

Information with Study

Company:	Hitit Bilgisayar Hizmetleri A.Ş.		
Address:	Reşitpaşa Mah. Katar Cad. No: 4/1 Anı Teknokent İç Kapı No: 601 34469		
Purpose:	Quantification and reporting of greenhouse gas (GHG) emissions at the organization level.		
Scope:	- Direct Greenhouse Gas Emission - Energy Indirect Greenhouse Gas Emissions - Other Indirect Greenhouse Gas Emissions	Organization Boundaries:	Operational Control Approach
		Reporting Limits:	Türkiye,Pakistan ,The Netherlands
Industry:	Services	Base Year:	2022
Turnover for the reporting year (TL):		Report Year:	
Data Input:	Yearly	Report Period:	1
Number of Employees:	392	Report Frequency	1
Number of working days:	255	Area (m2):	0
Global Warming Potentials:	IPCC Sixth Assessment Report: CO2:1 CH4:27.9 NO2:273		

Carbon Footprint Result Information

Calculation Year		Base Year Emissions	
Scope 1: Direct greenhouse gas emissions	15.940248590789292 -ton CO2e	Scope 1: Direct greenhouse gas emissions	-ton CO2e
Scope 1: Biomass GHG emissions	0 -ton CO2e	Scope 1: Biomass GHG emissions	-ton CO2e
Scope 2: Energy indirect greenhouse gas emissions - Market Based	111.57573392178703 -ton CO2e	Scope 2: Energy indirect greenhouse gas emissions - Market Based	-ton CO2e
Scope 2: Energy indirect greenhouse gas emissions - Location Based	111.57573392178703 -ton CO2e	Scope 2: Energy indirect greenhouse gas emissions - Location Based	-ton CO2e
Scope 3: Other indirect greenhouse gas emissions	1045.3437938479012 -ton CO2e	Scope 3: Other indirect greenhouse gas emissions	-ton CO2e
Total Emission:	1172.86 ton CO2e	Total Emission:	- ton CO2e
Carbon Footprint Density - Employee Count:	2991.9897959183672 Kg CO2e / Person		
Statement Status:	To be declared - In-company		

About the Company

As one of the top 3 largest passenger service system providers trusted by dozens of airlines around the world, Hitit is laser-focused on delivering, agile and innovative solutions backed by deep aviation industry experience. From individual team members all the way up to senior management, Hitit is made up of just the right combination of cutting-edge tech enthusiasts and airline industry veterans, guided and governed by our user community – or as we call them, our partners. This enables us to provide all our partners, regardless of their size or business model, whether an ambitious low- cost start up or an established full-service carrier looking to modernize, with the right tools to achieve their goals both today and tomorrow.

Followed standard:	GHG Protocol
Allocations:	Data allocation could not be made.
Units:	For Category 1 and Category 2, the data is "kg", "L" or "kWh". is being processed. For this reason, consumption collected in different units using the density coefficients of DEFRA. is calculated. Category 3, 4, 5 and 6 data are "kWh", "L", "ton.km", "km", "ton", "m3" for the relevant emission factors unit conversions.
Carbon emission from biomass combustion:	No
Methodology Procedure:	The firm is presented in the Greenhouse Gas Emission Identification and Evaluation Procedure.
Greenhouse Gas Emission Reduction Studies (Guided Activities)	Greenhouse gas emission reduction studies within the company and production reduction resulting from energy efficiency projects in its facilities amounts are targeted. In addition, the company's renewable in energy investment plans. These efficiency studies and the results of the investments are calculated with annual greenhouse gas inventories, annual decreases will be followed.
Calculation Method:	Tier 2 for electricity, Tier 3 for natural gas and coal, Tier 1 for all other accounts
Account Formula:	Greenhouse Gas Emission Amount (CO2e) = (Consumption Amount) x (Emission Factor)
Prioritization Analysis- Purchased Goods and Services	Emissions from purchased goods and services have been added to Category 4 in accordance with the completeness and accuracy principle of Annex-H, H.3.1 of the relevant standard. However, by applying the "cut-off rule", all purchases that remain above 1% financially and that are of high importance for the continuation of production are included in the inventory. Due to the high workload and effort required by the company to obtain some data, inventory calculations were not made and/or secondary databases were used.
Quantification Change:	Therefore, no changes were made in the quantification approach.
Reporting Method:	It has been reported in accordance with the requirements in ISO 14064-1:2018 standard, Chapter 9: GHG Reporting.
Verification	

