As part of Scope 1, Vossloh used 1,287 liters of hydrogenated vegetable oil in the reporting year, which generated 46 kilograms of biogenic emissions (CH_4 and N_2O only).

The market-based CO_2 emission factors provided by the utilities companies to calculate Scope 2 emissions do not specify the percentages of biogenic CO_2 from biomass, CH_4 and N_2O .

This information is therefore not currently available. The CO_2 emission factors used to record Scope 3 emissions (average and spend-based) do not take into account biogenic CO_2 emissions from the upstream and downstream value chain.

In 2024, 58.8 % of the green electricity used by Vossloh was purchased via bundled contracts.

Energy

On the subject of energy, the materiality analysis revealed:

- the following significant negative impacts: Depletion of limited resources through the consumption of non-renewable energies, particularly fossil fuels, in production processes;
- the following significant positive impacts: Promotion of decarbonization by increasing the use of renewable energies in production in order to achieve Scope 1 and Scope 2 climate neutrality by 2030 and significantly reduce the share of non-renewable energies;
- the following significant risk: An increase in operating expenses due to rising energy prices, therefore impairing competitiveness;
- no significant opportunities for the company.

The process for identifying material impacts, risks and opportunities (ESRS 2 IRO-1) is described in the section entitled Material sustainability matters at Vossloh (page 71 et seqq.).

The type of energy consumed (energy mix) and the efficiency of the energy used are factors that strongly influence the level of greenhouse gas emissions. With regard to Vossloh's goal of climate neutrality in the Scope 1 and Scope 2 categories by 2030, the materiality analysis resulted in a negative assessment because the company uses non-renewable energy from fossil sources in its production processes and therefore contributes to the depletion of finite resources. As decarbonization progresses, the use of energy from renewable sources is increasing. Vossloh is exposed to the risk that energy purchased in the future, regardless of its type, may become more expensive and therefore cause higher costs.

In order to increase the share of renewable energies in total energy consumption, Vossloh is equipping more and more of its factory buildings with photovoltaic systems and is purchasing green electricity at more and more sites. Corresponding activities are part of the transition plan drawn up in 2024, which is explained in detail on pages 91 et seq. Measures to improve efficiency include the use of process heat, the installation of modern, energy-efficient systems and better insulation of buildings. The most important lever for improvement in 2024 remained the use of electricity from renewable sources by expanding the company's own solar power generation. This was particularly evident in our foundry in India and in Poland with two new solar farms and in China with the expansion of the existing solar panel installations on the factories' roofs. In addition, the purchase of electricity from renewable sources was further increased.

The table below describes the Vossloh Group's energy consumption and energy mix. It is broken down into energy consumption from fossil fuels, nuclear and renewable energy sources and provides an overview of their share of total energy consumption.

Energy consumption and mix	2024
(1) Fuel consumption from coal and coal products (MWh)	
(2) Fuel consumption of crude oil and petroleum products (MWh)	34,301
(3) Fuel consumption from natural gas (MWh)	71,045
(4) Fuel consumption from other fossil sources (MWh)	
(5) Consumption of purchased or acquired electricity, heat, steam and cooling from fossil sources (MWh)	19, 167
(6) Total consumption of fossil energy (MWh) (calculated as the sum of rows 1 to 5)	124,513
Share of fossil fuels in total energy consumption (%)	65.9
(7) Consumption from nuclear sources (MWh)	1,314
Share of consumption from nuclear sources in total energy consumption (%)	0.7
(8) Fuel consumption for renewable energy sources including biomass (MWh)	64
(9) Consumption of purchased or acquired electricity, heat, steam and cooling from renewable sources (MWh)	61,268
(10) Consumption of self-generated renewable energy that does not come from fuels (MWh)	1,679
(11) Total consumption of renewable energy (MWh) (calculated as the sum of rows 8 to 10)	63,012
Share of renewable energy sources in total energy consumption (%)	33.4
Total energy consumption (MWh) (calculated as the sum of lines 6, 7 and 11)	188,839

The following tables show the energy and CO_2e emissions in relation to the Group's total revenue. The sales revenues (\notin 1,209.6 million) used to calculate the energy and CO_2e intensities can be found on page 152:

t CO ₂ equivalents Scope 1 (Vossloh Group)	2024	2023
Gas consumption	15,028,7	15,130.6
Heating oil consumption	154.8	228.8
Fuel consumption	5,930.2	5,325.9
Scope 1	21,113.6	20,685.3
Scope 1 CO₂e intensity (metric tons CO₂e/€ million)	17.5	17.0

t CO ₂ equivalents Scope 2 (Vossloh Group)	2024	2024	2023
	Market-based	Location-based	Market-based
Electricity consumption	15,423,0	33,879.8	20,220.0
District heating consumption	1,379.5	1,676.2	1,426.8
Scope 2	16,802.5	35,556.0	21,646.8
Scope 2 CO,e intensity (metric tons CO,e/€ million)	13.9	29.4	17,8

As all of Vossloh's activities are part of the rail infrastructure sector, they are also part of the climate-intensive sector. The disclosed energy intensity and total energy consumption should therefore be understood as part of the climate-intensive sector.

Energy and CO ₂ equivalents Scope 1 and 2 (Vossloh Group)	2024	2023
Energy intensity (MWh/€ million)	156.1	155.2
CO ₂ e intensity (metric tons CO ₂ e/€ million)	31.3	34.9
Greenhouse gas intensity of Scope 1, 2 and 3 (Vossloh Group)	2024	2023
Total GHG emissions (location-based) CO ₂ e intensity (metric tons CO ₂ e/€ million)	1,213.6	-
Total GHG emissions (market-based) CO ₂ e intensity (metric tons CO ₂ e/€ million)	1, 198. 1	_