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AYDINAY TOURISM, AUTOMOTIVE, CONSTRUCTION, INDUSTRY AND TRADE LTD.

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Greenhouse Gas

Scope 1

Scope 2

Scope 3

Report (2025)



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Preface

The Greenhouse Gas Inventory Report was prepared in accordance with clause 7.3.1 of the ISO 14064-1 “Greenhouse Gases – Part 1: Guidelines and Specifications for the Calculation and Reporting of Greenhouse Gas Emissions and Removals at the Organizational Level” Standard. The inventory was created using...

The IPCC methodologies and national reference calculations valid at that time were used as the basis.

In this study, greenhouse gases generated within the scope of the organization's activities and environmental management were examined. Within this scope, it has been taken into consideration as a new performance criterion.

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GENERAL INFORMATION - COMPANY INFORMATION

Company Name	AYDINAY TUR. OTO. ÿNÿ. SAN. VE TÿC. LTD. ÿTÿ
Address	Yavuz Selim Neighborhood, Yavuz Selim Street No: 20, Esenler / Istanbul

Activity Type/Sector: TOURISM ACCOMMODATION FACILITY

PREPARATION OF GREENHOUSE GAS EMISSION REPORT

What is a Carbon Footprint?

Carbon footprint is the amount of carbon footprint that each person accumulates as a result of transportation, heating, energy consumption, or any product they purchase.

It is a term used to describe the amount of carbon that is released into the atmosphere. In other words, it is the energy required to produce every product we buy or every activity we carry out.

It represents the total amount of carbon gas released into the atmosphere during a given period.

Climate change, which has been ongoing for millions of years under the influence of natural processes, is now caused by human activity. Environmental pollution has further increased its impact and damage. Every individual and organization has a responsibility to ensure that the clean and healthy environment we inherited from the past is passed on to future generations as it should be.

That is a fact. In this context, we aim to demonstrate our sensitivity towards the environment and climate, as well as the environment. Calculating our carbon footprint in order to make a concrete contribution to the measures taken against pollution and Working on reducing carbon footprints has become an important task. Since carbon footprint is a definition based especially on energy obtained from fossil fuels, reducing the carbon footprint is also...

This means reducing or optimizing energy consumption. This is important for businesses.

Reducing energy costs can only be achieved with a package of measures that will initiate a cycle of decreasing carbon footprint. This study essentially means developing a new energy usage culture for organizations.

In addition to each activity having a different carbon footprint, studies conducted on an individual or company basis show... Various factors need to be taken into account. Internationally, carbon footprint calculations require different factors to be considered. Various methods and standards have been developed. Among the standards addressing the six main greenhouse gases (CO2, CH4, N2O, PFc, HFc, SF6) evaluated under the Kyoto Protocol, the Intergovernmental Climate Change Standard is prominent.

In addition to the methods published by the Intergovernmental Panel on Change (IPCC), the GHG Protocol, ISO 14064, and CDP are also used. PAS 2050 is coming.

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Calculating Greenhouse Gas Emissions - Processes Followed - Defining the Objective

Carbon footprint calculation is about determining the goals to be achieved. For example, carbon footprint results...

It can be used in setting **CO2 reduction targets and identifying potential CO2 reduction measures.**

Determining Borders

Once the objective is determined, the limits for carbon footprint (the limits specified in the applicable standards) are defined.

Various selections should be made to determine (while remaining within) the scope. The most common for corporate reporting...

The scope used is operational control scope. This refers to the organization's daily operational controls.

will calculate and account for the carbon footprint resulting from all activities under its purview.

This means that the company will receive certain emissions outside of its own activities.

will be taken into consideration.

Since the organization's responsibility lies with the entity in determining its boundaries and in

terms of control, the approach method chosen for calculating emissions is the 'control approach'. Any

changes made to the chosen method...

The change will be declared in the following year's greenhouse gas report, and calculations will be based on the base year.

It will be renewed.

Data Collection and Application of Emission Factors

Once the limits and scope of the Carbon Footprint are agreed upon, specific data will be provided for the activities.

This data can be collected and used to calculate emission factors and global warming potentials. The information can be presented in this way.

The collection of this information is called inventory. Emission factors can vary from country to country and over time.

It can change. There are many sources for emission factors, such as the IPCC guidelines and the WBCSD's GHG Protocol.

It is available.