Refrigerant Gas Leakage Rates		
Type	Leakage Rate	Reference
Refrigerator	%0,1	IPCC 5th AR
Water Dispensers	%0,1	IPCC (2006), Vol 3. Chapter 7, Table 7.9
Split Air Conditioner	%1	IPCC 5th AR
Home Type Air Conditioner	%1	IPCC (2006), Vol 3. Chapter 7, Table 7.9
Cold room	%7	IPCC 5th AR
Industrial Cooler	%7	IPCC 5th AR
Chiller / Cooling Systems	%2	IPCC (2006), Vol 3. Chapter 7, Table 7.9
Fire Extinguisher Tubes	%4	IPCC/TEAP Special Report, Safeguarding the Ozone Layer and the Global Climate System. Volume 9, Fire Protection
Central System	%2	IPCC 5th AR

Emission Factors	
Fire Extinguishing	CO2 Calculation: IPCC Fifth Assessment Report, 2014 (AR5) HFC 227ea Calculation: Defra, 2021
Well-to-tank (WTT)	Defra, 2021, WTT-Fuels
Raw Material Shipping	Defra, 2021, Freightling goods
Products Shipping	Defra, 2021, Freightling goods
Personnel Service	https://theicct.org/sites/default/files/publications/EU-LCV-CO2-2030_ICCTupdate_20190123.pdf
Business Travel, Flights	Business Travel, Flights Defra, 2021, Business travel- air
Raw materials	Simapro, v9.1, Ecoinvent v3.7.1
Water Consumption Service	Defra, 2021, Water Supply
Water Treatment Service	Defra, 2021, Water Treatment
Wastes	Defra, 2021, Waste Disposal
Waste, Mud	IPCC (2006), Vol 5, Chapter 5, Table 5.3 ve Table 5.4
Electricity WTT and Transmission & Distribution	Electricity WTT and Transmission & Distribution Defra, 2021, Transmission and distribution, WTT- UK & overseas elec
Net Calorific Value (NCV) IPCC 2006 Vol 2, Chapter 1 Table 1.2	IPCC 2006 Vol 2, Chapter 1 Table 1.2

Uncertainty Calculations		
Uncertainty Confidence Interval	95%	IPCC, Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories
Uncertainty Methodology	GHG Uncertainty Tool	
Calculated Uncertainty	% 3.57	
Confidence Level	Good	

Scope	Emission Type	Emission Source	Location	tonne CO2	tonne CH4	tonne N2O	tonne CO2 eq	Description	Scope	tCO2eq
1.1 Stationary Combustion	Stationary Combustion	Natural Gas	Türkiye	2.76361431091	0.000049262287	0.000004926229	2.766333589163	Emirgan Office	1	15.940248590789292
1.1 Stationary Combustion	Stationary Combustion	Natural Gas	Holland a	0.007011523972	0.000000124983	0.000000012498	0.007018423012	Netherlands Natural Gas Consumption		
1.2 Mobile Combustion (On Road)	Mobile Combustion (On Road)	Motor Gasoline - Oxidation Catalyst	Türkiye	2.684309305293	0.00096836555	0.000309876976	2.795923118615	Gasoline Consumption		
1.4 Fugitive Emissions	Fugitive Emissions	CO2	Pakistan	0.00312	0	0	0.00312	Pakistan Fire extinguisher		
1.4 Fugitive Emissions	Fugitive Emissions	R-407C	Türkiye	0.04197446	0	0	0.04197446	airconditioner-ARI2		
1.4 Fugitive Emissions	Fugitive Emissions	CO2	Türkiye	0.0002	0	0	0.0002	fire extinguisher-ARI2		
1.4 Fugitive Emissions	Fugitive Emissions	R-410A	Pakistan	10.14975	0	0	10.14975	Pakistan refrigerant		
1.4 Fugitive Emissions	Fugitive Emissions	R-410A	Türkiye	0.175929	0	0	0.175929	airconditioner-ARI2		

