DERLÜKS Holding 2021 Carbon Footprint Report

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1. Introduction

This report provides DERLÜKS Yatırım Holding A.Ş. (from now on referred to as Derlüks Holding) with a detailed account of the carbon footprint of the Group's head office operations in the Zeytinburnu district of İstanbul City together with the Group's head office, Emiliano Zapata Deri Sanayi Ticaret A.Ş., Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş. and Toprak Yenilenebilir Enerji Sanayi Ticaret A.Ş. DERLÜKS Yatırım Holding A.Ş. have commissioned Life Enerji, which provides consultancy services, to calculate the greenhouse gas (GHG) emissions generated from Holding's internal operations following a review of internal and external documentation, interviews with key personnel and interrogation of source data, resulting in the production of this report.

All data collected and analysed in this report have been created in line with the principles of conformity, integrity, consistency, transparency and accuracy of the World Resources Institute (WRI) Greenhouse Gas Protocol (GHG), the most widely used international carbon calculation methodology. The GHG Protocol is recognised as the most commonly used global calculation tool for government and business leaders to understand, measure and manage their greenhouse gas emissions. It is an international standard used by many organisations and is considered the best available practice.

Derlüks Holding's Carbon Footprint Account covers the period between January 1, 2021, and August 31, 2021, and includes direct, energy indirect and other indirect emissions, including Scope 1, Scope 2 and Scope 3. This study covers emissions from electricity use in facilities, natural gas use for heating, employee commuting, product supply chain, waste generation and water usage, work-related hotel accommodation, paper consumption, owned vehicles and business travel.

Table 1: Performance summary for 2021

Year	Total Emissions	Total Employees	Emission intensity per employee
2021	**485.18 tCO_2**	**107**	**4.53 tCO_2**

2. Company Introduction – Derlüks Yatırım Holding A.Ş.

Derlüks Yatırım Holding A.Ş. was established in 2002. The subsidiaries of Derlüks Yatırım Holding operate in 3 main sectors including Emiliano Zapata Deri Sanayi Ticaret A.Ş. (Zapata Deri), Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş. (Vizyon Pazarlama) and Toprak Yenilenebilir Enerji Sanayi Ticaret A.Ş. (Toprak Energy).

Emiliano Zapata Deri Sanayi Ticaret A.Ş. (Zapata Deri), which joined Derlüks Holding in 2008, produces men's leather clothing. Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş., which joined Derlüks Holding in 2012, operates in food distribution sector. Toprak Yenilenebilir Enerji Sanayi Ticaret A.Ş. which joined Derlüks Holding in 2020, has an operational focus on renewable energy production.

The main activity of Emiliano Zapata Deri Sanayi Ticaret A.Ş. is to manufacture, buy, sell, import and export all kinds of natural leather, textile, knitwear, weaving products for men, women and children, clothing accessories products as well as trading, importing and exporting all kinds of leather and textile raw materials, leather and textile chemicals, fabric, natural leather, artificial leather, yarn and apparel materials.

The main activities of Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş. include wholesale, selling, market, and distributing water, soft drinks, alcoholic and non-alcoholic beverages and food products.

Toprak Yenilenebilir Enerji San. Tic. A.Ş.'s main field of activity is to establish and operate a production facility to convert energy resources to electrical energy in production facilities according to the legislation and to sell the electricity produced.

Derlüks Holding's commitment to measure and manage its footprint is consistent with its environmental and social policies, principles and standards for the projects it finances. Through understanding its carbon footprint, Derlüks Holding can identify and implement measures to reduce emissions.

3. Methodology Used

3.1. Organisational and operational boundary

The organisational boundary defines the businesses and operations that constitute the company for accounting and reporting greenhouse gas emissions. Companies can choose to report either the emissions from operations over which they have financial or operational control (the control approach) or from operations according to their share of equity in operation (the equity share approach).

Derlüks Holding's carbon footprint uses the operational control approach. As such, it includes the Holding's head office operations in the Zeytinburnu district of İstanbul, where it operates several office facilities together with Emiliano Zapata Deri Sanayi Ticaret A.Ş., Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş. and Toprak Yenilenebilir Enerji San. Tic. A.Ş.