Evaluation of Results and Reporting of Footprints

The report should be transparent, and the choices and assumptions made should be clearly stated.

Selection of the Calculation Method

In greenhouse gas calculations, the IPCC, Level-1 Methodology, and Level-2 Methodology for activity data containing national information were used. Since production data from Turkish Electricity Generation Inc. (TEÿAÿ) is used in electricity emission factor calculations, the Level-2 methodology is used for Scope 2 energy-related greenhouse gas emissions. Accordingly, the following formulas and variables are used in the calculations of Scope-1 and Scope-2 greenhouse gas sources. Emissions in Scope-3 are also calculated according to the following formula.

Emissions, fuel = EmissionCO2, fuel + EmissionCH4, fuel + EmissionN2O, fuel
EmissionsCO2, fuel = Consumption Amount, fuel x Emission FactorCO2, fuel

Due to the lack of sufficient technological infrastructure for measuring all emission sources, a calculation methodology

was chosen. A measurement methodology was not used. This calculation method addresses uncertainty.

This can be reflected in the results. Energy requirements are met solely by electricity. Large mass.

It does not use energy sources classified as biomass. For this reason, biomass utilization...

No relevant calculations have been made.

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Selection of Greenhouse Gas Emission Factors

CO2 equivalent calculated separately per ton, from the consumption of externally supplied electricity.

The greenhouse gas emission values resulting from the emission factor for Turkey were determined from www.ea.org/

CO2highlights, and the calculation was made according to the TIER 2 approach. CO2 equivalent

Calculated separately per ton. Greenhouse gas emissions from diesel fuel consumption of company vehicles.

Emission values and emission factor values for Turkey can be found at www.ea.org/CO2highlights.

Since the value was not specified, the calculation was performed using the TIER 1 approach.

In this study, greenhouse gas emissions (carbon footprint) of the participating organizations were shared.

The corporate carbon footprint was calculated separately for each company and then as a total, covering the period from January 1, 2025 to December 31, 2025, with 2025 as the 'base year'.

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GREENHOUSE GAS INVENTORY AND CORPORATE CARBON FOOTPRINT CALCULATION

Activity	Activity Categories	Activity Version	Scope	Greenhouse Gases
Heating System	Constant Burning	Natural gas (m^3)	Directly (Scope 1)	CO2 CH4 N2O
Air Conditioning Gases	Leakage Emissions	Air Conditioning Gas (kg) (Not calculated)	Directly (Scope 1)	R410a
Passenger Vehicles	Moving Combustion	Motorn (lt)	Directly (Scope 1)	CO2 CH4 N2O
Fire Extinguishers	Leakage Emissions	Fire Extinguisher (kg)	Indirect (Scope 2)	FM200 CO2
Electricity Consumption	Electricity	kWh	Indirect (Scope 2)	CO2
Transportation Activities	Moving Combustion	Motorn (lt)	Indirect (Scope 3)	CO2 CH4 N2O
Dangerless Waste Recovery	Open Loop	kg	Other Indirect Value (Scope 4)	CO2

Findings and Acceptances

Greenhouse Gas	Global warming Potential (GWP)
CO2	1
CH4	28
N2O	265

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In calculating greenhouse gas emissions from natural gas;

Natural gas consumption is determined by reading the natural gas supplied from the main network via a natural gas meter.

In calculating illicit emissions;

The emission factor of R407C type refrigerant is determined under the "Kyoto Protocol".
Data are from the "EPA- Greenhouse Gas Emsson Calculator" data system.

It has been received.

The annual loss/leakage amount for air conditioners is accepted as 4.5% of the gas filled.
(Uncertainty = ±10%) Source: "IPPC-Special Report on Safeguarding the Ozone and the Global Climate System-Chapter 5: Residential and Commercial Air

In the calculation of fire extinguishing systems;

Leakage rates for portable CO2 fire extinguishers are 4% of the gas weight inside the cylinder.
It is accepted as (Uncertainty=±2%). "Source: IPPC-Specal Report on Safeguarding the Ozone and the Global Climate System- Chapter 9: Free Protecton-
Table 9.2

In calculating CO2 systems used for cooling purposes;

Transportable primary CO2 intakes have been included in the calculations as direct carbon emissions.
Motornn's emission factors included in the report are from the "EPA- Greenhouse Gas Emission Calculator".
It was obtained from the tables.