Scope	Emission Type	Emission Source	Location	tonne CO2	tonne CH4	tonne N2O	tonne CO2 eq	Description	Scope	tCO2eq
2.1 Purchased Electricity	Electricity (Turkey) - Location Based		Türkiye	2.094353087679	0	0	2.094353087679	Emirgan Office Electric consumption	2	111.5757339217 8703
2.1 Purchased Electricity	Electricity (Turkey) - Market Based		Türkiye	2.094353087679	0	0	2.094353087679	Emirgan Office Electric consumption		
2.1 Purchased Electricity	Electricity (Turkey) - Location Based		Türkiye	41.711146	0	0	41.711146	ARI2 Office Electric consumption		
2.1 Purchased Electricity	Electricity (Turkey) - Market Based		Türkiye	41.711146	0	0	41.711146	ARI2 Office Electric consumption		
2.1 Purchased Electricity	Specific to Company - Location Based		Holland	0.5820290096	0	0	0.5820290096			
2.1 Purchased Electricity	Specific to Company - Market Based		a	0.5820290096	0	0	0.5820290096			
2.1 Purchased Electricity	Specific to Company - Location Based		Pakistan	7.230176642738	0	0	7.230176642738	Pakistan Elektrik Consumption		
2.1 Purchased Electricity	Specific to Company - Market Based		Pakistan	7.230176642738	0	0	7.230176642738	Pakistan Elektrik Consumption		
2.2 Heat and Steam	Specific to Company		Türkiye	0.055458171131	0.000277783515	0.000222914947	57.304566906769	Teknokent Office (natural gas)		
2.2 Heat and Steam	Specific to Company		Türkiye	0.001939602947	0.000009715245	0.000007796263	2.653462275	Teknokent Office (diesel)		

