

SUSTAINABILITY AT GROHE

GROHE is a leading global brand for full bathroom solutions and kitchen fittings. **Striving for the highest levels of sustainability is an integral and essential part of GROHE's DNA** and, in addition to quality, technology and design, one of the brand's pillars. GROHE consistently pursues a 360-degree sustainability approach that incorporates employees, suppliers, customers, processes, products and social responsibility in equal measure.

In the field of sustainability, GROHE identified its essential areas of activity over 25 years ago back in 2000, based on various fundamentals like the 16 principles for sustainable development of the International Chamber of Commerce (ICC) in 1992.

LIXIL IMPACT STRATEGY

As part of LIXIL, GROHE's sustainability strategy is based on LIXIL's Impact Strategy and its three strategic pillars and contributes to the company's purpose of making better homes a reality for everyone, everywhere.

GLOBAL SANITATION & HYGIENE

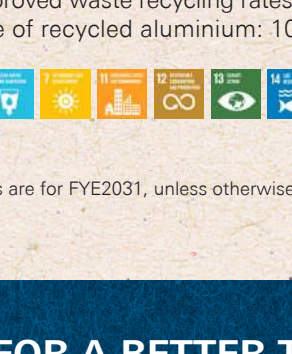


SANITATION AND HYGIENE FOR ALL

We innovate viable products, solutions, and business models to elevate standards of living through improved sanitation and hygiene.

- Improve sanitation and hygiene for 100 million people around the world by 2025

WATER CONSERVATION & ENVIRONMENTAL SUSTAINABILITY



ZERO CARBON AND CIRCULAR LIVING

We promote the responsible use of energy, water, and natural resources. From our operations and throughout our product lifecycle, we minimize our ecological footprint and scale innovation to help our partners and consumers protect the environment today and for generations to come.

- Scope 1+2 CO₂ emissions: -50.4%*1
- Scope 3 CO₂ emissions: -30%*1
- Water use efficiency: +20%*1
- Total water savings from watersaving products: 2 billion m³/year*3
- Improved waste recycling rates: 90%*2
- Use of recycled aluminium: 100%

DIVERSITY & INCLUSION



INCLUSIVE FOR ALL

We promote diversity and inclusion, starting with building an equitable workplace. By leveraging the knowledge and perspectives of our diverse employee base and together with stakeholders, we stimulate innovation and collaboration that enables everyone to live more comfortably and healthily and reach their full potential.

- By 2030
 - 50:50 male-female-ratio for Board & Executive Officers
 - 30% female managers across LIXIL



* Benchmark: FYE2019 *1 By FYE2026 *2 By FYE2025 (All targets are for FYE2031, unless otherwise noted)
For more details on LIXIL's Impact Strategy, click here.

TOGETHER FOR A BETTER TOMORROW
ENVIRONMENTAL INITIATIVES

LIMITING EMISSIONS

Since 2020 all eight LIXIL fittings plants, including the plants in Hemer, Lahr, Porta Westfalica (all Germany), Albergaria (Portugal) and Kiangmen (China), Danang (Vietnam) and Monterrey (Mexico) as well as the German logistics centres are CO₂-neutral*1. In 2021, the European outbound logistics became CO₂-neutral*1.

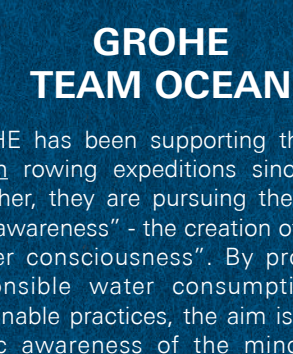
* Includes CO₂-compensation projects, more on www.grohe-x.com/sustainability



LESS PLASTIC INITIATIVE

GROHE contributes to tackling the global plastic waste problem with its Less Plastic Initiative. This encompasses the water system GROHE Blue which reduces the use of up to 800* single-use plastic bottles for a family of 4 per year as well as the ambition to eliminate plastic from product packaging that leads to a yearly saving of around 37 million plastic items.

* Environmental Action Germany (DUH)
<https://www.duh.de/mehrweg-klimaschutz/0/einweg-plastikflaschen/>



GROHE TEAM OCEAN

GROHE has been supporting the Team Ocean rowing expeditions since 2024. Together, they are pursuing the goal of "Aqua-awareness" - the creation of greater "water consciousness". By promoting responsible water consumption and sustainable practices, the aim is to raise public awareness of the mindful use of water.

SUSTAINABLE MANUFACTURING OF GROHE PRODUCTS

We understand the sustainable transformation of our business as an ongoing journey. The starting point is always a holistic view, which becomes apparent in our 360-degree approach.

In this way, we empower end consumers with our products to pursue an environmentally conscious lifestyle and manufacture our solutions as sustainably as possible. **Our ambition is to steadily reduce the footprint of our plants and achieve net-zero carbon emissions by 2050.**

HOW DOES IT WORK?

