



POLİMER TEKNİK
CARBON FOOTPRINT REPORT • 2022



MAINLY REPORT INFORMATION



- Report Date : June 2023
- Revision No : 00
- Standartization : ISO 14064-1:2018
Greenhouses Gases
- Base Year : 2022
- Currently Period : 2022
- Reporting Progrees : 01.01.2022 – 31.12.2022
- Reporting Period : Annualy



AIM AND SCOPE

- The purpose of the greenhouse gas report is to calculate the greenhouse gas emissions and removals at the organizational level for all operations carried out under our company's responsibility and to provide a greenhouse gas declaration in accordance with the requirements of the ISO 14064-1:2018 standard.
- The greenhouse gas report covers both direct and indirect emissions and includes calculations of gases such as Carbon Dioxide (CO₂), Methane (CH₄), Nitrogen Oxide (NO), Nitrogen Trifluoride (NF₃), Hydrofluorocarbons (HFC), Perfluorocarbons (PFC), and Sulfur Hexafluoride (SF₆).





POLICY AND STRATEGY



The objectives of the report are to reduce the potential environmental harm caused by the greenhouse gases



Decrease greenhouse gas emissions



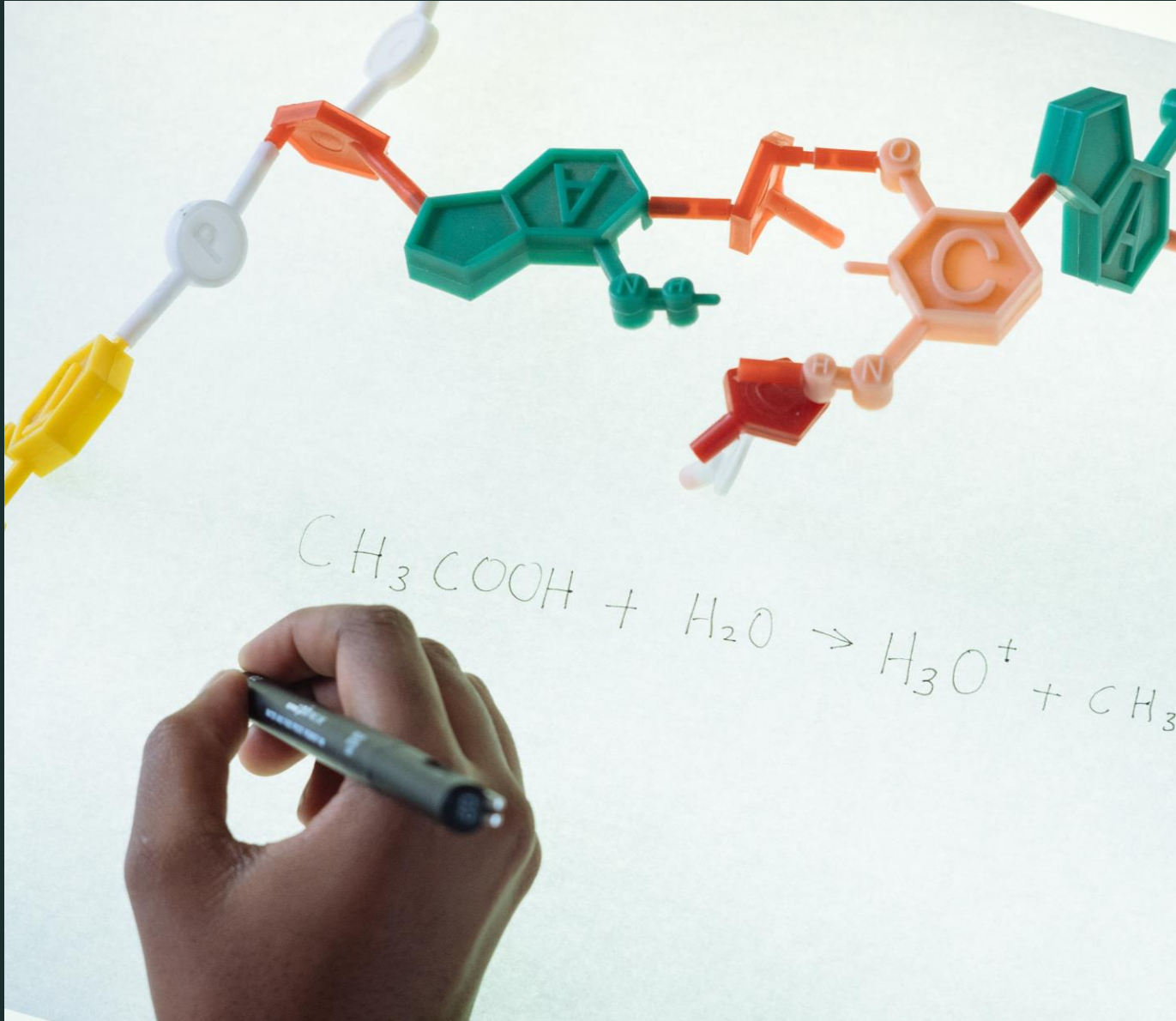
Manage and improve energy usage



Make a positive contribution to preventing climate change



Reduce the energy and natural resource consumption of employees, suppliers, and contractors through training



