İHKİB
İSTANBUL HAZIR GİYİM VE KONFEKSİYON İHRACATÇILARI BİRLİĞİ

LABORATORY, INSPECTION AND RESEARCH & DEVELOPMENT CENTER

EKOTEKS
LABORATORY AND INSPECTION SERVICES INC.

2020
Corporate Carbon Footprint Report

EKOTEKS
LABORATORY AND INSPECTION SERVICES INC.

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 2020.

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).

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 (CO2e) = (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	$\boldsymbol{EF\ (kWh\ olarak)} = \frac{Yakıtın\ default\ içeriği\ \frac{kg}{Tj}\ olarak}{277777{,}78\ kWh/TJ}$
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	$\boldsymbol{EF\ (kg\ olarak)}$
Mobil Yanma - Deniz	IPCC (2006), Vol 2, Chapter 3, Tablo 3.5.2 ve Tablo 3.5.3	$= \frac{(Yakıtın\ Default\ EF\ \frac{kg}{Tj}\ olarak\ ) \times (NCV\ \frac{Tj}{Gg}\ olarak)}{1000000 kg/Gg}$
CO2 equivalents	$CO2e = \big(CO2 \times GWP(CO2)\big) + \big(CH4 \times GWP(CH4)\big) + (N20\ X\ GWP(N20)$	
Electricity EF:	Firma	
Refrigerants GWPs:	DEFRA, 2021	
Net Calorific Value (NCV):	IPCC 2006 Vol 2, Chapter 1 Table 1.2	

GHG Emissions							
Direct Greenhouse Gas Emission							
Emission Scope	**Emisyon Source**	**Consuption Amount**	**Unit**	**Emission Factor**	**Unit**	**Carbon Footprint ton CO2 equivalent**	Emission Factors Reference
Constant Burning	Natural Gas	251887.27	kWh	0.2021	kgCO2 e/kWh	50.93	IPCC (2006), Vol 2, Chapter 2, Tablo 2.3
Constant Burning	Natural Gas	587895.88	kWh	0.2021	kgCO2 e/kWh	118.85	IPCC (2006), Vol 2, Chapter 2, Tablo 2.3
Mobile Burning (On Road)	Diesel Consumption	15797.92	kg	3.2404	kgCO2 e/kg	51.2	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Mobile Burning (On Road)	Diesel Consumption	3884.21	kg	3.2404	kgCO2 e/kg	12.59	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Mobile Burning (On Road)	Diesel Consumption	6782.65	kg	3.2404	kgCO2 e/kg	21.98	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Mobile Burning (On Road)	Motor Gasoline — Oxidation Catalyst	2267.8	kg	3.2032	kgCO2 e/kg	7.27	IPCC (2006), Vol 2, Chapter 3, Tablo 3.2.1 ve Tablo 3.2.2
Mobile Burning (Off Road)	Benzin - 4 zamanlı	418.82	kg	3.1517	kgCO2 e/kg	1.33	IPCC (2006), Vol 2, Chapter 3, Tablo 3.3.1
Refrigerant gases	Kyoto protokol - standart, R410A	0.25	kg	2088.0	kgCO2 e/kg	0.53	DEFRA, 2021
					TOTAL	264.68	
Energy İndirect Greenhouse Gas Emission							
Emission Scope	Emisyon Source	Consumption Amount	Unit	Emission Factor	Unit	Carbon Footprint ton CO2 equivalent	Emission Factors Reference
Electricity	Company Specific	1059891.0	kWh	0.645	kgCO2 e/kWh	683.63	
Electricity	Company Specific	453910.4	kWh	0.645	kgCO2 e/kWh	292.78	
Electricity	Company Specific	557203.04	kWh	0.0	kgCO2 e/kWh	0.0	
					TOTAL	**976.41**	

Other Indirect Greenhouse Gas Emissions							
Emission Coverage	**Emission Source**	**Consumption Amount**	**Unit**	**Emission Factor**	**Unit**	**Carbon Footprint ton CO2 equivalent**	**Emission Factors Reference**
Transport	Personel Servisleri(Euro 6)	49872.0	km	0.262	kgCO2e/ km	13.07	Euro 6
Transport	Flight	101381.45	km	0.1299	kgCO2e/ km	13.18	Ecoinvent v3.2
Transport	Personel Servisleri(Euro 6)	63489.74	km	0.2619	kgCO2e/ km	16.64	Euro 6
Transport	Flight	1059947.02	km	0.1299	kgCO2e/ km	137.8	Ecoinvent v3.2
Water Consumption	Water Consumption	3754.0	m3	0.344	kgCO2e/ m3	1.3	DEFRA, 2020
Waste Disposal	Evsel Atık (organik olmayan)-Geri Dönüşüm	1155.0	kg	0.0213	kgCO2e/ kg	0.03	DEFRA, 2021
Waste Disposal	Diğer Atıklar-Düzenli Depolama	2.0	kg	1.0418	kgCO2e/ kg	0.01	DEFRA, 2021
Waste Disposal	Industrial Wastes -Düzenli Depolama	7551.0	kg	0.467	kgCO2e/ kg	3.53	DEFRA, 2021
Waste Disposal	Tıbbi Atıklar-Düzenli Depolama	1626.0	kg	0.467	kgCO2e/ kg	0.76	DEFRA, 2021
Waste Disposal	Tekstil/Giyim-Yakma	13450.0	kg	0.0213	kgCO2e/ kg	0.29	DEFRA, 2021
					TOTAL	**186.60999999999999**	

EKOTEKS
LABORATORY AND INSPECTION SERVICES INC.

2020 Ekoteks

CARBON FOOTPRINT REPORT

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

COMPANY INFORMATION

Name : Ekoteks
Sector : Diğer
City :

LOCATION INFORMATION

Location : All Locations
Industry Type :
City :

RESULTS

SCOPE 1 | DIRECT GHG EMISSIONS

- Combustion: 169.78 ton CO_2 (64.2%)
- Transportation: 94.22 ton CO_2 (35.7%)
- Cooler Gas: 0.53 ton CO_2 (0.3%)
- Other: 0 ton CO_2 (0%)

SCOPE 2 | ENERGY INDIRECT GHG EMISSIONS

- Electricity: 976.41 ton CO_2 (100.0%)
- Heat and Steam: 0 ton CO_2 (0%)

SCOPE 3 | OTHER INDIRECT GHG EMISSIONS

- Transportation: 180.69 ton CO_2 (96.9%)
- Water Consumption: 1.3 ton CO_2 (0.7%)
- Waste Disposal: 4.62 ton CO_2 (2.5%)

TOTAL EMISSIONS:

1427.55 ton CO_2

EMISSION SUMMARY

- **Scope 1:** 264.53 ton CO_2 18.6%
- **Scope 2:** 976.41 ton CO_2 68.4%
- **Scope 3:** 186.61 ton CO_2 13.1%

PERFORMANCE

CO_2eq / Income:	0.0141342
CO_2eq / Personnel:	5.4279468
CO_2eq / Output:	-

Co2nnectorPro

iHKiB
İSTANBUL HAZIR GİYİM VE KONFEKSİYON İHRACATÇILARI BİRLİĞİ

EKOTEKS

LABORATORY AND INSPECTION SERVICES INC.

Esenyurt Firüzköy Bulvarı No:29
P.K: 34320 Avcılar - İstanbul / Türkiye

/ekotekslab

/ekotekslab

info@ekoteks.com

/Ekoteks Laboratuvar

/ekoteks

www.ekoteks.com