



Sunrise Design Textile

ISO 14064-1 GHG Inventory Report

For Reporting PERIOD: 2021

Prepared in accordance with part 9.3.1 of ISO 14064-1

Prepared By: Orbit Consulting

Dated: 20.06.2022

TABLE OF CONTENTS

TABLE OF CONTENTS	2
EXECUTIVE SUMMARY	3
INTRODUCTION	4
1. ABOUT THIS REPORT	6
1.1 OBJECTIVE.....	6
1.2 CATEGORY	6
1.3 REPORTING ACCORDING TO ISO 14064-1.....	7
1.4 RESPONSIBLES	9
2. METHODOLOGY	10
2.1 GHG INVENTORY BOUNDARIES	10
2.1.1 ORGANIZATIONAL BOUNDARIES	10
2.1.2 REPORTING BOUNDARIES.....	10
2.2 EMISSION FACTORS AND OTHER VALUES USED FOR CALCULATION	11
2.3 TIER CONCEPT.....	11
2.4 QUANTIFICATION AND CALCULATION OF GHG EMISSIONS	12
3. GHG EMISSION INVENTORY	13
3.1 REPORTING YEAR RESULTS	13
4. UNCERTAINTIES	13
INVENTORY UNCERTAINTIES	13
5. APPENDICES	15
APPENDIX 1 – CALORIFIC VALUES USED IN CALCULATIONS.....	15
APPENDIX 2 – GLOBAL WARMING POTENTIAL VALUES.....	15
APPENDIX 3 – EMISSION FACTORS.....	15
APPENDIX 4 – EMISSIONS INVENTORY BY BUSINESS UNIT FOR 2021	16
APPENDIX 5 – EMISSIONS INVENTORY BY ACTIVITY FOR 2021	17
6. REFERENCES:	20

EXECUTIVE SUMMARY

This is the annual greenhouse gas (GHG) emissions inventory report for the Sunrise Design Textile. Throughout this document “emissions” means “GHG emissions”. The inventory is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to the organization’s operations within the declared boundary and category for the specified reporting period.

The reporting processes and emissions classifications in this report are consistent with international protocols and standards. This report has been written in accordance with Part 9.3.1 of the requirements of International Standards Organisation (ISO) 14064-1 standard. Where applicable discretionary information has been disclosed consistent with section 9.3.2 of the Standard. The inventory has also been prepared in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (the GHG Protocol).

The total of Sunrise Design Textile GHG emissions for 2021 is 182.08 tons of CO₂-e. GHG offset amount by financial instruments for the same year is 7.988ton tons of CO₂-e. GHG emission amount out of offset by financial instruments is 174.092ton tons of CO₂-e.

A breakdown by category of the reporting year emissions and comparison to the base year can be seen in the below table.

Emissions (tons CO ₂ -e)	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Total	Offset
2021 Emissions	166.266 tons	15.61 tons	-	0.204 tons	-	-	182.08 tons	7.988 tons

INTRODUCTION

Climate change has been identified as one of the greatest challenges facing nations, governments, businesses and citizens today and over future decades. Climate change has implications for both human and natural systems and could lead to significant changes in resource use, production and economic activity. In response, international, regional, national and local initiatives are being developed and implemented to limit greenhouse gas (GHG) concentrations in Earth's atmosphere. Such GHG initiatives rely on the quantification, monitoring, reporting and verification of GHG emissions and/or removals, which can be done within the framework of ISO 14064.

ISO 14064-1 specifies principle requirements at the organizational level for quantification and reporting of greenhouse gas (GHG) emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's GHG inventory and it is a tool for greenhouse gas (GHG) limitation and reduction.

ABOUT SUNRISE DESIGN TEXTILE

Sunrise Design Textile founded in 2019 in Istanbul, Turkey. Sunrise Headquarter is based on a 1000m² area in Sultangazi/Istanbul which is a development and main preparation center for production that includes sample room, cutting room, sewing/finishing operations and office. Also, in October 2021, cutting room and fabric warehouse area consisting of 800 m² became operational.

