

CO₂ Report 2022

1. CO₂ balance sheet of PRIMES GmbH

1.1. Base year

Emissions were collected for the period January 01, 2022 to December 31, 2022.

PRIMES composed its CO₂ balance for 2021 for the first time. The year 2021 was characterized by the Covid pandemic, which hardly allowed any travel activities, especially air travel, due to national entry restrictions for certain countries as well as risk mitigation measures by customers and prospects. Since 2021, a large number of employees has not been present in the company due to the use of a flexible working time model, which can have an impact on CO₂ emissions. However, this is not quantified in this report.

1.2. Location

Pfungstadt (Germany).

PRIMES has 2 company buildings at this location. Both are included in the calculation.

1.3. Scope

This CO₂ report considers emissions from the following sources:

- Heating
- Electricity consumption (subtracting electricity generated by own solar systems)
- Business trips
- Company cars

Cooling for the lasers and heating and cooling of the buildings are largely provided by two cisterns outside the buildings in combination with a heat pump and concrete core activation of the ceilings. The remaining heating requirements are covered by gas heating. Consumption for additional air-conditioning units is included as electricity consumption.

Emissions from the upstream and downstream plant supply chain are not included in the balance sheet, with the exception of business trips, 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, bookings of business trips and mileage of the company cars.

2. CO₂ calculation

2.1. Heating

Description	Quantity, m ³	kg CO ₂ /m ³	Total, kg CO ₂
Natural gas	8 000	2.0	16 000 kg CO ₂

2.2. Electricity consumption and generation

Description	Quantity, kWh	kg CO ₂ /kWh	Total, kg CO ₂
Electricity consumption	179.059	0.401	71.803 kg CO ₂
Electricity generation (solar plants on company buildings)	-228.833	0.401	-91.762 kg CO ₂
Electricity total			-19.959 kg CO₂

2.3. Mobility

Description	Total, kg CO ₂
Air travel, train travel, bus travel, company cars	61.912 kg CO ₂

2.4. Total amount

Description	Total, kg CO ₂
Heating	16.000 kg CO ₂
Electricity	-19.959 kg CO ₂
Mobility	61.912 kg CO ₂
Total	57.953 kg CO₂

3. Summary

We compensate about 61 % of the emissions with the own electricity generation of the solar plants.

PRIMES GmbH had about 130 employees in 2022. We have an emission of less than 450 kg CO₂/year per employee. On average, each German emits over 8 500 kg of CO₂ per year.

The CO₂ balance for 2022 results in a higher value for CO₂ emissions compared with the previous year. The higher value can be explained by external factors at global level. In 2022, the restrictions caused by the Covid pandemic came to an end thanks to the availability of vaccines and higher immunity in the population. As a result, national business and professional life almost returned to normal. At the international level, travel restrictions were still in place, but overall travel increased again in 2022. The presence in national and international trade fairs still did not match the pre-pandemic level but normalized for the most part.

It is to be expected that the CO₂ emission level will continue to rise and that we will only have a representative base year from 2024/2025 onwards on which we can look at the effect of reduction measures.

4. Targets for 2023

- Reduction of CO₂ emissions caused by heating by reducing gas consumption by approximately 10 %.
- Reduction of CO₂ emissions caused by electricity consumption by reducing electricity consumption by approximately 3 %.