



INITIAL REPORT ON GREENHOUSE GAS INVENTORY

ACCORDANCE WITH THE SCIENCE
BASED TARGETS INITIATIVE (SBTi)



12.02.2026



1. Company Profile

A&D Verpackungsmaschinenbau GmbH is a small or medium-sized enterprise (SME) according to the EU definition. The company's business activities comprise the manufacturing and distribution of packaging machinery. The company operates from a single site located in Germany.

There are no additional operating locations. The company has registered with the Science Based Targets initiative (SBTi) and commits to reducing its greenhouse gas emissions in line with the goals of the Paris Climate Agreement.

2. Objective of the Initial Report

The objective of this initial report is to:

- Identify and document **Scope 1 and Scope 2 emissions**
- Define a **base year (2024)**
- Establish a reliable baseline for the development of science-based climate targets (Science Based Targets)

This report serves as the foundation for target setting, progress tracking, and future reporting to the SBTi.

3. Methodological Framework

The greenhouse gas inventory is prepared in alignment with:

- **GHG Protocol – Corporate Accounting and Reporting Standard**
- **SBTi Criteria and Recommendations for SMEs** (simplified approach for SMEs)

Emissions are reported in **metric tonnes of CO₂ equivalent (tCO₂e)**.

4. Organizational and Operational Boundaries

4.1 Organizational Boundary

The inventory is prepared using the **operational control approach**.

All sites and activities over which the company exercises operational control are included in the inventory.

4.2 Included Emission Categories

Scope	Description	Included
Scope 1	Direct emissions from owned or controlled sources	✓
Scope 2	Indirect emissions from purchased energy	✓
Scope 3	Other indirect emissions	✗ (not part of this initial report)

5. Base year: 2024

The base year was selected because complete and reliable activity data are available for this year. Future emission reductions will be assessed relative to this base year.

6. Scope 1 Emissions (Direct Emissions)

Scope 1 emissions include all direct greenhouse gas emissions from sources that are owned or controlled by the company.

Included emission sources:

- Combustion of fossil fuels in stationary equipment (e.g. heating systems)
- Fuel consumption of the company-owned vehicle fleet
- Other direct emissions (if applicable)

Scope 1 emissions in base year 2024: 115,29 tCO₂e

7. Scope 2 Emissions (Indirect Energy-Related Emissions)

Scope 2 emissions result from the consumption of purchased energy.

Included energy carrier: Electricity

The calculation follows the **market-based approach** in accordance with the GHG Protocol.

Scope 2 emissions in base year 2024:

0 tCO₂e

8. Total Emissions (Scope 1 + Scope 2)

Emission Category	Emissions 2024 (tCO ₂ e)
Scope 1	115,29
Scope 2	0,00
Gesamt	115,29

These emissions represent the **baseline for the SBTi target setting**.

9. Data Quality and Assumptions

- Calculations are based on internal consumption data (e.g. invoices, meter readings)
- Emission factors are sourced from recognized data providers (Bavarian State Office for the Environment)
- Conservative estimates were applied where necessary
- Data quality is assessed as **sufficient for target setting in accordance with SBTi SME requirements**

10. Next Steps

- Development of a science-based emission reduction target for Scope 1 and Scope 2:
A&D Verpackungsmaschinenbau GmbH plans to reduce its absolute Scope 1 and Scope 2 emissions by 63% by 2035 compared to the base year 2024.
- Definition of appropriate reduction measures:
 - Installation of a more efficient heating system based on natural gas or renewable energy
 - Installation of a photovoltaic system to support the heating system and reduce externally sourced electricity consumption
 - Gradual transition of the vehicle fleet to electric vehicles
- Annual progress review against the base year 2024
- Optional extension of the inventory to include Scope 3 emissions