



iHKiB

İSTANBUL HAZIR GIYIM VE
KONFEKSİYON İHRACATÇILARI BİRLİĞİ



EKOTEKS

LABORATORY AND INSPECTION SERVICES INC.

2021 Corporate Carbon Footprint Report





ABOUT US,

Ekoteks Laboratory was founded in 1998, as a participation of IHKIB (Istanbul Ready-to-wear and Clothing Exporters Association). With its trained, experienced and dynamic staff, Ekoteks operates accredited test methods on textile, footwear, toys, childcare products, cosmetics, plastic and accessories, water and wastewater.

Ekoteks supports the exporters to develop their R&D activities and to set up an infrastructure for product development activities.

Ekoteks Laboratory has also surveillance status; therefore, companies become as brands on worldwide market. Today, it is obvious that the most important points of customer satisfaction is to understand customer needs and quote the best prices as well highquality service.

Apart from testing, seminars, symposium, workshop, trainings are hold regularly to contribute to the promotion of primarily export organizations and company.



Ekoteks and Sustainability

Ekoteks Laboratory adopts UN goals and works to fulfill its responsibilities. Social health and safety, environmentally friendly solutions attract and Ekoteks try to be involved. This carbon footprint report link to the SDGs 7, 13, 15 and 17.

The carbon footprint of Ekoteks evaluated by direct greenhouse gas emissions and indirect greenhouse gas emissions. Direct emissions related to transport process, natural gas consumption and air conditioner gases. Indirect emissions related to energy consumption and transportation of staffs.

This Carbon footprint report was prepared according to TS EN ISO 14064-1 standard and GHG emission inventory. The calculation methodology and tools were stated in following pages. All the data which used for calculation were based on internal consumption reports during the 2021.

The results provide the amount of all greenhouse gas emissions according to the GHG Protocol. Therefore, the amount of the carbon footprint is given in kilogram/tons CO₂ equivalents (CO₂e).

It neutralized carbon emissions based on scope-II electrical energy by using I-REC certified electrical energy





GHG Quantification Methodology

Standard:	EN ISO 14064-1:2012: Greenhouse gases – Specifications with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
Allocation:	No allocation conducted.
Units:	Considered as 'kg' or 'kWh'. See Appendix 2 for the density factor per DEFRA.
Combustion of biomass:	Yok
Methodology Procedure:	Presented in the company's Greenhouse Gas Emission Information Management Procedure.
Activities to reduce GHG emissions:	No activity to be in placed within the reporting period.
Quantification methodology per IPCC 2006:	Tier 1
Quantification equation:	Individual GHG emission amount (CO ₂ e) = (Consumption Amount) x (Emission Factor)
GWP values:	IPCC 5th Assessment Report
Reporting method:	ISO 14064-1:2012; Section 7.3 GHG report content

Refrigerant Leakage Assumptions

Type of Technology	Leakage Percent	Reference
Residential and Commercial A/C, including Heat Pumps	%1	IPCC (2006), Vol 3, Chapter 7, Table 7.9
Chillers	%2	IPCC (2006), Vol 3, Chapter 7, Table 7.9
Domestic Refrigeration	%0,1	IPCC (2006), Vol 3, Chapter 7, Table 7.9
Fire extinguisher	%4	IPCC/TEAP Special Report: Safeguarding the Ozone Layer and the Global Climate System, Volume 9, Fire Protection

Emission Factors

Stationary Combustion	IPCC 2006 Vol 2, Chapter 2 Tablo 2.3	$EF \text{ (kWh olarak)} = \frac{\text{Yakıtın default içeriği } \frac{kg}{Tj} \text{ olarak}}{277777,78 \text{ kWh/Tj}}$
Mobile Combustion – On Road	IPCC 2006 Vol 2, Chapter 3, Tablo 3.2.1 ve 3.2.2	
Mobile Combustion – Off Road	IPCC 2006 Vol 2, Chapter 3, Tablo 3.3.1	$EF \text{ (kg olarak)} = \frac{(\text{Yakıtın Default EF } \frac{kg}{Tj} \text{ olarak}) \times (NCV \frac{Tj}{Gg} \text{ olarak})}{1000000 \text{ kg/Gg}}$
Mobil Yanma - Deniz	IPCC (2006), Vol 2, Chapter 3, Tablo 3.5.2 ve Tablo 3.5.3	

CO₂ equivalents $CO_2e = (CO_2 \times GWP(CO_2)) + (CH_4 \times GWP(CH_4)) + (N_2O \times GWP(N_2O))$

Electricity EF:

Refrigerants GWPs: DEFRA, 2017

Net Calorific Value (NCV): IPCC 2006 Vol 2, Chapter 1 Table 1.2



Uncertainty of the Accounting

Confidence level:	%95	Referans: IPCC, Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories
Uncertainty quantification per:	GHG Uncertainty Tool	
Uncertainty of the study:	5.9979	
Level of Assurance:	Limitli	

