Greenhouse gas emissions

GRI 305-1
GRI 305-2

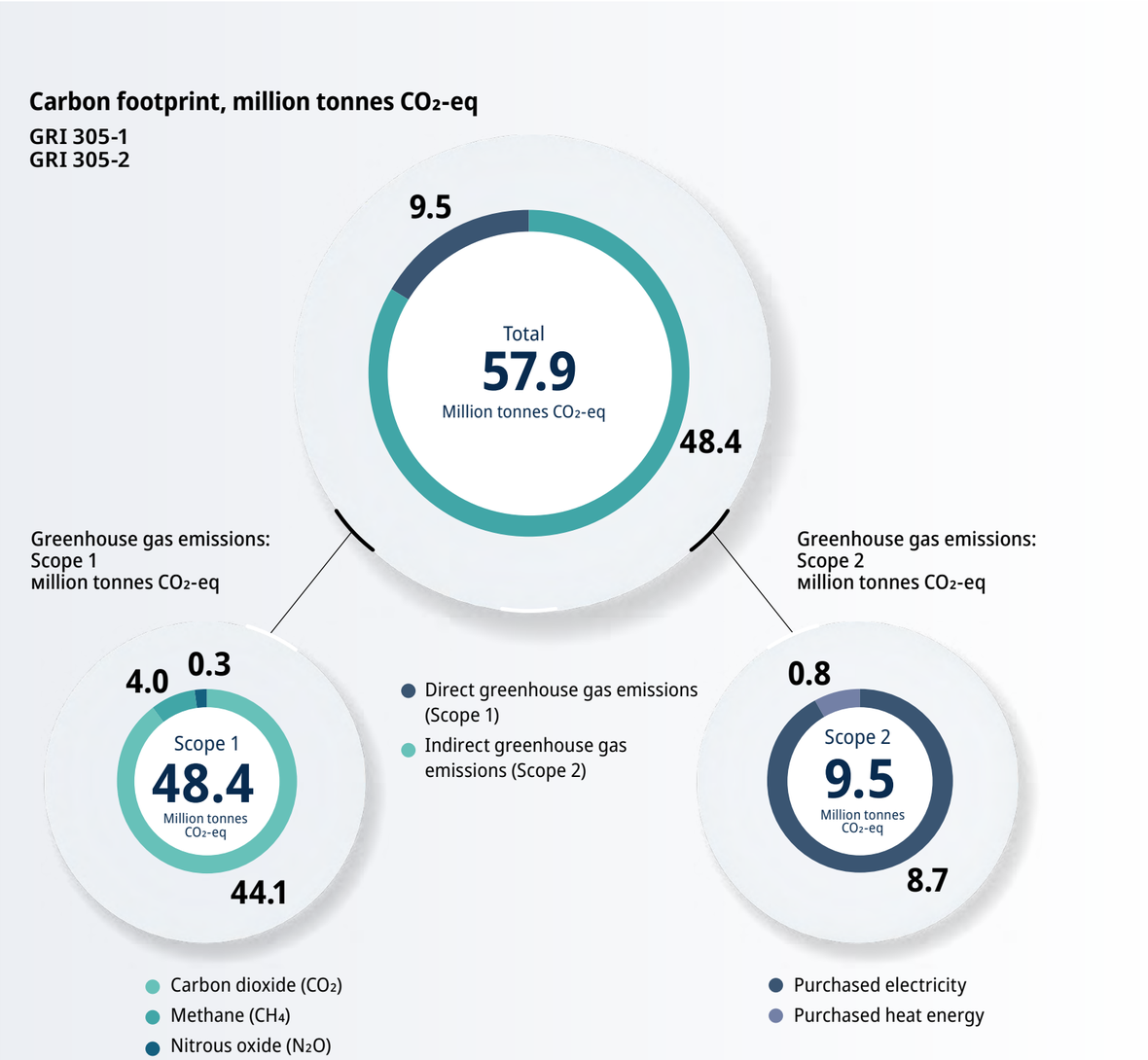
In 2024, the Fund Group's carbon footprint (direct and indirect greenhouse gas emissions) was 57.8 million tonnes of CO_2-eq. Compared to 2023, total greenhouse gas emissions decreased by 3% (59.8 million tonnes of CO_2-eq. in 2023).

