elmos

Environmental

Elmos Semiconductor SE
ESG KPIs

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Section:	Environment
Chapter:	Emissions
KPI:	Corporate Carbon Footprint (CCF)
Coverage:	Elmos Group (as a fabless company without wafer fab)
Supported UN SDGs:	**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE **12** RESPONSIBLE CONSUMPTION AND PRODUCTION **13** CLIMATE ACTION
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 (CO_2). The following figure illustrates the breakdown:
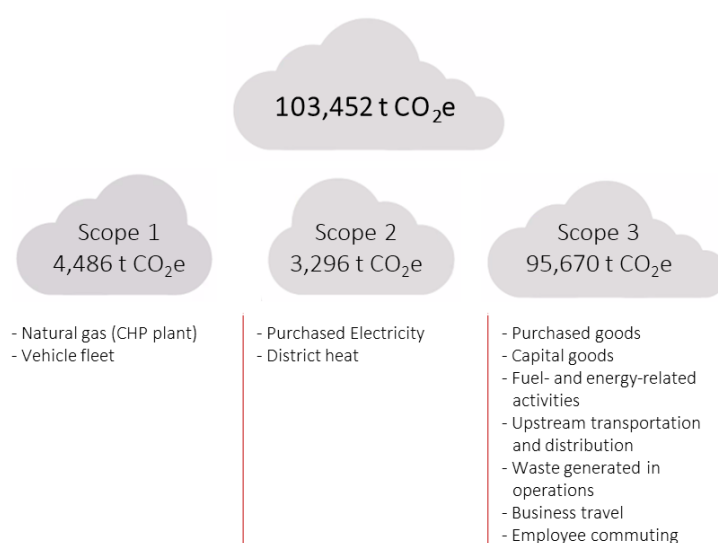
Overview of GHG Protocol scopes and emissions across the value chain
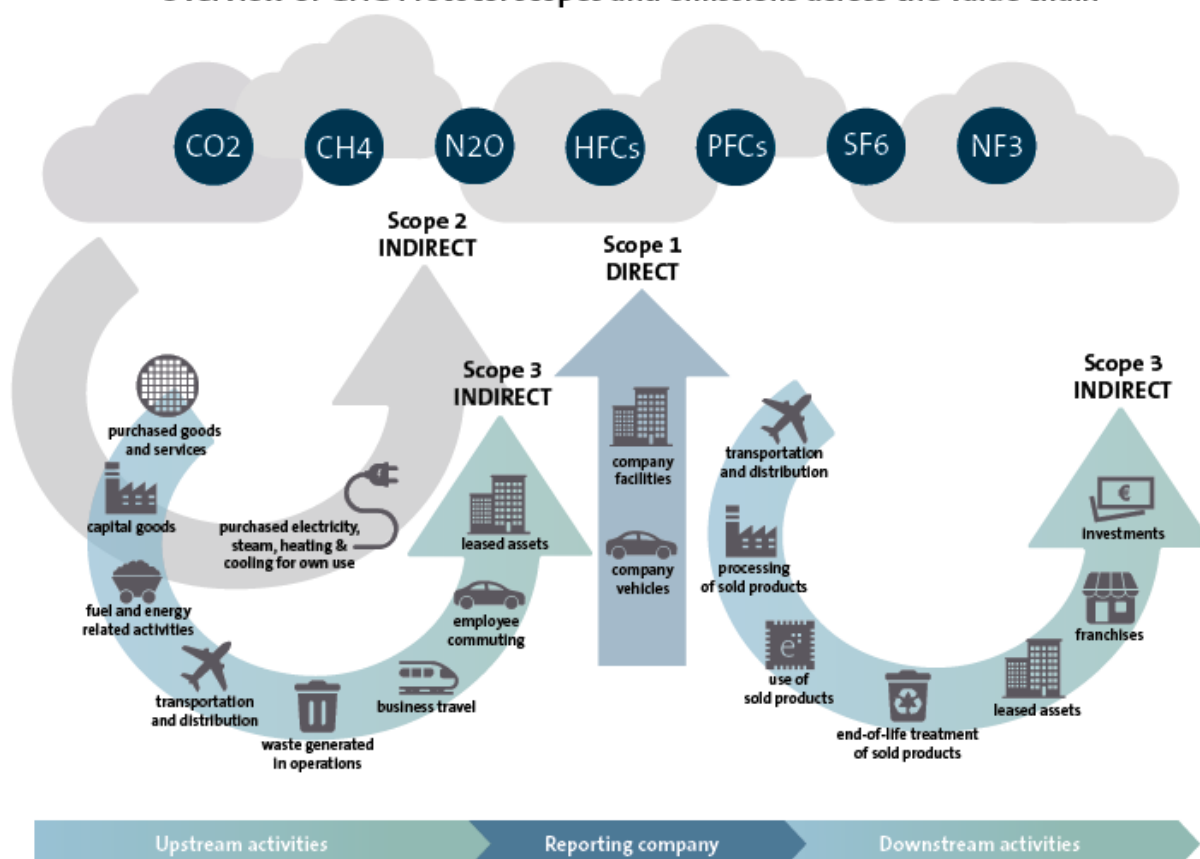
System boundary: After the sale of the wafer fab in Dortmund to Littelfuse Inc. has received regulatory approval, our corporate carbon footprint is based on the future organizational structure of Elmos as a fabless company. The emissions produced in the wafer fab in the process of semiconductor manufacturing 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

103,452 t CO_2e

Scope 1
4,486 t CO_2e
- Natural gas (CHP plant)
- Vehicle fleet

Scope 2
3,296 t CO_2e
- Purchased Electricity
- District heat

Scope 3
95,670 t CO_2e
- Purchased goods
- Capital goods
- Fuel- and energy-related activities
- Upstream transportation and distribution
- Waste generated in operations
- Business travel
- Employee commuting

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.

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 last year, which included new test machines.

We will update our corporate carbon footprint annually, and will optimize it where possible on an ongoing basis. This corporate carbon footprint also forms the basis of our climate targets (see separate document).

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)