Based on 20 years of Experience, Expertise on Garment and Textile Industry with the goal of Collaboration to provide Fashionable, Qualitative, Competitive and Sustainable products for customers whichever aim to produce and provide the same standards. Sunrise Design Textile, which offers its products and services within the framework of universal sustainability principles, from the first stage to the last stage of the product obtained, observes all the rights of its employees arising from local laws and regulations and gives priority to occupational health. In line with the United Nations Sustainable Development Goals, Sunrise Design Textile works to minimize its carbon footprint and acts with environmental awareness.

Specialized on Womenswear, Menswear & Kidswear product variety. Also, it continues to grow by adding qualified personnel to its existing staff structure.

Sunrise is in strategic partnerships in supply chain to process some of the production process and aims to add value to all stakeholders. It attaches importance to the fact that the stakeholders in the supply chain act in line with the universal sustainability principles.

All activities are carried out in accordance with the law with an understanding of honesty, transparency, and zero tolerance.

More information about Sunrise Design Textile: www.sunrisedesigntextile.com

SUNRISE DESIGN TEXTILE ENVIRONMENTAL POLICY

- To carry out the production process and operations in accordance with internationally and locally accepted laws, regulations and standards and to keep up to date.
- Paying attention to environmental impacts and focusing on a clean and sustainable future while maximizing product quality standards.
- Adopting and implementing the United Nations' Sustainable Development Goals. Keeping the relevant actions up to date in line with all these targets.
- Adhering to the European Green Deal.

- Taking into account climate change, annual measurement and reporting of carbon emissions arising from activities, creating and implementing an action plan to reduce carbon emissions.
- To share the amount and report of the annual carbon emission measured with the entire public and stakeholders with the principle of transparency and leanly.
- To create environmental awareness, including customers, suppliers, employees and all relevant stakeholders.
- To develop and keep our environmental management system up to date as a result of our respect and responsibility for the environment.
- Adopting the principle of circular economy, based on reuse and transforming waste into new sources as much as possible.
- Adopting the Zero Waste Target, preventing waste, using resources more efficiently, measuring and minimizing waste generation.

These principles will be announced to the public using communication means and will be open to public opinion.

The Management Board will be a constant follower of the implementation of the Environmental Policy and targets to which it is committed.

1. ABOUT THIS REPORT

1.1 OBJECTIVE

To gain competitive advantage in the market, organizations should determine their impacts on climate change and manage greenhouse gas risks by identifying national and international climate change policies. Organizations that do not calculate greenhouse gas emissions, determine their risks and do not manage them may be subject to legal sanctions in the future with expected changes in legislation. This may end up having significant impacts on both corporate and financial performance.

This report has been prepared for Sunrise Design Textile and carries the below objectives:

- Calculation of the impact of activities on climate change
- Preparing for current and future legal regulations
- Determination of risky and problematic issues in carbon management
- Reporting GHGs in accordance with ISO 14064-1
- Contribution to the development of the Company Carbon Management Plan
- Awareness of employees on climate change, energy efficiency and sustainability issues

This study is expected to generate the following benefits to Sunrise Design Textile

Internal benefits:

- Transparency of the organization's resource consumption, emissions and energy consumption
- Determination of emission reduction potentials
- Increasing in-house awareness
- Strengthening the sustainability vision of Sunrise Design Textile

Extracurricular benefits:

- Strengthening the sustainability vision of the company and forefront the environmental identity
- Being a pioneer in its sector

1.2 CATEGORY

The term of "Category" is used in the ISO 14064-1: 2018 to determine the limits between different types of direct and indirect emissions: Category 1 refers to direct GHG emissions of the reporting company; Category 2 is the reporting company's emissions from the generation of acquired and consumed electricity, steam, heat, or cooling; Category 3 refers to the indirect transportation emissions of the reporting company; Category 4 is the emissions associated with goods and services purchased by the reporting company; Category 5 refers to the emissions associated with the use of products from the reporting company result from products sold by the company during life stages occurring after the company's production process; Category 6 is the indirect emissions of the reporting company that cannot be reported in any other category.