The portfolio companies keep records of direct (Scope 1) and indirect (Scope 2) emissions of the following greenhouse gases: carbon dioxide, methane and nitrous oxide. Scope 1 greenhouse gas emissions in 2024 were 48.4 million tonnes of CO_2-eq. (a 3% decrease from 2023). Indirect greenhouse gas emissions were 9.5 million tonnes CO_2 (5% decrease from 2023).

Dynamics of the Fund's Group carbon footprint, million tonnes CO_2-eq

Carbon footprint	2021	2022	2023	2024
Total direct emissions (Scope 1) of greenhouse gases	61.60	50.60	49.81	48.38
Total indirect emissions (Scope 2) of greenhouse gases	10.70	10.10	10.01	9.46
Total	72.30	60.70	59.82	57.84

Note to the table: Accounting is carried out in equivalent tonnes of carbon dioxide using global warming potential coefficients for methane and nitrous oxide. Greenhouse gas emissions are calculated in accordance with Order No.280-p of 05 November 2010 "On Approval of Certain Methods for Calculating Greenhouse Gas Emissions", Order No.9 of the Minister of Ecology and Natural Resources of the Republic of Kazakhstan of 17 January 2023 "On Approval of Methods for Calculating Greenhouse Gas Emissions and Absorption", Order No.221 of the Minister of Energy of the Republic of Kazakhstan of 19 March 2015 "On Approval of Rules for Monitoring and Control of Greenhouse Gas Inventory", Order No.502 of the Acting Minister of Energy of the Republic of Kazakhstan dated 28 July 2015 "On Approval of the Forms of Greenhouse Gas Inventory Reports", Order No.371 of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan "On Approval of the Methodologies for Calculating Greenhouse Gas Emissions and Absorption" dated 13 September 2021, "IPCC Guidelines for National Greenhouse Gas Inventories".



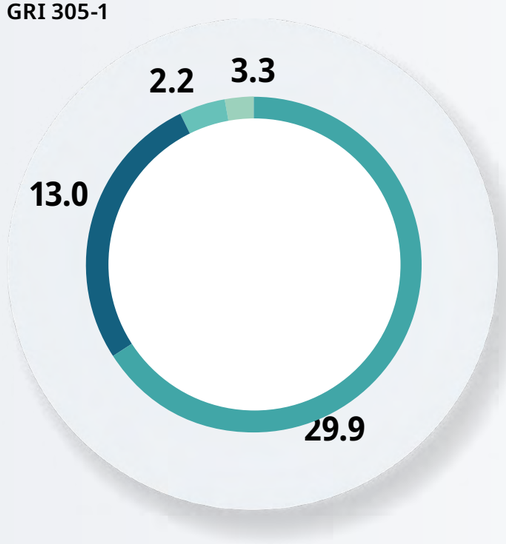
The largest amount of direct greenhouse gas emissions comes from the energy sector – the production of heat and electricity in 2024 released about 32 million tonnes of CO_2-eq into the atmosphere (65% of the total Scope 1 emissions). This is due to the use of fossil fuels in energy production. Direct greenhouse gas emissions from the oil and gas sector in 2024 amounted to 13.00 tonnes of CO_2-eq (26% of Scope 1).

Among indirect greenhouse gas emissions, the largest share of CO_2 emissions comes from purchased electricity (92%). Here emissions were split between the oil and gas sector – 3.47 million tonnes of CO_2-eq (36%), the railway sector (27%) and the power sector, where the electricity transmission sector accounted for about 25% of Scope 2 emissions.

A number of the Fund's portfolio companies keep records of indirect Scope 3 emissions related to the supply chain and life cycle of manufactured products. In particular, NAC Kazatomprom JSC analyses emissions from purchased raw materials used in technological processes (sulphuric acid, ammonium nitrate, ammonia water, etc.), emissions from transportation, delivery and use of sold products, transportation and business trips of employees are analysed.

Greenhouse gas emissions by sector Scope 1, million tonnes CO_2-eq.

GRI 305-1



Greenhouse gas emissions (Scope 2) by sector, million tonnes CO_2-eq.

GRI 305-2