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Direct Greenhouse Gas Emissions (Scope 1)

Heating System

Heating system total amount of natural gas consumed.			31511 m3
Activity data		Emission factor	Emission amount
31511 m3	EF CO2 =	2.040 kg/m3	64282.440 kg CO2-equivalent
31511 m3	EF CH4 =	0.003 kg/m³	94.533 kg CO2-equivalent
31511 m3	EF N2O =	0.001 kg/m³	31.511 kg CO2-equivalent
TOTAL EQUIVALENT DUE TO HEATING GREENHOUSE GAS EMISSION AMOUNT			64408,484 kg CO2-equivalent

Air Conditioning System

Since there is no data on greenhouse gas emissions leaks from air conditioning systems for the year 2025, this figure has not been included in the calculations.

Passenger Vehicles

Fuel consumption in passenger vehicles in 2025: 2000 liters

The amount of motor fuel consumed by generators in 2025: 500 liters.

Total amount of diesel fuel consumed from vehicles and generators.			2500 lt
Activity data		Emission factor	Emission amount
2500 lt	EF CO2 =	2.51 kg/lt	6275,000 kg CO2-equivalent
2500 lt	EF CH4 =	0.00029 kg/lt	0.725 kg CO2-equivalent
2500 lt	EF N2O =	0.033 kg/lt	82,500 kg CO2-equivalent
FROM VEHICLES AND GENERATORS TOTAL EQUIVALENT GREENHOUSE GAS EMISSIONS EMISSION AMOUNT			6358.225 kg CO2 equivalent

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Fire Extinguishers

It is predicted that **in 2025, the amount of CO2 leaking from fire extinguishers will be significant.**

CO2 Cylinder					
			183 kg		
Tube type	changing tube quantity	tube kg	Total kg	Activity data	Emission amount
CO2 Cylinder	28	6	168 kg	1 kg/	168,000 kg CO2-equivalent
HFC-227ea (FM200)	3	5	15 kg	3,350 kg/	10050,000 kg CO2-eq
TOTAL EQUIVALENT GREENHOUSE GASES FROM FIRE EXTINGUISHERS EMISSION AMOUNT					10,218,000 kg CO2 equivalent

Indirect Greenhouse Gas Emissions - Electricity Consumption (Scope 2)

Electricity consumption is the total amount of electricity consumed.		874259 kWh
Activity data	Emission factor	Emission amount
874259	0.493 CO2-equivalent/kWh	431010 kg CO2-equivalent
CAUSED BY ELECTRICITY CONSUMPTION TOTAL EQUIVALENT GREENHOUSE GAS EMISSIONS AMOUNT		431010 kg CO2-equivalent

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Transportation Activities (Scope 3)

Business trip total km			2000 km
Activity data		Emission factor	Emission amount
2000 KM	EF.CO2 =	0.080 kg/km	160 Kg CO2-equivalent
TOTAL KILOMETERS FROM BUSINESS TRIPS EMISSION AMOUNT			160 Kg CO2-equivalent

Recovery/Disposal of Non-Hazardous Waste (Scope 3)

Waste Type	Waste Amount (kg)	Emission Factor	Annual COÿ Emissions (kg)
Organic Waste	1770.9	0.446	789.8214
Paper Waste	8425	0.022	185.35
Plastic Waste	6380	0.022	140.36
Mixed PACKAGING	245	0.022	1081
Total			2196,5314

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TOTAL EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT

TOTAL EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT		
TOTAL EQUIVALENT GREENHOUSE GASES FROM HEATING EMISSION AMOUNT	64408,484	COÿ (kg)
TOTAL FROM VEHICLES AND GENERATORS EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT	6358,225	COÿ (kg)
TOTAL EQUIVALENT GREENHOUSE DAMAGE CAUSED BY FIRE EXTINGUISHERS. GAS EMISSION AMOUNT	10218,000	COÿ (kg)
TOTAL EQUIVALENT FROM ELECTRICITY CONSUMPTION GREENHOUSE GAS EMISSION AMOUNT	431009,687	COÿ (kg)
TOTAL KILOMETER EMISSIONS FROM BUSINESS TRAVEL AMOUNT	200	COÿ (kg)
RECOVERY/DISPOILAGE OF NON-HAZARDOUS WASTE	2196,5314	COÿ (kg)