This report includes Category 1 (Direct), Category 2 (Indirect – Imported Energy) , Category 4 (Indirect – Products Used by Company) Greenhouse Gas emissions from Istanbul / Turkey activities between January 2021 and December 2021.

This report has been prepared in accordance with the principles set forth by the International Standards Organization (ISO) for the calculation and reporting of greenhouse gas emissions (Standard 14064-1: 2018).

1.3 REPORTING ACCORDING TO ISO 14064-1

ISO 14064-1 provides detailed information on the principles and requirements for the design, development, management and reporting of greenhouse gas inventories at the enterprise or company level. This standard includes requirements for the determination of greenhouse gas emission limits to improve greenhouse gas management, the calculation of greenhouse gas emissions for an organization, the identification of mitigation measures and the identification of proposals for company specific activities. This standard also includes requirements for inventory analysis, quality management, reporting, internal audit and organizational responsibilities and guidance information for verification activities.

The ISO 14064 Standard has introduced a systematic approach to the management of greenhouse gases. The ISO 14064 Standards Series consists of three parts and each section contains a separate scope.

ISO 14064-1; specifies principles and requirements at the organization level for quantification and reporting of GHG emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's GHG inventory.

ISO 14064-2; specifies principles and requirements and provides guidance at the project level for quantification, monitoring and reporting of activities intended to cause greenhouse gas (GHG) emission reductions or removal enhancements. It includes requirements for planning a GHG project, identifying and selecting GHG sources, sinks and reservoirs relevant to the project and baseline scenario, monitoring, quantifying, documenting and reporting GHG project performance and managing data quality.

ISO 14064-3; specifies requirements for selecting GHG validators/verifiers, establishing the level of assurance, objectives, criteria and scope, determining the validation/verification approach, assessing GHG data, information, information systems and controls, evaluating GHG assertions and preparing validation/verification statements.

The benefits provided by the ISO 14064-1 standard to the firm can be listed as the following:

- Assist organizations to verify greenhouse gas emissions using a standardized approach and principles,
- Provide companies with information to plan and reduce the management of greenhouse gas emissions strategically,
- Ease the process of developing and implementing greenhouse gas reduction projects,
- Provide information that may be needed to participate in voluntary carbon markets,
- Demonstrate consistency, transparency and reliability in the determination, monitoring, reporting and mitigation of greenhouse gas emissions,
- Help establish trust-based relationships with stakeholders.

The greenhouse gas calculation and reporting principles of the ISO 14064-1 Standard is fundamental to ensure that GHG-related information is a true and fair account. The principles of ISO 14064 are the following:

- 1. Relevance:** Select the GHG sources, GHG sinks, GHG reservoirs, data and methodologies appropriate to the needs of the intended user.
- 2. Completeness:** Include all relevant GHG emissions and removals.
- 3. Consistency:** Enable meaningful comparisons in GHG-related information.
- 4. Accuracy:** Reduce bias and uncertainties as far as is practical.

5. Transparency: Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.

1.4 RESPONSIBLES

In preparing this report, the following individuals have been involved in related processes and were responsible for coordinating the reporting of corporate carbon footprint calculations, in line with ISO 14064-1 standard, resulting from the operational activities of Sunrise Design Textile. The data provided by Sunrise Design Textile has been used in the calculations and are based on documented information.

Name of Responsible	Company/Title	Phone	e-mail
İzzet Furkan Yılmaz	Sunrise Design Textile/Proje Koordinatörü	+90 212 595 28 37	izzetfurkany@gmail.com
Hilal Sariali	Sunrise Design Textile/Muhasebe & Finans Sorumlusu	+90 212 595 28 37	hilal@sunrisedesigntextile.com
Hasan Kerim Can	Sunrise Design Textile/İnsan Kaynakları & Sosyal Uygunluk Sorumlusu	+90 212 595 28 37	kerim@sunrisedesigntextile.com
Yasemin Tatar	Orbit Consulting/Sustainability Consultant	+90 212 227 00 16	yasemin@theorbitconsulting.com
Büşra Suiçmez	Orbit Consulting/ Sustainability Consultant	+90 212 227 00 16	busra@theorbitconsulting.com

2. METHODOLOGY

2.1 GHG INVENTORY BOUNDARIES

2.1.1 ORGANIZATIONAL BOUNDARIES

A Equity Share has been adopted when Sunrise Design Textile's greenhouse gas emissions are calculated.