CONDENSATION CODE

CH₄	Methane
CO₂	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
EF	Emission Factor
GHG	Green House Gas
GWP	Global warming potential
HFC	Hydro Fluoro Carbons
IPCC	Intergovernmental Panel on Climate Change
NO	Nitrogen Oxide
PFC	Per Fluoro Carbons
SF₆	Sulfur hexafluoride
NF₃	Nitrogen trifluoride



GREENHOUSE INVENTORY BOUNDARY



1. Boundary of Establishment

All of our activities within the boundaries of our company are included in the calculations.

The "Operational Control Approach" method was chosen for the calculation of greenhouse gas emissions and removals.

2. Reporting Boundaries

Reporting boundaries are divided into two main groups as direct and indirect greenhouse gas emissions and removals. The identified greenhouse gases have been documented as greenhouse gas inventories in Table-1.



DIRECT GREENHOUSE GAS EMISSION AND REMOVALS

a. Direct greenhouse gas emissions' classification

- Direct greenhouse gas emissions are classified as Category-1 in the greenhouse gas report, which includes emissions from stationary and mobile combustion sources and leakage and emissions.

a. In-direct greenhouse gas emissions' classification

- In-direct greenhouse gas emissions are classified in the greenhouse gas report as Category-2 to Category-6, which are emissions that originate outside the company.