Table 2: Companies belonging to Derlüks Holding A.Ş.

No	Company Name	Company Address
1	Derlüks Yatırım Holding A.Ş.	Kazlıçeşme Mah., Demirhane Cad., Hacı Reşit Bey Sok. No:11 34020 Zeytinburnu İstanbul
2	Emiliano Zapata Deri Sanayi Ticaret A.Ş.	Kazlıçeşme Mah., Demirhane Cad., Hacı Reşit Bey Sok. No:11 34020 Zeytinburnu İstanbul
3	Vizyon Global Tüketim Malzemeleri Pazarlama Sanayi Ticaret A.Ş.	Yalçın Koreş Cad. Arif Ağa Sok. No:29 Yenibosna/İstanbul
4	Toprak Yenilenebilir Enerji San. Tic. A.Ş. Toprak Yenilenebilir Enerji San. Tic. A.Ş.	Ağrı, Merkez İlçesi, Suçatağı Köyü, Eski Köy Mevki; Niğde, Merkez İlçesi, Aktaş Köyü

3.2. Operational Boundary

Defining the operational boundary involves identifying emissions associated with its operations, categorising them as direct or indirect emissions. Companies choose the scope of accounting and reporting for indirect emissions.

3.2.1. Direct GHG emissions:

- Scope 1: emissions from sources owned or controlled by the reporting entity (i.e. any owned or controlled activities that release emissions straight into the atmosphere).

3.2.2. Indirect GHG emissions:

Indirect emissions result from an organisation's activities but are from sources owned or controlled by another entity. These are classified as:

- Scope 2: Indirect GHG emissions from purchased electricity, heat, steam or cooling.

- Scope 3: Indirect GHG emissions from other activities. A detailed Standard exists that sets out the rules for 15 categories of Scope 3 emissions[1].

[1] For more details, see Figure 2. Derlüks Holding's organisational and operational boundary below

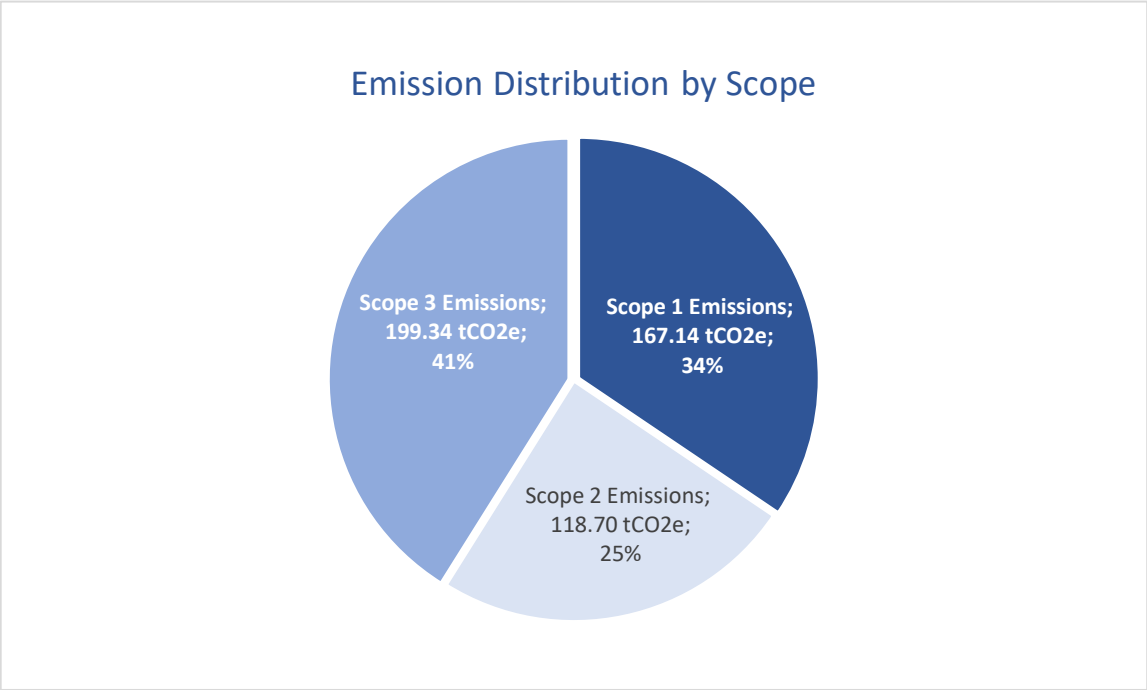

Figure 1: Emission Distribution by Scope

The operational boundary for Derlüks Holding's carbon footprint report includes the following:

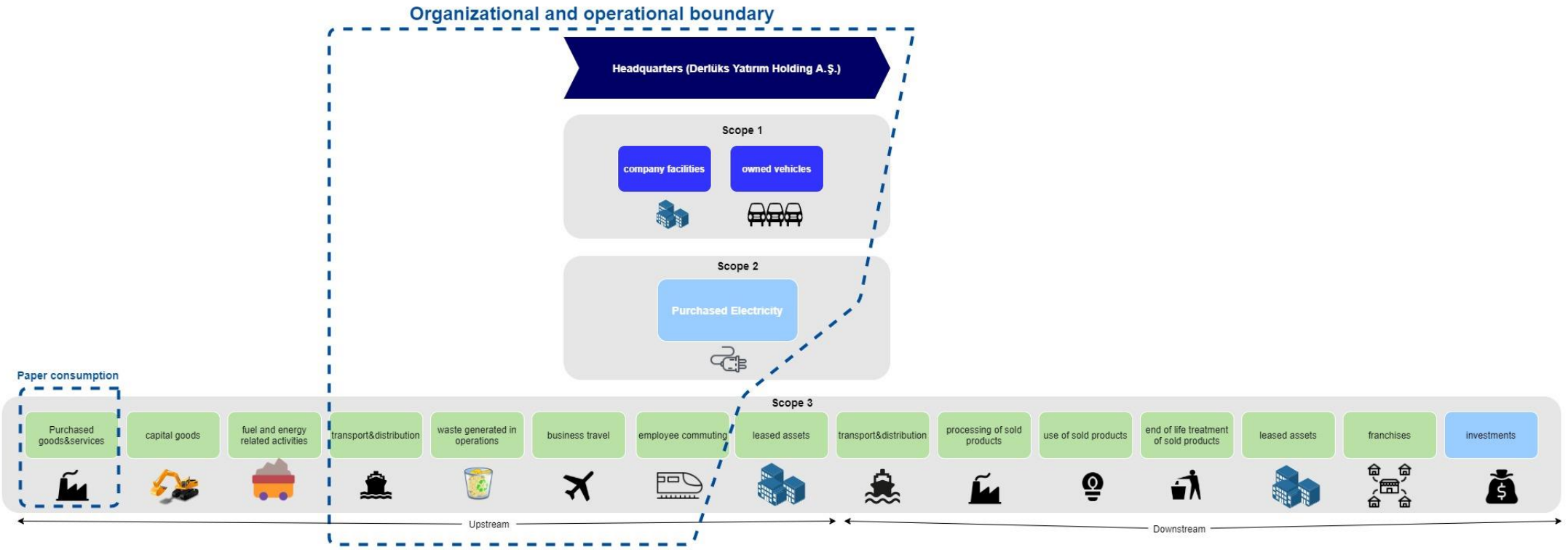

Figure 2: Derlüks Holding's organisational and operational boundary

Scope 1: Natural gas combusted in boilers to heat Holding's buildings and transport fuel used to run vehicles owned by the Holding.
Scope 2: Purchased grid electricity (lighting, air conditioning, small power, elevators, etc.).
Scope 3: Transport fuel and power used by air and rail transport operators for business travel, by employee-owned vehicles for commuting to and from work; emissions from water consumed and waste generated by the Holding; emissions from product supply chain activities; and emissions generated in the production of office paper purchased by the Holding.

3.3. Reporting Period

The Reporting Period covers January 1 2021, to August 31 2021.

3.4. Data Collection and Calculation Methodology

To calculate the GHG emissions inventory, all relevant GHG emissions sources are identified, activity data from the relevant services is collected, and the relevant emissions factors are applied. Thus, emissions from each source were calculated. This data was then aggregated to create Derlüks Holding's total carbon footprint. The following sections set out the details of the process followed.