RESOURCE-SAVING PRODUCTION PROCESS IN HEMER:



1. CENTRAL MELTING

Around 50% of the brass used is from recycled material

Use of electricity generated by block heat and power plant



2. SAND CORE PRODUCTION

Recycling with external partner



3. CASTING PROCESS

Resulting waste water is processed through evaporation to separate it into pure water and final waste



4. SAWING

Milling of superalloys (Augsburg & Slings)



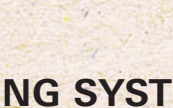
5. TEST GRINDING

Item control into grinding down of products with inferior quality



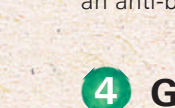
6. MACHINING

Collection, cleaning and melting down of brass chips



7. SURFACE TREATMENT

Recycling of brass chips



8. ELECTROPLATING

Reduction of fresh water use thanks to reusing the cleaning bath



9. IN-HOUSE CARTRIDGE PRODUCTION

Service life up to 20 years



10. ASSEMBLY

For function and leak testing, air is predominantly used instead of water

Plastic-reduced packaging

EVERY DROP COUNTS

GROHE'S RESOURCE-EFFICIENT TECHNOLOGIES

1 GROHE SENSIA PRO

SAVES UP TO 15 KG OF TOILET PAPER EACH YEAR PER PERSON¹

The hygiene principle of the shower toilet is similar to the idea of hand washing and combines the advantages of a toilet and a bidet.

2 GROHE CERAMICS

DECREASE OF HIGH CLEANING EFFORTS

GROHE Sensia Pro's Triple Vortex Flush is exceptionally thorough and effective. Other GROHE ceramics are available with special surfaces such as GROHE Pure Guard: Long-lasting ions with an anti-bacterial effect prevent bacteria growth.

3 GROHE FLUSHING SYSTEMS

ADJUSTABLE WATER USAGE

A concealed dual-flush cistern allows users to control water usage when flushing, offering two volume options: large, 6 litres and small, 3 litres.

4 GROHE SILKMOVE ES

PREVENTS UNNECESSARY WARM WATER USAGE

The starting point of the lever in the mid-position only allows the flow of cold water and prevents unnecessary hot water consumption, which saves energy. For an apartment building with 1,000 units, over 270,000 € can be saved per year.²

5 GROHE ECOJOY

REDUCING THE WATER CONSUMPTION WITHOUT COMPROMISING ON COMFORT

The GROHE EcoJoy technology is available on numerous models of showers and faucets across most of all design and price segments. The integrated flow restrictor automatically reduces water consumption up to 50%.

7 GROHE THERMOSTAT WITH ECOBUTTON

MAINTAINING A CONSTANT TEMPERATURE WHILE SAVING WATER

Thermostats automatically adjust for temperature fluctuations, allowing the shower to be used without constant readjustment. Additionally, the EcoButton reduces water consumption by up to 50%. To increase water flow, users need to press a button, encouraging more mindful and sustainable water use.

9 GROHE BLUE HOME

SAVES AROUND 800* SINGLE-USE PLASTIC BOTTLES EACH YEAR

The water system provides sparkling, medium and still water that is filtered and chilled directly from the kitchen tap. In addition, 76% of the CO₂ emissions³ generated during the production of bottled water can be saved. Water consumption is also minimized: One liter of water becomes one liter of drinking water while in the production process for one liter of bottled water seven liters of water are used⁴.

FUTURE-PROOF SHOWER SOLUTIONS

RETHINKING ENERGY EFFICIENCY

GROHE RAPIDO HEAT RECOVERY

Featuring an innovative technology, the concealed shower system GROHE Rapido Heat Recovery collects warm water from the drain and pumps it through a separated pipe surrounded by the cold-water supply, transferring some of its residual heat. This results in **significant energy savings** without compromising the shower experience or design: a household of four can reduce both energy cost savings and CO₂ emissions by up to 48%⁶.

¹ WWF: Hygiene Paper, 2020

² Calculation based on the following parameters: Household of 4 people using the basin mixer for 5 minutes per person per day. Costs are based on the following estimation: Energy cost (electricity) 0.29 €/kWh, water cost 0.0035 €/litre. Assumption of flow rates: Old product flow rate: 8 l/min. New product flow rate: 5 l/min. New basin mixer equipped with GROHE SilkMove ES energy-saving functionality and water-saving EcoJoy technology. GROHE does not guarantee the accuracy and correctness of the results, as the calculation depends on many unforeseeable factors and is therefore non-binding. In particular, it depends on water and energy prices, consumer behavior and the technical installations on site.

