



STEULER

Linings

Environmental Update 2024

With this update, STEULER-KCH GmbH supplements the environmentally relevant key figures according to GRI for the year 2024, as reported in the Steuler Group's 2023 Sustainability Report.

The Steuler Group's Linings division includes production and sales companies, with STEULER-KCH GmbH being the core company of the Linings division. In addition to STEULER-KCH GmbH, this update covers all other manufacturing divisions of the Steuler Group. Furthermore, with the En-MS initial certification of STEULER-KCH GmbH, energy consumption at German permanent construction sites has been recorded for the first time and included in this update.

The 2023 Sustainability Report contains not only the materiality analysis but also descriptive elements for this update.

As of: July 2025

Initiatives and measures taken in 2023/2024/2025

August 2023	Commissioning of a PV field to reduce electricity consumption at the Höhr-Grenzhausen site
October 2023	Commissioning of a new high-temperature tunnel kiln (HTTO) with the aim of saving 6.5 million kWh of gas and reducing CO ₂ emissions by 2,000 tons per year
July 2025	En-MS certification of STEULER-KCH GmbH in accordance with DIN ISO 50001. First-time energy monitoring of permanent construction sites in Germany
End of 2025	Replacement of energy-intensive lighting with LED lighting, resulting in electricity savings of 55,200 kWh per year at the Mogendorf site

Energy and environmental targets for 2024/2025/2026

The energy and environmental targets are discussed and set each quarter in an internal meeting between management, operational staff, and the sustainability department.

2024–2027	Reduction in firing temperature for refractory products by 2027. Expected CO ₂ reduction of approx. 300 tons per year
2025	Merger of two sites through a new building at the Siershahn site. Reduction in energy consumption by eliminating factory traffic between the two sites and merging infrastructures. Expected annual savings of approx. 150,000 kWh diesel, 41,500 kWh electricity, and 819,000 kWh heating power
2025	Replacement of burners in auxiliary heating systems at the Breitscheid site (WTI). Expected savings approx. 2.4 million kWh per year
2025 / 2026	Expansion of e-mobility in the forklift fleet
2025 / 2026	Introduction of a digital electricity meter reading system and implementation of IT energy monitoring
2025 / 2026	Replacement of a cooling system at the Siershahn site to reduce water consumption
2026	Expansion of the acceptance and return of used refractory materials from the steel industry
2026	Enclosure of a thermal oil system to limit heat loss

Key figures environmental update 2024

This environmental report covers the following GRI standards:

301 Materials **302** Energy **303** Water **305** Emissions **306** Waste

301 Materials

Breakage from ceramic production is recycled and returned to the process. The total annual weight of reused cutting particles from the wet cutting process for refractory materials is currently still being calculated. Approximately 1 % of the material used each year is renewable. In addition, used refractory materials are processed by an external service provider as regenerated material and then used as recycled material.

		2023	2024	
301-1	Total weight of materials used	57,850	52,488	tons
301-1	Of which renewable materials	613	522	tons
301-1	Of which recycled materials (excluding cutting particles)	13,763	10,439	tons
301-2	Recycled raw materials used	23.8	19.9	%

302 Energy

As in the 2023 Sustainability Report, 2021 is taken as the base year. As part of the initial En-MS certification (according to ISO 50001) at STEULER-KCH GmbH in August 2025, permanent onstruction sites in Germany were also taken into account.

Energy consumption in the organization and reduction of energy consumption (Δ 2021)

GRI: 302-1 & 302-4	2021	2023	2024	Δ 2021
Total energy consumption (MWh)	87,833	87,617	78,467	-10.7%
Natural gas (MWh)	71,406	70,812	61,392	-14.0%
Diesel fuel (MWh)	3,347	3,287	3,471	3.7%
Gasoline fuel (MWh)	29	76	79	174.3%
District heating (MWh)	497	797	637	28.3%
Total electricity consumption	12,139	11,539	10,728	-11.6%
Electricity consumption from own renewable sources (MWh)	416	1,105	2,160	419.3%
Sales of self-generated renewable electricity (MWh)	203	619	1,232	506.7%

303 Water

303-1 Water as a shared resource:

In addition to its usual sanitary uses, water is also used to shape brick masses or for cooling units. In addition, pressure tests are carried out on manufactured containers using water, and fireproof rods are cut using water. During the cutting process, the cutting water is collected and the cutting particles are collected, filtered, and then recycled internally. The recording of recycled cutting particles has been initiated and is ongoing.

		2023	2024	
303-3	Water withdrawal from drinking water network	13,426	13,656	megaliters
303-4	Water return to sewer system	11,447	13,184	megaliters

305 Emissions

As in the 2023 Sustainability Report, 2021 is assumed to be the base year. CO₂ emissions are reported.

		2021	2023	2024	
305-1	Direct GHG emissions (SCOPE1)	14,529	14,407	12,518	tons of CO ₂
305-2	Indirect GHG emissions (SCOPE2)	3,773	4,157	2,732	tons of CO ₂

306 Waste

		2023	2024	
306-3	Waste generated (total)	2,023	1,956	tons
306-3	of which non-hazardous waste	1,592	1,675	tons
306-3	of which hazardous waste	431	281	tons

		2023	2024	
306-4	Waste diverted from disposal	1.040	975	tons
306-4c(d)	Preparation for reuse (on site)	0	0	tons
306-4c(d)	Recycling (on site)	1.040	975	tons