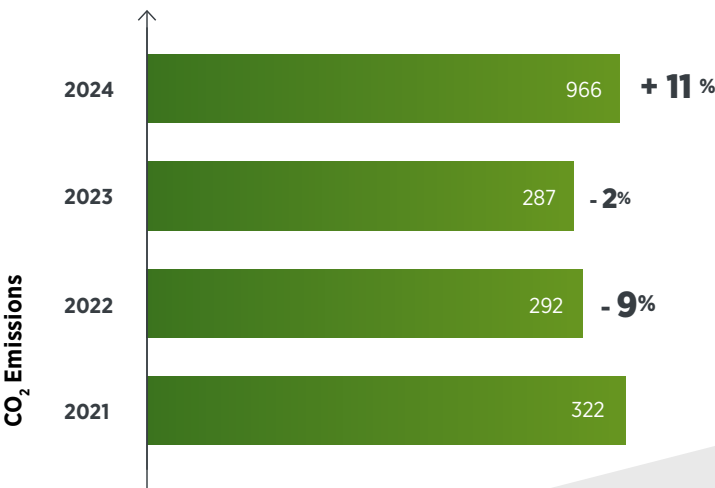
Note: Water at our facility is primarily used in sanitary areas, for cleaning, and in the cafeteria. Our production processes are largely water-free. Through the use of water-saving fixtures and a general commitment to responsible water use, we achieved further reductions in consumption.



Waste Generation per Employee (kg/employee/day)

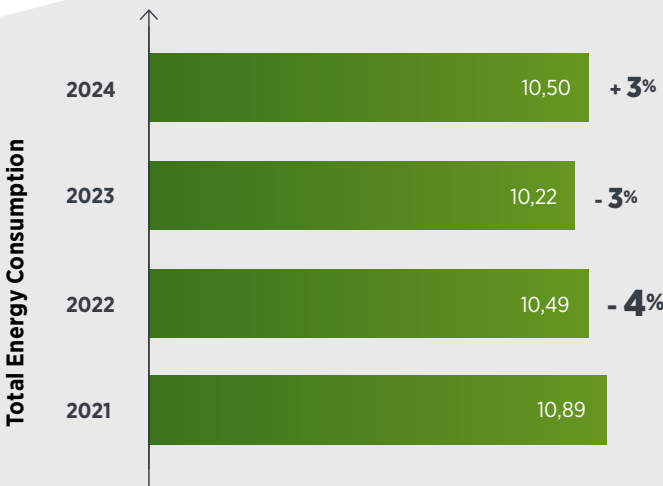
Note: The reduction in spent sand significantly contributed to the decrease in waste per employee in the 2024 reporting year.

Energy Efficiency & CO₂ Emissions



CO₂-Equivalent Emissions (t)

Note: The increase in CO₂ emissions in 2024 is primarily attributable to a less favorable electricity mix from the energy provider and reduced output from the photovoltaic system.



Total Annual Energy Consumption (MWh/employee)

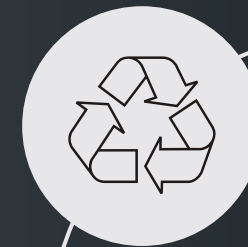
Note: Due to energy-intensive production processes, total energy consumption per employee rose slightly in the 2024 reporting year.



Visualization of the Product Lifecycle

Decommissioning,
Disposal

Raw Materials



Product Lifecycle



Installation, Production,
and Support

Design, Engineering,
and Logistics

Subject to change without prior notice. All information
is purely informative and without guarantee.

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This report documents the environmental protection activities of
the ExOne GmbH site in Gersthofen for the reporting year 2024.

For questions, suggestions, or feedback on this environmental
statement, as well as on the environmental protection measures
of ExOne GmbH Gersthofen, please contact the Quality and
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