Figure 3: Calculation Methodology

3.4.1. Emissions sources and activity data

Activity data is a quantitative measure of activity that results in GHG emissions. The table below shows the activity data provided by Derlüks Holding for each emissions source. It is mainly primary data, e.g. the amount of natural gas used for heating or the distance travelled by air, except waste generation data, which is based on the average number of Tuik statistics.

Table 3: 2021 Activity Data for Derlüks Holding

Scope	Emission Sources	Units	Activity Data	Data Quality
Scope 1	Owned Vehicles	Litre & km	Fuel Purchase Receipts	Primary Data
	Natural gas for heating	kWh	Monthly Natural Gas Bills	Primary Data
Scope2	Purchased electricity	kWh	Monthly Electricity Bills	Primary Data
Scope 3	Business travel – Air	Passenger - km	flight tickets	Primary Data
	Employee commuting	km	Surveys conducted by the employee	Primary Data
	Hotel Accommodations	Overnight stays	Hotel Bills	Primary Data
	Paper consumption	number	Purchase Receipts	Primary Data
	Water consumption	m^3	Monthly Water Consumption Bills	Primary Data
	Waste Generation*	kg	The average amount of mixed municipal waste produced per capita was accepted as 0.88 kg[2].	Secondary Data

[2] **Türkiye için üretilen kişi başı atık miktarı 1.16 kg olup, Firma ile yürütülen envanter çalışması sırasında elde edilen bilgilere göre ofis içi üretilen atık miktarı 0.88 kg olarak varsayılmıştır.* https://data.tuik.gov.tr/Bulten/Index?p=Belediye-Atik-Istatistikleri-2018-30666

3.4.2. Emission Factors

Emissions factors are calculated ratios relating GHG emissions to a measure of activity at an emissions source. They are used to convert activity data to carbon emissions. The emissions factors represent carbon dioxide equivalent (CO2e). They convert the impact of each of the six greenhouse gases covered by the Kyoto Protocol — carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF6) – into a standard unit of tonnes of CO2e based on their Global Warming Potential (GWP). The GWP measures how much heat the respective gas retains in the atmosphere over a given time horizon, based on the Intergovernmental Panel on Climate Change (IPCC) 100-years GWP coefficients. For all scope three fuel emissions factors, emissions factors include direct combustion and upstream emissions of producing fuels (mining, excavation, and transportation).

Table 4: Emission Factors Used and References

Emission Sources	Emission Factors Used	Emission Factor Units	References
Owned Vehicles	Gasoline : **0.0023999** Diesel : **0.0027119**	tCO_2e/litre	VFU Kennzahlen Tool Version 2018: Kennzahlen zur betrieblichen Umweltleistung
Natural Gas For Heating	**0.0002099**	tCO_2e/kWh	https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf
Purchased Electricity	**0.0006993**	tCO_2e/kWh	https://enerjiapi.enerji.gov.tr/Media/Dizin/ETKB/Duyurular//0c6b62ea-bf2f-4fea-b9b3-28bc6f48ddf2_Bilgi_Formu_-_Web_Sitesi.pdf
Business Travel - Air	**0.0001530**	tCO_2e/pkm	Defra Conversion Factors; https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020
Employee Commuting	**0.0000273**	tCO_2e/pkm	VFU Kennzahlen Tool Version 2018: Kennzahlen zur betrieblichen Umweltleistung
Hotel Accommodations	**0.016700**	tCO_2e/night	Öko-Institut 2001: Umwelt und Tourismus Durchschnitt 1999
Paper Consumption	**1.095455**	tCO_2e/tpaper	VFU Kennzahlen Tool Version 2018: Kennzahlen zur betrieblichen Umweltleistung;
Water Consumption	**0.708000**	$kgCO_2e/m^3$	Defra Conversion Factors, 2020, water treatment, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020
Waste Generation	Landfill: **8.9344** Metals&Plastics: **1,041.8361** Batteries: **85.4344** Clothing: **444.9759** Mixed Municipal Waste: **437.3719** Industrial Waste: **458.1763** Small electrical equipment: **8.9864**	$kgCO_2e$/ton	Defra Conversion Factors, 2020, waste disposal, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

