



GOLDEN CROWN HOTEL

INTURSAN İNŞAAT TURİZM SANAYİ VE TİCARET A.Ş

Sera Gazı

Kapsam 1

Kapsam 2

Kapsam 3

Raporu (2024)

Preface

Greenhouse Gas Inventory Report is prepared in accordance with article 7.3.1 of ISO 14064-1 "Greenhouse Gases - Part 1: Narrow Guide and Specification for Calculating and Reporting Greenhouse Gas Emissions and Removals at the Organization Level" Standard. IPCC methodologies and national reference calculations valid during the period were taken as basis. In the study, greenhouse gases generated within the scope of the activities carried out by the organization, environmental management has been taken into consideration as a new performance criterion.

GENERAL INFORMATION - COMPANY INFORMATION

Company Name: INTURSAN CONSTRUCTION TOURISM INDUSTRY AND TRADE INC. – GOLDEN CROWN HOTEL Address: BÿNBÿRDÿREK NEIGHBORHOOD PÿYER LOTÿ STREET NO:10-1 FATÿH / ÿSTANBUL Activity Type/Sector: TOURISM ACCOMMODATION FACILITY

PREPARATION OF GREENHOUSE GAS EMISSION REPORT

What is Carbon Footprint?

Carbon footprint is a term used to describe the amount of carbon that each person emits into the atmosphere as a result of transportation, heating, energy consumption or any product they purchase. In other words, the energy required for every product we buy or every activity we perform is produced. It expresses the total carbon gas released into the atmosphere during the

Climate change, which has been going on for millions of years under the influence of natural processes, has increased its effects and damage even more due to human-induced environmental pollution. The clean and healthy environment we have inherited from the pa Every individual and organization has a duty to pass on the environmental legacy to future generations as needed. is also a fact. In this context, we aim to show our sensitivity towards the environment and climate, and also to It has become an important duty to calculate and reduce our carbon footprint in order to make a concrete contribution to the measures taken against carbon pollution. Carbon footprint is especially Since it is a definition based on energy obtained from fuels, reducing the carbon footprint is also means reducing or optimizing energy consumption. This is important for businesses. It is possible with a package of measures that will start the cycle of reducing energy costs. Carbon footprint The study actually means developing a new energy usage culture for organizations. is coming.

In addition to each activity having a different carbon footprint, individual or company based studies Different factors need to be calculated. Various methods and standards have been developed internationally in calculating carbon footprint. The standards addressing the 6 main greenhouse gases (CO2, CH4, N2O, PFc, HFc, SF6) evaluated within the scope of the Kyoto Protocol are the Intergovernmental Climate In addition to the methods published by the IPCC, the GHG Protocol, ISO 14064, CDP, PAS 2050 is coming.

Calculation of Greenhouse Gases - Processes Followed - Determination of Purpose

Determining the goals to be achieved with carbon footprint calculation. For example, Carbon footprint results It can be used to set CO2 reduction targets and identify possible CO2 reduction measures.

Determination of Boundaries

Once the goal is determined, the limits for carbon footprint (limits specified in the standards to be applied)

Various choices should be made to determine the most important criteria for corporate reporting.

The scope used is the operational control scope. This is the scope of the organization's daily operational controls will calculate the carbon footprint resulting from all activities under its responsibility.

It means that the company will receive some emissions outside of its own activities.

will be taken into consideration.

Since the organization is responsible for the goods and narrow control in determining the organization boundaries, the approach method used in calculating the emissions was chosen as the 'control approach'. Any changes to be made in the selected method The change will be declared in the next year's greenhouse gas report and the calculations will be based on the base year. will be renewed.

Data Collection and Application of Emission Factors

Once the boundaries and scope of the Carbon Footprint are agreed upon, the activities are narrowed down. emission factors and global warming potentials can be calculated by collecting the data. The collection of these is called inventory. Emission factors may vary from country to country, and over time may vary. Many sources such as IPCC guidance for emission factors and WBCSD's GHG Protocol is available.

