



Elmos Semiconductor SE ESG KPIs

Section: Environment
 Chapter: Emissions
 KPI: Corporate Carbon Footprint (CCF)
 Coverage: Elmos Group (as a fabless company without wafer fab)
 Supported UN SDGs:



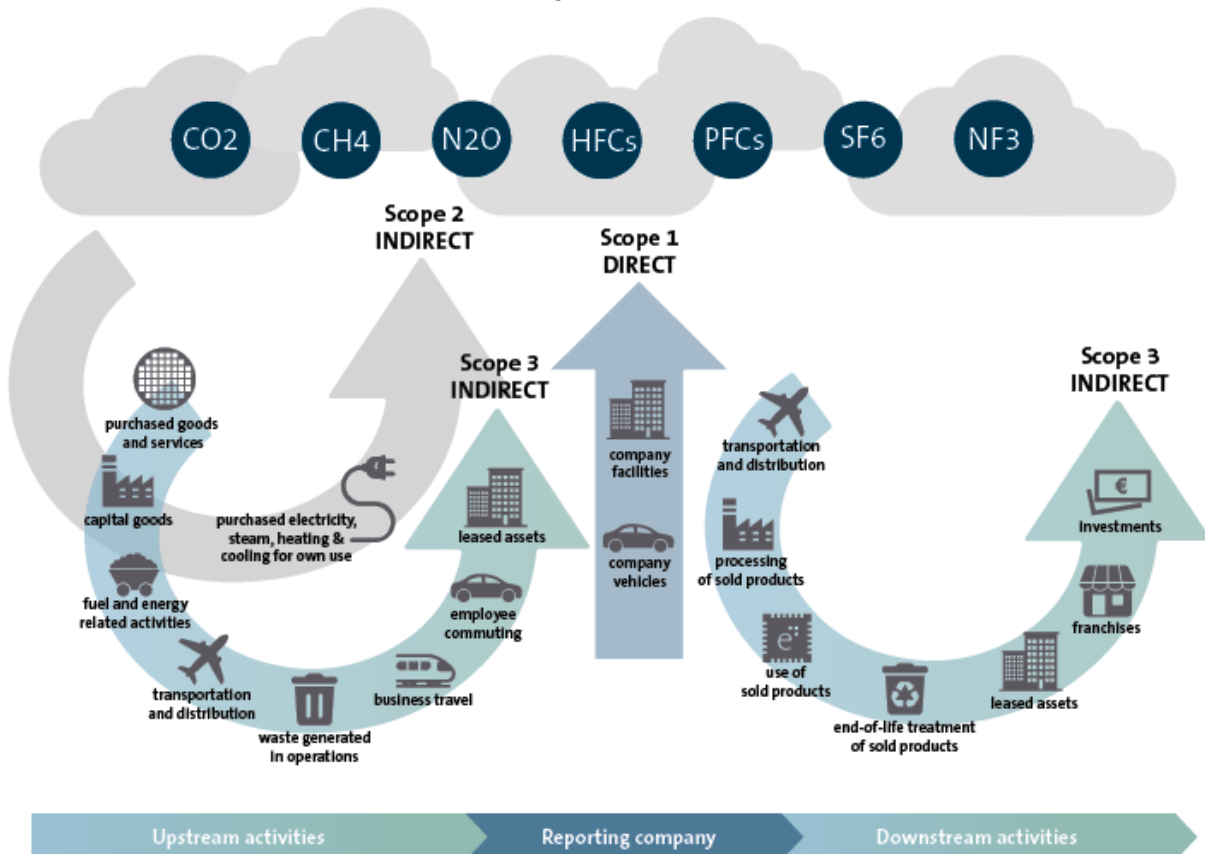
Addressed GRI standards: 305

Framework: The Elmos Corporate Carbon Footprint (CCF) is based on the internationally recognized Greenhouse Gas Protocol (GHG Protocol). It divides emissions into three categories:

- Scope 1: direct emissions from burning fuel in the company’s own facilities
- Scope 2: indirect emissions from energy sourced externally
- Scope 3: indirect emissions from upstream and downstream supply chains

These include six further greenhouse gases covered by the Kyoto Protocol in addition to the most familiar, carbon dioxide (CO₂). The following figure illustrates the breakdown:

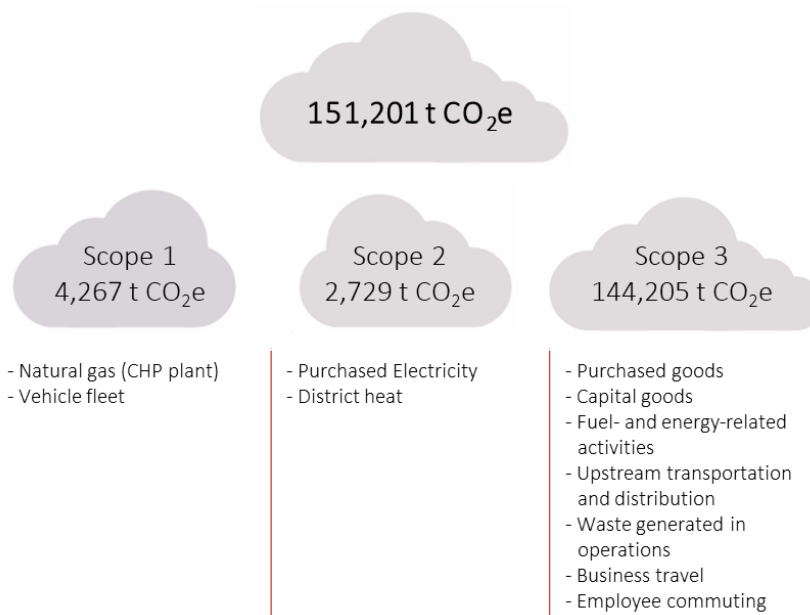
Overview of GHG Protocol scopes and emissions across the value chain



System boundary: After the sale of the wafer fab in Dortmund to Littelfuse Inc. has received regulatory approval, our corporate carbon footprint is based on the future organizational structure of Elmos as a fabless company without our own wafer fab. The emissions produced in the wafer fab in the process of semiconductor manufacturing thus fall under Scope 3, the same as those from external foundries. The corporate carbon footprint covers data from the entire Elmos Group as a fabless company, i.e., the emissions from all sites where data was available.

Calculation: A wide range of activity and usage data was collected in coordination with the relevant departments. This concerned everything from energy and water usage, to waste volume, raw materials and transportation routes. We used emission factors from various national and international databases in our calculation.

GHG emissions (t CO₂e)



t CO ₂ e	2022	2023
Scope 1	4,486	4,267
Scope 2	3,296	2,729
Scope 3	95,670	144,205
Total	103,452	151,201

The main drivers in Scope 1 are the emissions produced by the natural gas used in the combined heat and power plant (CHP). The Scope 2 emissions are almost exclusively attributable to purchased electricity. In 2023, we started investing in the expansion of renewable energy by purchasing certified guarantees of origin for electricity from renewable sources. Emission savings relating to these are reflected in the data.

Scope 3 includes the following seven out of 15 categories, with a focus on the upstream value chain:

- Category 1: Purchased goods and services
- Category 2: Capital goods
- Category 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2

- Category 4: Upstream transportation and distribution
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 7: Employee commuting

The remaining categories are either irrelevant or immaterial, or we do not currently have any valid data pertaining to them. The majority of Scope 3 emissions are attributable to purchased goods and services (category 1), including greenhouse gases from the wafer fab in Dortmund. All of our equipment at the Dortmund wafer fab is fitted with highly efficient gas scrubbers, which eliminate a large portion of the theoretically produced emissions. This is one of our active contributions to climate action. The other purchased goods and services include in particular the processed wafers from foundries, plastics and packaging material. The additional drivers are transportation logistics (category 4: Upstream transportation and distribution) and purchased testing machines (category 2: Capital goods). We invested extensively in expanding our test capacities in the last years, which included the purchase of new test machines.

Comparison with previous year: The target to reduce greenhouse gas emissions from our own activities (Scope 1 and 2) was met in the reporting year. Detailed information on our climate targets and target achievement can be found on our website in the sustainability section under "ESG targets". The increase in Scope 3 emissions from 2022 to 2023 can be explained by the economic growth of Elmos. An intensified cooperation with foundries and OSATs, an increase in wafer inventories and an associated higher throughput of raw materials is reflected in Category 1. The increase of emissions from transports going hand in hand with this development is reflected in Category 4.

This corporate carbon footprint is updated annually, and optimized where possible on an ongoing basis. The corporate carbon footprint also forms the basis of our climate targets (see separate document "Climate targets") and is used to measure the achievement of these.

ESG policies	Environmental protection and management
ESG targets	Climate targets
Certificates	Energy Management Certificate ISO 50001:2018 Environmental Management Certificate ISO 14001:2015 Energy Efficiency and Climate Protection Network Certificate (German only)
Accompanying documents	Elmos Occupational Health and Safety, Environmental Protection, and Energy Policy (German only)