a. Greenhouse Gas Emissions Classification

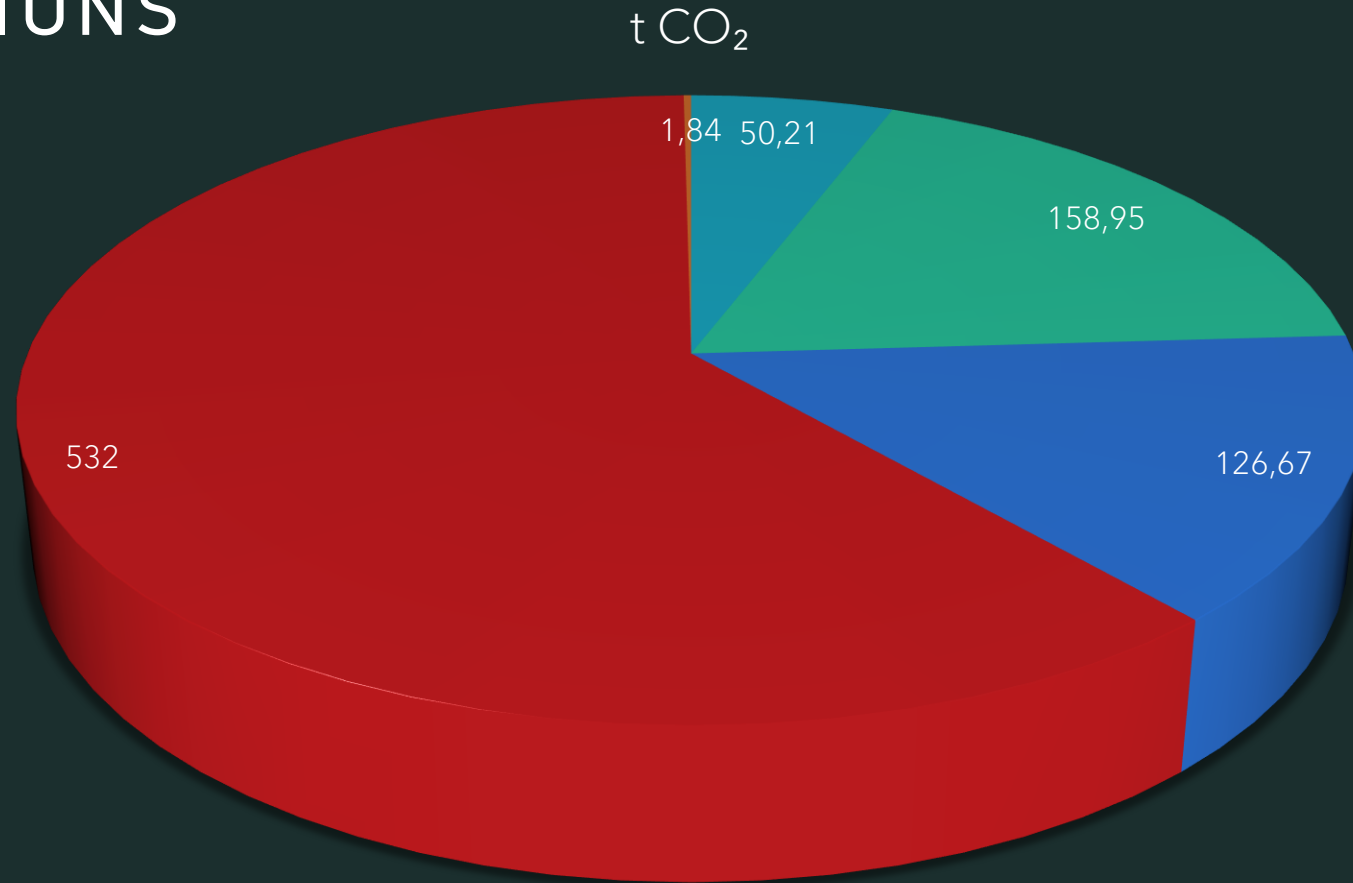
Greenhouse gas emissions are classified into the following categories at the organization level and listed in Chart-1 under the greenhouse gas inventory:



- Category 1 - Direct greenhouse gas emissions and removals,
- Category 2 - Indirect greenhouse gas emissions from imported energy,
- Category 3 - Indirect greenhouse gas emissions from transportation,
- Category 4 - Indirect greenhouse gas emissions from products used by the organization, and
- Category 5 - Indirect greenhouse gas emissions associated with products belonging to the organization.



CALCULATIONS AND RESULTS



Total emission: 869,67

- Category-1 Direct
- Category-2 Energy (Direct)
- Category-3 Transportation
- Category-4 Used Inputs
- Category-5 Produced Product and Service

Chart-1

CALCULATION AND RESULTS

For the production quantity analysis based on our calculations, the Ecoinvent Database from Zurich-based Ecoinvent Association was used, with average value of 2.47 for the manufacturing process. However, the value obtained by our company is 3.92. Factors such as energy consumption, material resources, waste management, and transportation affect the calculation of greenhouse gas emissions in the production process and supply chain.



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