Evaluation of Results and Footprint Reporting

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

Choosing the Calculation Method

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

Emissions, fuel = EmissionCO2, fuel + EmissionCH4, fuel + EmissionN2O, fuel EmissionCO2, fuel = Consumption Quantity, fuel X Emission FactorCO2, fuel

Since there is no sufficient technological infrastructure for measuring all emission sources, the calculation methodology was selected. No measurement methodology was used. This calculation method is uncertain. It can be reflected in the results. It meets its energy needs only from electrical energy. Mass It does not use energy sources classified as biomass. For this reason, biomass usage No relevant calculations have been made.

Selection of Greenhouse Gas Emission Factors

CO2 equivalent tonnes calculated separately from the consumption of externally supplied electricity Since the greenhouse gas emission value for Turkey has been determined from www.ea.org/CO2 hghlghts, the calculation has been made according to the TIER 2 approach. CO2 equivalent calculated separately per ton. Greenhouse gas originating from diesel consumption of company vehicles Emission value Emission factor value for Turkey from www.ea.org/CO2 hghlghts Since it has not been determined, the calculation was made according to the TIER 1 approach. In this study, greenhouse gas emissions (carbon footprint) for the relevant organization are shared

It has been calculated separately with the data for 2024, and by taking 2025 as the 'base year' to cover the period between 01.01.2024 and 31.01.2024, the total corporate carbon footprint has been calculated separately and then.

GREENHOUSE GAS INVENTORY AND CORPORATE CARBON FOOTPRINT CALCULATION

Activity	Activity Vers	Scope	Greenhouse Gases
Categories			
Constant Burning	Natural gas (m3)	Direct	CO2
		(Scope 1)	CH4
			N2O
Fugitive Emissions Air	conditioning gas kg	Direct (Scope 1)	R410a
	(Not calculated)		
Moving	Engine (It)	Direct	CO2
Combustion		(Scope 1)	CH4
			N2O
Leakage	Fire Extinguisher (kg)	Indirect	FM200
Emissions		(Scope 2)	CO2
Electricity	kWh	Indirect	CO2
		(Scope 2)	
Moving	Engine (It)	Indirect	CO2
Combustion		(Scope 3)	CH4
			N2O
Open Loop	kg	Value Indirect	CO2
		(Scope 4)	
	Activity Categories Constant Burning Fugitive Emissions Air of Moving Combustion Electricity Moving Combustion Open Loop	ActivityActivity VersCategoriesConstant BurningNatural gas (m3)Fugitive Emissions Air CombustionConditioning gas kg (Not calculated)Moving CombustionEngine (lt)Leakage EmissionsFire Extinguisher (kg)ElectricitykWhMoving CombustionEngine (lt)Open Loopkg	ActivityActivity VersScopeCategoriesDirect (Scope 1)Constant BurningNatural gas (m3)Direct (Scope 1)Fugitive Emissions Air conditioning gas kg (Not calculated)Direct (Scope 1)Moving CombustionEngine (lt)Direct (Scope 1)Leakage EmissionsFire Extinguisher (kg)Indirect (Scope 2)ElectricitykWhIndirect (Scope 2)Moving CombustionEngine (lt)Indirect (Scope 2)Qpen LoopkgValue Indirect (Scope 4)

Tests and Acceptances

Greenhouse Gas	Global warming		
	Potential (GWP)		
C02	1		
CH4	28		
N2O	265		

In calculating greenhouse gas emissions from natural gas;

Activity data regarding natural gas consumption is ensured by reading the natural gas supplied from the main network from the natural gas meter.

In calculating fugitive emissions;

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

has been taken.

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

In the calculation of fire extinguishing systems;

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

In the calculation of CO2 systems used for cooling purposes;

Portable CO2 intakes are added to the calculations as direct carbon emissions. The engine emission factors included in the report are "EPA- Greenhouse Gas Emission Calculator

obtained from the tables

Direct Greenhouse Gas Emissions (Scope 1)

Heating System

There is no natural gas use in the business.

