Energy consumption and greenhouse gas emissions

We monitor energy consumption at our office locations and manufacturing facilities. It is calculated by adding the primary and secondary consumption of fuels and electricity and enables us to track the success of our climate neutral program.

Siemens Energy's total energy consumption during the reporting period was 5.8 million gigajoules. Compared with fiscal year 2019, this is a reduction of 16.6%. This is mainly related to COVID-19 impacts on our global operations but also related to the implementation of some energy efficiency projects.

Primary Energy (1,000 gigajoules)	Fiscal year 2020	2019
Natural gas/liquid petroleum gas	1,920	2,377
Fuel oil, coal, gasoline/diesel	263	352
Other	5	5
Total	**2,188**	**2,734**

Secondary Energy (1,000 gigajoules)	Fiscal year 2020	2019
Electricity	2,902	3,383
Thereof electricity from renewable sources	2,256	2,007
District Heating	713	843
Total	**3,615**	**4,226**

Over the reporting period, Siemens Energy collected the following data regarding the level of scope 1 and 2 emissions related to its business activities.

Scope 1 (direct) emissions

Direct greenhouse gas emissions arise from sources in the company's ownership or under its control.

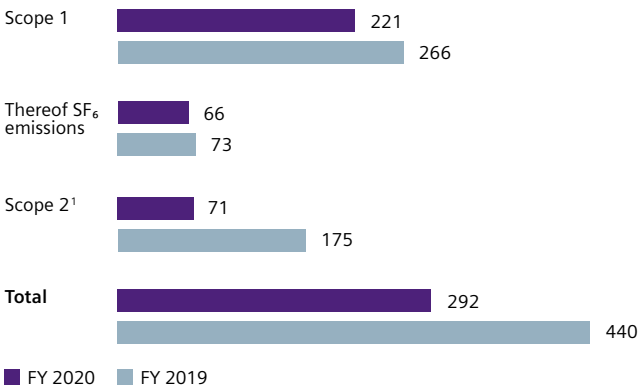
Scope 2 (indirect) emissions

Indirect greenhouse gas emissions refer to the consumption of purchased electrical energy and district heating.

In fiscal year 2020 we achieved to reduce our scope 1 and 2 emissions by around one third or 148,000 metric tons. The main levers were the increase of renewable electricity share, some energy efficiency projects as well as COVID-19 related impacts on our global operations.

Scope 1 and 2 emissions FY 2020

1000 metric tons of CO_2 equivalent



[1] We calculate our emissions resulting from electrical consumption based on carbon emission factors of our local sites according to the market-based approach.

Atmospheric Pollutant Emissions

Other atmospheric pollutant emissions also have negative impacts on the environment. These include Volatile Organic Compounds (VOC) and Ozone Depleting Substances (ODS). VOC contribute to the formation of ozone close to the earth's surface. The types of substances and materials that are in use and contain organic compounds include: solvents, paints and adhesives. ODS are monitored to comply with the Montreal Protocol, the international convention on the protection of the ozone layer, as well as with country-specific regulation. The volume of emissions from the use of volatile organic compounds during the reporting period equates to 434 metric tons. The volume of emissions from the use of ozone depleting substances during the reporting period equates to 0.013 metric tons.

In calculating nitrogen oxides, we have assumed typical combustion conditions in the relevant thermal processes, resulting in a figure of 74 metric tons for environmentally relevant locations in the year under review. The figure includes nitrogen oxides released during the incineration of fuels reported in the section on primary energy.