Scope	Emission Type	Emission Source	Location	tonne CO2	tonne CH4	tonne N2O	tonne CO2 eq	Description	Scope	tCO2eq
3.1 Downstream Transportation and Distribution	HGV - All rigid - Average Laden		Türkiye	0.094923588616	0	0	0.094923588616	Waste Transport.xlsx (3 trip(s))	3	1045.3437938479012
3.1 Downstream Transportation and Distribution	HGV - All rigid - Average Laden		Türkiye	0.034947076889	0	0	0.034947076889	Good Purchased Transport.xlsx (41 trip(s))		
3.1 Downstream Transportation and Distribution	HGV - All rigid - Average Laden		Türkiye	0.001672702778	0	0	0.001672702778	Capital Goods Transport.xlsx (47 trip(s))		
3.3 Employee Commuting	Employee Services (ICCT)		Türkiye	5.249244	0	0	5.249244			
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	48.37999216728	0	0	48.37999216728	Hitit 2023.xlsx (201 kişi), Average Passenger - With RF		
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	1.225708312998	0	0	1.225708312998	Hitit 2023.xlsx (32 kişi), Business Class - With RF		
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	80.043377124345	0	0	80.043377124345	Hitit 2023.xlsx (313 kişi), Economy Class - With RF		
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	108.483414450749	0	0	108.483414450749	Hitit 2023.xlsx (32 kişi), Business Class - With RF		
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	121.696687979017	0	0	121.696687979017	Hitit 2023.xlsx (133 kişi), Economy Class - With RF		
3.5 Business Travels	Bussiness Travel (airway)		Türkiye	290.001817369926	0	0	290.001817369926	Hitit 2023.xlsx (275 kişi), Average Passenger - With RF		
4.1 Purchased Goods and Services	Veri Merkezi Hizmeti		Türkiye	209.403	0	0	209.403	Data Center (Verizon) - Elektrik		
4.1 Purchased Goods and Services	Veri Merkezi Hizmeti		Türkiye	10.5780562	0	0	10.5780562	Data Center (İşnet) - Elektrik		
4.1 Purchased Goods and Services	Bulut Hizmeti - Belçika		Türkiye	13	0	0	13	Cloud servis (Google)		
4.1 Purchased Goods and Services	Ofis Satın Alımları		Türkiye	0.076196365084	0	0	0.076196365084	Office Purchases (stationery other than paper)		
4.1 Purchased Goods and Services	Bulut Hizmeti - Almanya		Türkiye	24.15996	0	0	24.15996	Cloud servis (IBM)		
4.1 Purchased Goods and Services	Ofis Satın Alımları (kağıt)		Türkiye	0.894051182527	0	0	0.894051182527	Office Purchases (paper)		
4.2 Capital Goods	Elektronik Ürün		Türkiye	4.26065026704	0	0	4.26065026704	Capital Goods		
4.3 Waste Disposal	Batteries		Türkiye	0.001115804488	0	0	0.001115804488			
4.3 Waste Disposal	Paper (Mixed)		Türkiye	0.027275220807	0	0	0.027275220807			
4.3 Waste Disposal	Plastic (Mixed)		Türkiye	0.041202113855	0	0	0.041202113855			
4.4 Water Treatment	Waste Water Treatment		Pakistan	0.028435253336	0	0	0.028435253336			
4.4 Water Treatment	Spesific To Company Waste Water Treatment		Türkiye	0.013045425303	0	0	0.013045425303	Emirgan		
4.4 Water Treatment	Spesific To Company Waste Water Treatment		Türkiye	0.239791037039	0	0	0.239791037039			
4.5 Water Supply	Water Supply		Pakistan	0.027728726375	0	0	0.027728726375			
4.5 Water Supply	Water Supply		Türkiye	0.012721287354	0	0	0.012721287354	Emirgan		
4.5 Water Supply	Water Supply		Türkiye	0.233832981003	0	0	0.233832981003			
5.2 Use of Sold Products	Yazılım Kullanımı		Türkiye	95.702	0	0	95.702	Hitit Server - Pegasus		
6 Indirect GHG Emissions from Other Sources	WTT-Natural Gas		Hollanda	0.001218759597	0	0	0.001218759597			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-Generation		Pakistan	1.690700403876	0	0	1.690700403876			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-Generation		Türkiye	10.243453052273	0	0	10.243453052273			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-Generation		Hollanda	0.136101333373	0	0	0.136101333373			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-Transmission and Distribution		Türkiye	1.271117228617	0	0	1.271117228617			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-transmission and distribution		Hollanda	0.016888909317	0	0	0.016888909317			
6 Indirect GHG Emissions from Other Sources	WTT-Natural Gas		Türkiye	10.419453	0	0	10.419453			
6 Indirect GHG Emissions from Other Sources	Elektrik transmission and distribution		Hollanda	0.069494263746	0	0	0.069494263746			
6 Indirect GHG Emissions from Other Sources	WTT-Diesel		Türkiye	0.61101	0	0	0.61101			
6 Indirect GHG Emissions from Other Sources	Elektrik Transmission and Distribution		Türkiye	5.230376591069	0	0	5.230376591069			
6 Indirect GHG Emissions from Other Sources	Elektrik transmission and distribution		Pakistan	0.863283091143	0	0	0.863283091143			
6 Indirect GHG Emissions from Other Sources	Elektrik WTT-transmission and distribution		Pakistan	0.209800191481	0	0	0.209800191481			
6 Indirect GHG Emissions from Other Sources	WTT-Gasoline		Türkiye	0.6700503866	0	0	0.6700503866			