GHG EmissionsA

Doğrudan Sera Gazı Emisyonları

Emisyon Kapsamı	Emisyon Kaynağı	Tüketim Miktarı	Birim	Emisyon Faktörü	Birim	Karbon Ayakizi ton CO2 eşdeğeri	Emisyon Faktörleri Referansı
Hareketli Yanma(On Road)	Motor Gasoline — Oxidation Catalyst	2767.0	kG	3.1949	kgCO2 e/kg	8.85	IPCC (2006), Vol 2, Chapter 3, Tablo 3.2.1 ve Tablo 3.2.2
Hareketli Yanma(On Road)	Diesel Consumption	16802.0	kg	3.2354	kgCO2 e/kg	54.37	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Hareketli Yanma(Off Road)	Benzin - 4 zamanlı	381.0	kg	3.1554	kgCO2 e/kg	1.21	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Soğutucu Gazlar	Kyoto protokol - standart, R410A	0.25	kg	2088.0	kgCO2 e/kg	0.53	DEFRA, 2017
TOPLAM						64.96	



Other Indirect Greenhouse Gas Emissions

Emission Scope	Emission Source	Consumption Amount	Unit	Emission Factor	Unit	Carbon Footprint tons CO2 equivalent	Emission Factor Reference
Ulaşım	Staff Transportation	54710.0	km	0.209	kgCO2 e/km	11.44	CO2 Emission Standards for Passenger Cars-2019
Flight	Flight	3068.42	km	0.1529	kgCO2 e/km	0.94	DEFRA, 2021
Flight	Flight	355.62	km	0.1529	kgCO2 e/km	0.55	DEFRA, 2021
Flight	Flight	322.81	km	0.1529	kgCO2 e/km	0.1	DEFRA, 2021
Flight	Flight	2169.75	km	0.1529	kgCO2 e/km	1.33	DEFRA, 2021
Water Consumption	Water Consumption	4024.0	m3	0.344	kgCO2 e/m3	1.39	DEFRA, 2020
Waste Disposal	Tekstil/Giyim-Yakma	10700.0	kg	0.0213	kgCO2 e/kg	0.23	DEFRA, 2020
Waste Disposal	Industrial Wastes-Düzenli Depolama	10149.0	kg	0.4581	kgCO2 e/kg	4.66	DEFRA, 2020
Waste Disposal	Diğer Atıklar-Düzenli Depolama	31.0	kg	1.0418	kgCO2 e/kg	0.04	DEFRA, 2020
Waste Disposal	Tıbbi Atıklar-Düzenli Depolama	1603.0	kg	0.4581	kgCO2 e/kg	0.74	DEFRA, 2020
Waste Disposal	Plastik (Karışık)-Geri Dönüşüm	1264.0	kg	0.0213	kgCO2 e/kg	0.03	DEFRA, 2020
Waste Disposal	Kağıt (Karışık)-Geri Dönüşüm	632.0	kg	0.0213	kgCO2 e/kg	0.02	DEFRA, 2020
TOPLAM						21.47	


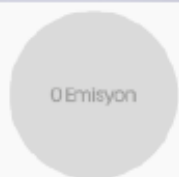



2021 Ekoteks


CARBON FOOTPRINT REPORT

This Report represents scope 1-2-3 emission results and carbon intensity values.

COMPANY INFORMATION	LOCATION INFORMATION
 <p>Name : Ekoteks Sector : Diğer City :</p>	 <p>Location : Ekoteks Laboratory and Inspection Services Inc. Industry Type : Commercial City : İstanbul</p>

RESULTS		
SCOPE 1 DIRECT GHG EMISSIONS	SCOPE 2 ENERGY INDIRECT GHG EMISSIONS	SCOPE 3 OTHER INDIRECT GHG EMISSIONS
 <p>Combustion: 0 ton CO₂ (0%) Transportation: 64.43 ton CO₂ (99.2%) Cooler Gas: 0.53 ton CO₂ (0.9%) Other: 0 ton CO₂ (0%)</p>	 <p>Electricity: 0 ton CO₂ (0%) Heat and Steam: 0 ton CO₂ (0%)</p>	 <p>Transportation: 14.36 ton CO₂ (66.9%) Water Consumption: 1.39 ton CO₂ (6.5%) Waste Disposal: 5.73 ton CO₂ (26.7%)</p>

TOTAL EMISSIONS:
86.43 ton CO₂

EMISSION SUMMARY	PERFORMANCE
 <p>Scope 1: 64.96 ton CO₂ 75.2% Scope 2: 0 ton CO₂ 0% Scope 3: 21.47 ton CO₂ 24.9%</p>	<p>CO₂ eq / Income: -</p> <p>CO₂ eq / Personnel: 1.167973</p> <p>CO₂ eq / Output: -</p>



TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory,

EKOTEKS LABORATUVAR VE GÖZETİM HİZMETLERİ A. Ş.
Deney Laboratuvarı

Firuzköy Bulvarı No:29 Esenyurt Avcılar 34325 ISTANBUL / TURKEY

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by **TURKAK**.

Accreditation Number : AB-0583-T

Accreditation Date : 25 July 2012

Revision Date / Number : 11 January 2022 / 013

This certificate shall remain in force until **23 November 2024**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.

G. Banu MÜDERRİSOĞLU
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Secretary General

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.



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