³ DUH 2019, www.duh.de/mehrweg-klimaschutz/0/einweg-plastikflaschen/, based on a family of four

⁴ "Creation of a Product Carbon Footprint for GROHE water systems for drinking and hot water supply", Sebastian Schay, Prof. Dr. Ulta Geldermann, University Duisburg-Essen (2021). The service life of GROHE Blue Home considered in the study is 10 years.

⁵ "The real water consumption behind drinking water: The case of Italy", Journal of Environmental Management 32 (2011)

⁶ Depending on individual shower habits

THE FUTURE OF SUSTAINABLE SHOWERING

THE WATER-RECYCLING SHOWER GROHE EVERSTREAM

The water-recirculating shower technology hygienically treats, reheats and reuses water. It has been designed to create the shower experience users expect but with as little fresh water as possible – and with far less energy.

Depending on the individual showering habits, **the user can shower with only a quarter of the water and a third of the energy** typically required by traditional showers. Thus, GROHE Everstream can reduce carbon emissions from showering by up to 70% and can provide a cost-saving of up to 65% a year for a four-person household.

In summer 2024, GROHE Everstream was introduced to the market as an exclusive launch for selected partners.



CIRCULAR ECONOMY

WITH GROHE'S FIRST CRADLE TO CRADLE CERTIFIED® PRODUCTS

With waste recycling rates of around 99 percent and a use of brass with recycling proportions of up to 80 percent, GROHE has increasingly approached a circular economy for brass. In 2021, **GROHE launched four best-selling products as Cradle to Cradle Certified® variants**, which achieved the Gold Product Standard.

In the Cradle to Cradle® design concept, products are designed and manufactured with the intent of using its components in its end-of-life-phase for the creation of new products.

The *Cradle to Cradle Certified®* Product Standard is the world's leading science-based and rigorous norm for designing and manufacturing safe, circular and responsible materials and products. Find more information [here](https://www.cradletogether.com).

To achieve a certification, a product is evaluated in terms of the following five categories: material health, material reutilization, renewable energy, water stewardship, and social fairness.

Each product is then designated a level of achievement: basic, bronze, silver, gold, or platinum.

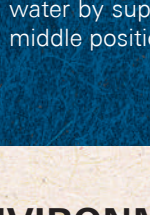
GROHE TEMPESTA 100 SHOWER RAIL SET



GROHE EUROSMAKT KITCHEN

GROHE BAUEDGE S-SIZE

GROHE EUROSMAKT S-SIZE



The **GROHE Blue** filters of our supplier BWT are *Cradle to Cradle Certified®* at the Bronze level. GROHE collects the used filters and passes them on to BWT, where 99% of materials are recycled.



Further reduction of a building's carbon footprint: The sustainability benefit of the two *Cradle to Cradle Certified®* faucets, GROHE Eurosmart and GROHE BauEdge, is enhanced with the SilkMove ES technology, where ES stands for energy-saving. The technology prevents the unnecessary use of hot water by supplying only cold water with the faucet lever in the middle position.

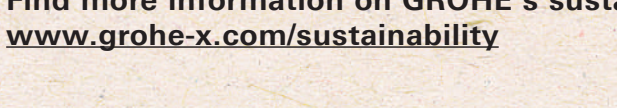
ENVIRONMENTAL PRODUCT DECLARATIONS
AN IMPORTANT STEP TOWARDS GREEN BUILDINGS

Nearly 40% of carbon emissions are building- and construction-related*. As the materials and products used contribute to the environmental impact of buildings, there is a need to improve product choices to **reduce the industry's carbon footprint**.

One **innovative way is to resort to products** that have an **Environmental Product Declaration (EPD)**. EPDs are considered by the European Commission to be an appropriate means of assessing the sustainability of buildings.

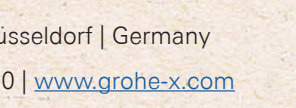
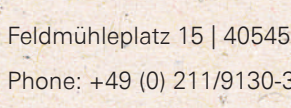
In 2022, **GROHE launched EPDs** for 18 product groups covering basin and kitchen mixers, thermostats, shower rail sets, hand showers, installation systems and flush plates.

* European Commission, 2020



An **EPD** is an independently verified and registered document. Like a "product pass", EPDs contain **transparent and comparable data** on the environmental impact throughout the entire life cycle of a product (Life Cycle Assessment). The GROHE EPDs provide customers with **easy guidance** and a **new option to compare products** to improve product selection to reduce the environmental impact of buildings.

EPDs comply with ISO 14025 and EN 15804 for construction products, services and processes.

EXTERNALLY VALIDATED
SUSTAINABILITY COMMITMENT

GROHE's engagement and achievements in sustainability have been honored with a double-win of the German Sustainability Award 2021 in the category "Resources" and with the water system GROHE Blue in the category "Design Icons".

Find more information on GROHE's sustainability engagement at www.grohe-x.com/sustainability