4. Results of the Carbon Footprint Study

4.1. Performance summary for 2021

Year	Total Emissions	Total Employees	Emission intensity per employee
2021	**485.18 tCO_2**	**107**	**4.53 tCO_2**

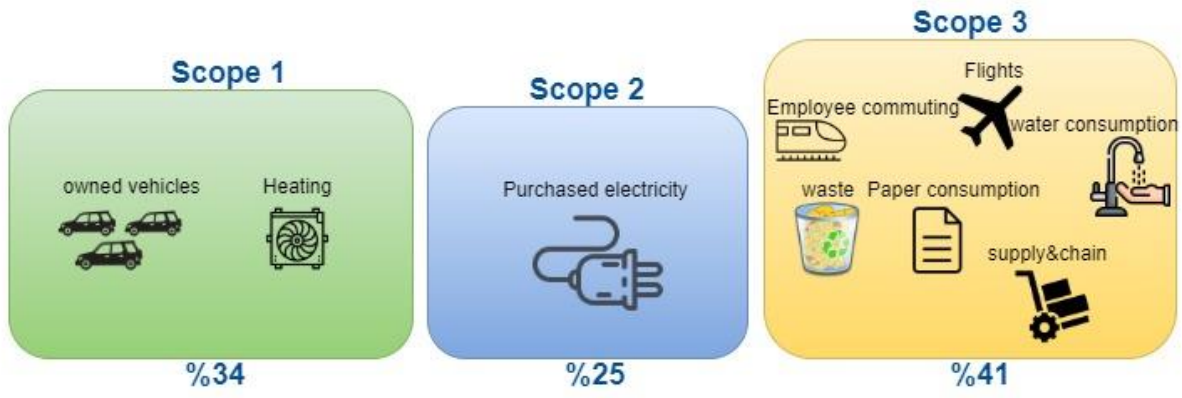

Figure 4: Emission Distribution by Scope

In 2021, the total emission amount due to Derlüks Holding's head office and its three other subsidiaries' activities were calculated as 485.18 tCO2, and the emission intensity per employee in 2021 with a total of 107 employees was found to be 4.53 tCO2. Scope 1 emissions (direct emissions) are determined as 167.14 tCO2, Scope 2 emissions (energy indirect emissions) as 118.70 tCO2 and Scope 3 emissions (other indirect emissions) as 199.34 tCO2. Emission sources included in the inventory are as follows; electricity consumed in office buildings, heating, vehicles owned, work-related travels (flights, etc.), paper consumption, supply chain, employee commuting, business-related hotel accommodation, water used, and waste produced.

The results of the 2021 GHG inventory show that the vehicles owned by the company are the most critical emission source. Emissions from the cars owned by the company correspond to 152.85 tCO2, which is equivalent to approximately 32% of the total greenhouse gas emissions. The other two factors responsible for a significant share of the total greenhouse gas emissions arising from Derlüks Holding's operations are the emissions originating from the supply chain and the electricity used. These two emission sources represent approximately 31% of the total with 149.18 tCO2e and about 25% of the total with 118.70 tCO2, respectively.

In this study, although emissions are specified separately as Scope 1, Scope 2 and Scope 3, they are also evaluated under two different categories as building-related and mobile emissions. Emissions originating from electricity consumption, natural gas consumption for heating purposes, paper consumption, produced waste and consumed water are included within the scope of building-related emissions. Within the range of mobile emissions, emissions originating from business-related flights, supply chain, employee commuting, hotel accommodation and owned vehicles are differentiated. Building-related emissions account for approximately 29% of total emissions, while mobile emissions account for 71% of total emissions.

