

CORPORATE CARBON FOOTPRINT SUMMARY REPORT

Organization: Aksay Plastik A.Ş.

Standard: TS EN ISO 14064-1:2019

Reporting Period: 01.01.2024 – 31.12.2024

STRATEGIC FRAMEWORK AND SCOPE

1.1. Introduction and Objective

This report has been prepared to calculate, report, and verify the greenhouse gas (GHG) emissions arising from Aksay Plastik's activities in accordance with the international ISO 14064-1:2019 standard. The report serves as a baseline for measuring the company's environmental sustainability performance and determining strategies to combat climate change.

1.2. Organizational Boundaries and Operational Scope

All facilities and production processes under the control of Aksay Plastik are included within the reporting boundaries. The operational scope encompasses polymer processing, manufacturing, and logistics processes.

1.3. Compliance with International Legislation: EU Green Deal and CBAM

The report is based on two primary regulations critical for export markets:

- **European Union Green Deal:** Obligations imposed on industrial organizations in line with the goal of becoming the first carbon-neutral continent by 2050.
 - **Carbon Border Adjustment Mechanism (CBAM):** Preparations for the taxation system to be applied to the import of carbon-intensive products into the EU.
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EMISSION CATEGORIES AND METHODOLOGY

2.1. Greenhouse Gas Emission Categories

In accordance with the ISO 14064-1:2019 standard, emissions are classified into the following categories:

- **Category 1 (Direct Emissions):** Stationary combustion (natural gas, etc.), mobile combustion (company vehicles), and fugitive emissions (refrigerant gases).
- **Category 2 (Imported Energy):** Indirect emissions related to the consumption of purchased electricity.
- **Category 3 (Transportation):** Employee commuting, business travel, and product shipments.

- **Category 4 (Products and Services):** Purchased raw materials and their production processes, waste management, and capital assets.
- **Category 5:** Emissions associated with the use of products.
- **Category 6 (Other):** Other indirect sources not included in the above classes.

2.2. Calculation Principles

- **Global Warming Potential (GWP):** The heat-trapping capacities of greenhouse gases in the atmosphere are calculated over a 100-year time horizon in terms of CO₂e equivalent
- **Emission Factors (EF):** Current coefficients from international databases such as IPCC, IEA, and DEFRA were utilized in the calculations.
- **Data Quality and Uncertainty:** Uncertainty analyses have been conducted to ensure the accuracy and transparency of the data, in compliance with reporting standards.

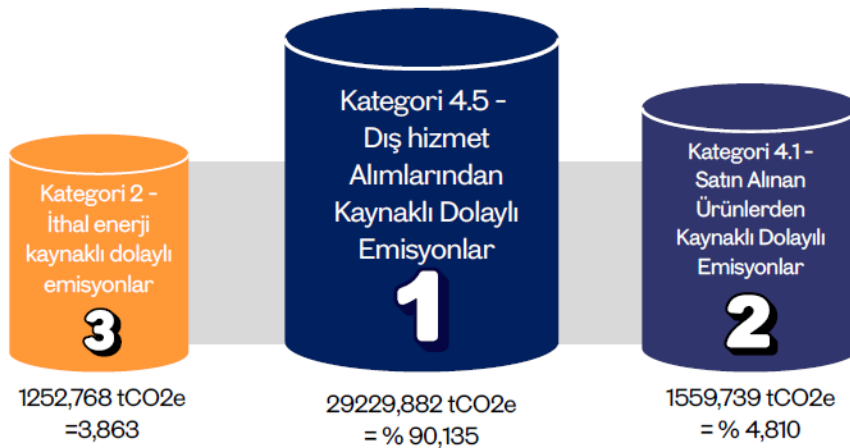
ANALYSIS, RESULTS, AND REFERENCES

3.1. General Evaluation

The 2024 corporate carbon footprint inventory of Aksay Plastik provides a comprehensive profile of the company's greenhouse gas emissions. The findings indicate that the vast majority of carbon emissions are concentrated under Scope 3 (Other Indirect Emissions). Emissions arising from purchased raw materials, auxiliary materials, and logistics processes are the decisive factors in total emissions

Hot Spot Analysis Emission Concentration Points

The analysis reveals that **90.135%** of Aksay Plastik's total emissions originate from **Category 4.5 (Purchased Services/Goods)**, representing the highest potential for reduction.



The 2024 greenhouse gas inventory of Aksay Plastik A.Ş. has been analyzed in accordance with the methodology prescribed by the ISO 14064-1:2019 standard. The total emission volume has been calculated as 32,429.081 tCO_{2e}.

| Kapsam Kategorisi | Ton CO _{2e} | Yüzelik Dağılım (%) |
|-------------------|----------------------|---------------------|
| Kapsam1 | 146,833 | 0,453 |
| Kapsam2 | 1252,768 | 3,863 |
| Kapsam3 | 31029,479 | 95,684 |

Table 1: Emission Scopes and Inventory Results (ton CO_{2e}) (ISO 14064-1:2018)

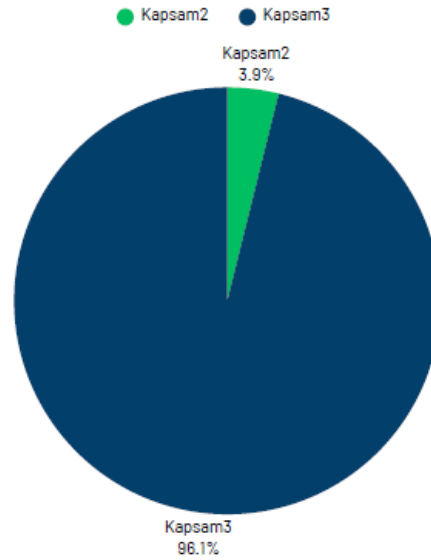


Figure 1: Percentage Distribution of Emission Scopes and Inventory Results

3.2. Future Strategies and Recommendations

Based on the report results, the following steps are recommended:

- Increasing energy efficiency and utilizing renewable energy sources.
- Selecting raw materials with lower carbon intensity within the supply chain.
- Optimizing logistics processes to reduce Category 3 and Category 4 emissions

3.3. References

1. **ISO 14064-1:2018 Standard:** Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions.
2. **IPCC (Intergovernmental Panel on Climate Change):** GWP values and methodological guidance.
3. **Aksay Plastik 2024 Operational Data:** Usage records for electricity, natural gas, and raw materials.
4. **DEFRA & IEA Databases:** International emission factor references.