Equity Investments

Equity Investment Type	Scope 1 (TonCO2e)	Scope 2 (TonCO2e)	Scope 3 (TonCO2e)	Equity as a Percentage %	Emissions Due to Equity Investments (TonCO2e)	Description	Scope	tCO2eq

Managed Investments & Client Services

Equity Investment Type	Scope 1 (TonCO2e)	Scope 2 (TonCO2e)	Scope 3 (TonCO2e)	Equity as a Percentage %	Emissions Due to Equity Investments (TonCO2e)	Description	Scope	CO2eq
------------------------	-------------------	-------------------	-------------------	--------------------------	---	-------------	-------	-------

Debt Investments & Project Finance									
Financing Type	Financing Source	Use of Proceeds	Activity Sector	Asset Class (PCAF)	Financed Emissions Scope 1 & Scope 2 (TonCO2e)	Financed Emissions Scope 3 (TonCO2e)	Description	Scope	CO2eq

Fuel Density Statement		
General Use Fossil Fuels	Density - kg/m ³	Density - liter/tonne
Aircraft Fuel	729,93	1.370,00
Aircraft Turbine Fuel	800,00	1.250,00
Coal (Domestic)	850,00	1.176,00
Diesel	843,17	1.186,00
Diesel (average biodiesel blended)	846,17	1.181,80
Fuel-oil	983,28	1.017,00
Coal Oil	853,97	1.171,00
LPG	529,75	1.887,69
Natural Gas	0,80	1.255.833,57
Other Petroleum Gases	366,30	2.730,00
Gasoline	741,84	1.348,00
Gasoline (biogas blend)	744,17	1.343,79
Propan	514,93	1.942,00
Other Fuels		
Biodiesel	890,00	1.124,00
Biogas	1,15	869.565,00
Biomethane	0,73	1.379.355,67
CNG	175,00	5.714,00
Landfill Gas	1,30	769.231,00
LNG	452,49	2.210,00
Gases		
Metan (CH ₄)	0,72	1.397.112,11
Carbon Dioxide (CO ₂)	1,96	509.290,00

Information of Personnel and Responsible Persons Involved in the Study			
Order	Name and surname	Mission	Contact information
1	Güvenç Aksoy	Personnel and Administrative Specialist	0537 956 78 49
2	Sevgi Karaman	Financial Affairs and Purchasing	0533 208 75 86
3	Özgür Berke Özyurtlu	Climate Strategy Advisor	0532 290 9628

References
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 2 Chapter 1 https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 2 Chapter 2 http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 2 Chapter 3 http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_3_Ch3_Uncertainties.pdf
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7 https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/3_Volume3/V3_7_Ch7_ODS_Substitutes.pdf
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 5 Chapter 5 https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/5_Volume5/V5_5_Ch5_IOB.pdf
DEFRA Greenhouse gas reporting: conversion factors 2021 https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021
IPCC/TEAP Special Report: Safeguarding the Ozone Layer and the Global Climate System, Volume 9, Fire Protection https://www.ipcc.ch/pdf/special-reports/sroc/sroc09.pdf
No translation found for "dashboard__reporting__Page__standart__Reference__IPCC, Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories"
IPCC Climate Change 2013. The Physical Science Basis. Working Group I contribution to the Fifth Assessment Report of the IPCC. http://www.climatechange2013.org .
BS EN ISO 14064-1:2018: Greenhouse gases – Part 1: Guidance and specifications for calculating and reporting greenhouse gas emissions and removals at the enterprise level
CO2 Emission Standards For Passenger Cars And Light-Commercial Vehicles In The European Union-2019 https://theicct.org/sites/default/files/publications/EU-LCV-CO2-2030_ICCTupdate_20190123.pdf
Simapro, v9.1
IEA Turkey Data 2018
MEASURING AND MEASURING INSTRUMENTS INSPECTION REGULATION, https://www.mevzuat.gov.tr/File/GeneratePdf?mevzuatNo=6381&mevzuatTur=KurumVeKurulusYonetmeligi&mevzuatTertip=5
National Greenhouse Gas Inventory Report