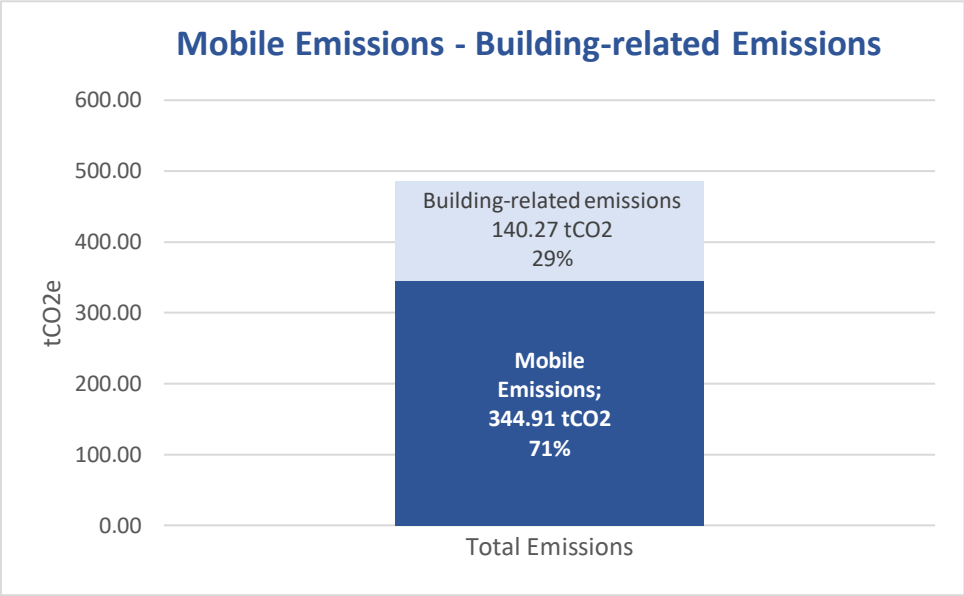

Figure 5: Mobile Emissions – Building-related Emissions

4.2. Building-related Emissions

Table 5: Emissions from buildings and consumption amounts in 2021

	Consumption Amount	Unit	Total Emissions (tCO_2)
Electricity consumption	**153,336.37**	**kWh**	**118.70**
Natural gas consumption	**68,079.14**	**kWh**	**14.29**
Paper consumption	**75,200**	**number**	**0.39**
Waste generation	**14,403.84**	**kg**	**6.30**
Water consumption	**838**	**m^3**	**0.59**

Buildings' electricity consumption is the largest source of emissions and also represents the company's largest influence area. Electricity consumption corresponds to 24% of total emissions and 85% of building-related emissions. The vast majority of emissions from electricity consumption can be avoided through a renewable energy supply.

Emissions from heating, which have a share of 3% based on total emissions and 10% based on emissions from buildings, have the second-largest share in building-related emissions after electricity consumption. Emissions from water consumption and waste generation were the third-largest source of emissions related to facilities, with 6.89 tCO2e in 2021. The low natural gas and water consumption and waste generation are due to the ongoing pandemic conditions in 2021. Emissions from paper consumption are relatively small among other building-related emission sources, accounting for only 0.1% of total emissions and 0.3% of building-related emissions.

Additionally, to reduce electricity consumption, attempts can be made to optimise the operating program settings of air conditioners (e.g. blocking the cooling option operating outside of essential

working hours or preventing the air conditioning system from starting automatically in the early morning hours). Expanding the installation of LED lighting to replace halogen lamps, improvements to the pump arrangement in the cooling system can contribute to further electricity savings.

