

CO₂ Report 2023

1. CO₂ Balance Sheet of PRIMES GmbH

1.1. Base year

The emissions were recorded for the period from January 1, 2023 to December 31, 2023. The carbon footprint for 2023 was without coronavirus-related restrictions compared to previous years, which is why 2023 will be used as the base year for future reports.

1.2. Location

Pfungstadt (Germany)
PRIMES has 2 company buildings on this site. Both are included in the calculation.

1.3. Scope

This CO₂ report takes emissions from the following sources into account:

- Heating,
- Electricity consumption (minus the electricity generated by our own solar systems),
- Business travel,
- Company cars (business use)

Most of the cooling systems for the LASERs and the heating and cooling of the building is provided by two cisterns outside the building in combination with a heat pump and concrete core activation of the ceilings. The remaining heating requirements are covered by gas heating. The consumption for additional air conditioning systems is included in as power consumption.

With the exception of business trips, emissions from the upstream and downstream value chain are not included in the balance sheet, as PRIMES has no direct influence on them.

1.4. Data sources

The data for the preparation of the balance sheet was determined or estimated from the gas and electricity invoices, business trip bookings and the mileage of company cars. The calculation factors for air/bus/rail transport were derived from data from the Federal Environment Agency (probas.umweltbundesamt.de/einblick/).

2. CO₂ Calculation

Description	Quantity	Factor	Total, kg CO ₂
Heating (natural gas)	1.872 m ³	2,0 kg CO ₂ /m ³	3.744
Electricity consumption	188.578 kWh	0,405 kg CO ₂ /kWh	76.374
Electricity generation (solar plants on company buildings)	-210.648 kWh	0.405 kg CO ₂ /kWh	-85.312
Air travel	250.123 km	0,117 kg/person*km	29.264
Company cars	89.553 km	Vehicle specific	14.070
Total			38.140

3. Summary

We offset around 70 % of emissions with our own electricity generation from solar systems.

PRIMES GmbH had a total of 130 employees (including trainees) as at the reporting date of 31.12.2023.

We had emissions of less than 281 kg CO₂/year per employee. On average, every German emits over 10,500 kg of CO₂ per year.

The CO₂ balance for 2023 is the new base year for future reports. Travel activities in sales have returned to normal after coronavirus. The higher electricity consumption is mainly due to increased production and the switch from gas to heat pumps as the main heat supplier.

It is expected that the CO₂ emission value in the mobility sector will remain approximately the same in 2024 and that the overall value will continue to fall due to newly installed photovoltaic systems.

4. Goals for 2024

- Reduction of CO₂ emissions by optimizing business trips
- Reduction in electricity consumption through targeted switching off night time consumers.
- Reduction of reactive current by revising the device infrastructure