Total amount of	natural gas consumed	l by the heating sys	tem 7745	m3
Activity data		Emission factor		Emission amount
7745 m3 EF	CO2 =	2,040 kg/m3 15799,8	00	kg CO2-eq
7745 m3 EF	CH4 =	0.003 kg/m3 23.235		kg CO2-eq
7745 m3 EF	N2O =	0.001 kg/m3 7.745		kg CO2-eq
TOTAL EQUIVALEN GREENHOUSE GAS	T DUE TO HEATING EMISSION AMOUNT		15830,780	kg CO2-eq

Air Conditioning System

Greenhouse Gas Emissions from Air Conditioners until 2024 have not been taken into account as there is no leakage amount.

Custom Vehicles

The amount of engine consumed in passenger cars in 2024: 250 litres The amount of engine consumed for the generator in 2024: 850 Ltre

Total ar	nount of diesel consu and generators	umed from ve	ehicles	1100	lt	
Activity data		Emission fa	actor			Emission amount
1100 It E	F CO2 =	2.51	kg/lt 276	51,000 kg CO	2-eq	
1100 lt E	F CH4 =	0.00029	kg/lt 0.3	19	kg CO2-eq	
1100 lt E	F N2O =	0.033	kg/lt 36,	300	kg CO2-eq	
FROM VEHICLES TOTAL EQUIVALE AMOUNT OF EMIS	AND GENERATOR INT GREENHOUSE GAS	EMISSION		2797,619 kg	CO2-eq	

Fire Extinguishers

It is estimated that the amount of CO2 leaking from fire extinguishers will be in 2024 .

* Fire Extinguishers Total number of fire extinguishers replaced during the year kg number 105 kg						
Tube type	changing tube quan	tity tube kg	Total kg	Activity data		Emission amount
CO2 Cylinder	16	6	96 kg 1	kg/ s	6,000	kg CO2-eq
HFC-227ea						
(FM200)	1	9	9 kg 3	,350 kg/ 3350,0	00 kg CC	D2-eq
TOTAL EQUIVALENT GREENHOUSE GAS EMISSION FROM FIRE EXTINGUISHERS AMOUNT OF EMISSIONS						
					3446,00	0 kg CO2-eq

Indirect Greenhouse Gas Emissions - Electricity Consumption (Scope 2)

Electricity consu	mption total amount of electricit	y _{6797/} sumed	кwн
Activity data	Emission factor		Emission amount
67977 KWH 0.493	CO2-eq/kWh	33513	KgCO2-eq
CAUSED BY ELECTRICIT TOTAL EQUIVALENT GRE AMOUNT	Y CONSUMPTION ENHOUSE GAS EMISSIONS	33513	Kg CO2-eq

Transportation Activity (Scope 3)

	Busi	ness travel total k	m 2000	km
Activity data		Emission factor		Emission amount
2000 KM EF.	CO2 =	0.080 kg/km	160	Kg CO2-eq
TOTAL KM DUE TO AMOUNT OF EMISS	BUSINESS TRAVEL SIONS		160	Kg CO2-eg

Recycling/Disposal of Non-Hazardous Wastes (Scope 3)

Waste Type	Waste Amount (kg) I	Emission Factor	Annual Emission COÿ (kg)
Organic Waste	775	0.446	581,000
Paper Waste	465	0.022	10.23
Plastic Waste	232	0.022	5,104
Mixed Packaging	675	0.022	14.85
	Total		611,184

TOTAL EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT

TOTAL EQUIVALENT GREEN	HOUSE GAS E	MISSION AMOUNT
TOTAL EQUIVALENT DUE TO HEATING GREENHOUSE GAS EMISSION AMOUNT	15830,780	COÿ (kg)
CAUSED BY VEHICLES AND GENERATORS TOTAL EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT	2797,619	COÿ (kg)
TOTAL COSTS CAUSED BY FIRE EXTINGUISHERS EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT	3446,000	COÿ (kg)
TOTAL ENERGY CONSUMPTION EQUIVALENT GREENHOUSE GAS EMISSION AMOUNT	33512,661	COÿ (kg)
TOTAL KM DUE TO BUSINESS TRAVEL AMOUNT OF EMISSIONS	160	COÿ (kg)
RECOVERY / DISPOSAL OF NON-HAZARDOUS WASTES (Scope 3)	611,184	COÿ (kg)

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