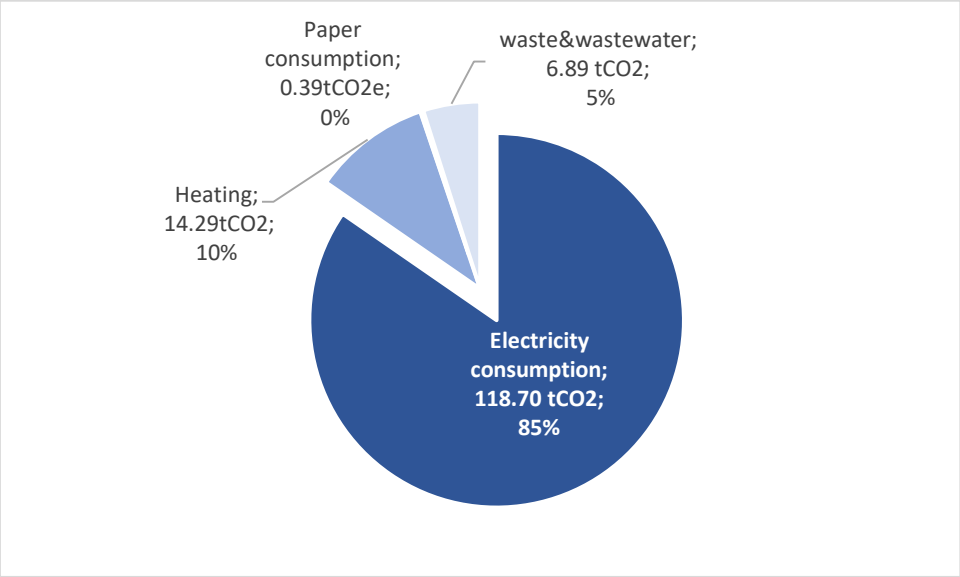

Figure 6: Breakdown of Building related emissions

4.3. Mobile Emissions

Table 6: Mobile Emissions and Total Distance Travelled for 2021

2021		Total distance Travelled (km)	Total Emissions (tCO_2)
Air transportation		13,511	2.07
Road transportation	Employee commuting	1,074	40.44
	Owned vehicles	N/A	152.85
Hotel accommodations		N/A	0.35

Business travels are an inevitable part of the company, as it operates in many different provinces of Turkey. While mobile emissions are responsible for 71% of total emissions, emissions from owned vehicles have the largest share in mobile emissions with 44%. After emissions from owned vehicles, the product supply chain emissions have the second-largest percentage at 43%. Emissions from employee commuting were determined as the third-largest emission source among mobile emissions, with a share of 12%.

To increase the transparency of the analysis, not only the fuels consumed but also the distance travelled in both diesel and gasoline vehicles were recorded. To reduce mobile emissions in the coming years, the company may consider travel alternatives, including teleconferencing and video conferencing, as long as they are compatible with business interests. In addition, company employees can be encouraged to use sustainable transportation for their daily commute through awareness-raising initiatives.

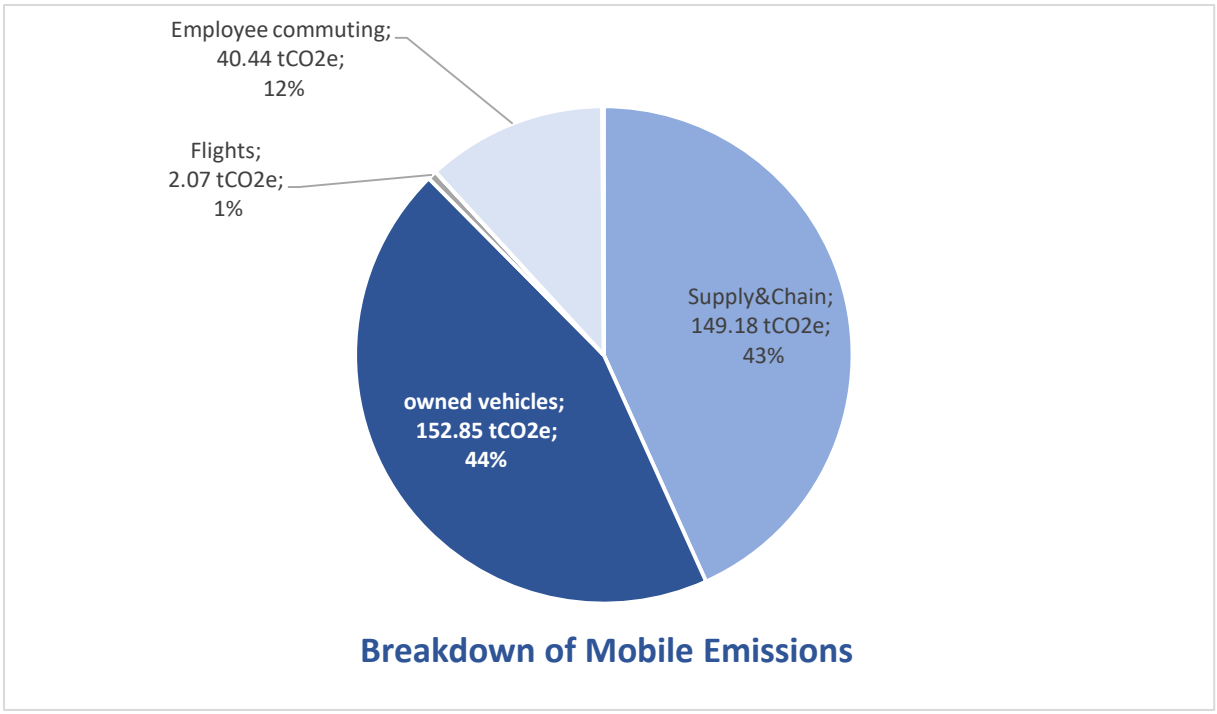

Figure 7: Breakdown of Mobile Emissions

5. Life Enerji Opinion Statement

Life Enerji's statement provides Derlüks Holding with a third-party assessment of the quality and reliability of the Holding's carbon footprint data for the reporting period January 1 2021, to August 31 2021. It does not represent an independent third-party assurance of the Holding's management approach to sustainability.

Derlüks Holding has commissioned life Enerji to calculate the carbon footprint of all head office locations for its 2021 Carbon Footprint Report. Through this engagement, Life Enerji has assured Derlüks Holding that the reported carbon footprint represents the business and that the data presented is credible and compliant with the appropriate standards and industry practices. Data has been collected and calculated following the WRI GHG Protocol principles of relevance, completeness, consistency, transparency and accuracy.

Life Enerji's work has included interviews with key Derlüks Holding personnel, internal and external documentation review, and interrogation of source data and data collection systems.

Life Enerji has concluded the points listed below:

Relevance

Life Enerji has ensured the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users, both internal and external to the company.

Completeness

Derlüks Holding uses the operational control approach to define its organisational boundary. Derlüks Holding calculates total direct scope 1, 2 and significant scope 3 emissions, including upstream emissions for several scope 3 emissions sources. Reported environmental data covers all employees and entities that meet the criteria of being subject to control or significant influence of the reporting organisation.

Consistency

The inventory enables the meaningful comparison of information on greenhouse gases. Methodologies have been used, which allow comparisons of emission values calculated over time. Any revisions or improvements to the methods used and the impact of such changes are clearly noted in this report.

Transparency

Where relevant, Life Enerji has included appropriate references to the accounting and calculation methodologies, assumptions and re-calculations performed.

Accuracy

To the best of our knowledge, all data presented within this report is considered accurate within the limits of the quality and completeness of the data provided by Derlüks Yatırım Holding.

Although not mandatory, verification of this Corporate Carbon Footprint Report is strongly recommended to be done by 3rd parties.

Derlüks Holding may continue to carry out various technical optimisations to minimise electricity consumption and energy wastage in existing buildings.

These optimisations can include:

1. Regulation and distribution of heating and cooling systems (adaptation of consumption to demand in real-time);
2. Lighting management;
3. Ventilation systems management;
4. Targeting 'carbon neutrality for electricity used in companies and purchasing 100% renewable energy (hydroelectric, biomass and wind) from the electricity supplier.
5. Generated waste can be sorted in-house to the extent possible so that it can ultimately be recycled.

6. Exclusions

Since there is no invoice and receipt for the waste streams required to calculate the emissions from domestic waste production, the daily amount of waste produced per person is considered 0.88 kg, and the emissions from this waste stream are calculated accordingly. According to the latest information published by TUIK, the average amount of municipal waste per person produced is 1.28 kg; since there is no kitchen in the facilities subject to the study and considering the ongoing pandemic conditions in 2021 was taken as 0.88 kg. In addition, construction waste is excluded from the calculations. Emissions from this waste stream are likely to be very small, as total waste emissions account for 4% of the total carbon footprint. In the light of the ongoing pandemic conditions in 2021, the water consumption and the resulting emissions were very low. Derlüks Yatırım Holding is committed to continuously improving the data quality of reported data whenever possible and continues to improve the methodology applied to improve the scope and transparency of the analysis. It is highly recommended to carry out this study in the coming years, taking 2021 as the base year in terms of comparative emission analysis and determination of reduction opportunities.

In this study, the number of permanent staff was used to calculate specific rates. In some cases, including interns or contractors in calculating emissions from waste disposal, paper and water consumption can result in lower emission intensities. For this reason, only the number of permanent staff is used for consistency.