EQUITY SHARE APPROACH

Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.

Locations included in this report are Sunrise Design Textile Headquarter and Branch.

2.1.2 REPORTING BOUNDARIES

Sunrise Design Textile has established and documented its reporting boundaries and identified consistent emissions and removals associated with the Sunrise Design Textile's operations. GHG Inventory categories included in this report are the following: Category 1 - Direct, Category 2 - Indirect - Imported Energy, Category 4 - Indirect - Used Products (Upstream)

Detailed classification of the emissions that are caused by Sunrise Design Textile activities are as follows:

CATEGORY 1 - DIRECT GHG EMISSIONS AND REMOVALS:

Direct GHG emissions occur from sources that are owned or controlled by the company. Classification of direct emissions can be:

- Stationary Combustion (boiler, oven, turbine, heater, burning oven, etc.)
- Mobile Combustion (cars, etc.)
- Process Emissions (emissions from chemical production in owned or controlled process equipment)
- Fugitive Emissions (Fugitives from equipment connections, cooling kettles, air conditioning gases, fire tubes)

For Sunrise Design Textile direct emission sources and activities are identified as the following:

Emission Source / Activity	Detail	Data Source
Category 1 - Direct / Direct Emissions / Fire Extinguishers	CO2	Bills
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles	Gasoline	Bills indicating purchased gasoline amounts
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles	Diesel	Bills indicating purchased diesel amounts
Category 1 - Direct / Stationary Combustion / Space Heating	Natural Gas	Natural gas utility bills

CATEGORY 2 - INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY:

It includes GHG emissions from the generation of purchased electricity, heat or steam consumed by the company.

Sunrise Design Textile 's indirect greenhouse gas emissions activities are identified as the following:

Emission Source / Activity	Detail	Data Source
Category 2 - Indirect - Imported Energy / Electricity Consumption	Purchased Electricity From Grid	Electricity utility bills

CATEGORY 4 – INDIRECT GHG EMISSIONS FROM PRODUCTS USED BY COMPANY:

Category 4 emissions are a consequence of the activities of the company, which are associated with goods and services used by the company, but occur from sources not owned or controlled by the company.

Sunrise Design Textile 's indirect greenhouse gas emissions from products used by the company included in this report are:

Emission Source / Activity	Detail	Data Source
Category 4 - Indirect - Used Products (Upstream) / Water	Water Supply	Water utility bills
Category 4 - Indirect - Used Products (Upstream) / Waste Generated in Operations	Wastewater	Water utility bills

2.2 EMISSION FACTORS AND OTHER VALUES USED FOR CALCULATION

CALORIFIC VALUE: The energy contained in a fuel determined by measuring the heat produced by the complete combustion of a specified quantity of it. This is usually expressed in joules per kilogram. See Appendix 1 for all calorific values used in calculations in this study.

GLOBAL WARMING POTENTIAL (GWP): The emission factors are provided as carbon dioxide (CO₂) equivalents (expressed as CO₂-e). Emissions of greenhouse gases outside of CO₂ are calculated separately and converted to CO₂ equivalents. When this conversion is made, the emission quantities of each greenhouse gas are multiplied by the global warming potentials of that gas. See Appendix 2 for the GWP values used in calculations in this study.

OXIDATION FACTOR: Measure the percentage of carbon that is actually oxidized when combustion occurs. The oxidation factor is used to calculate the amount of the fuel that is contributing to carbon dioxide emissions. The Oxidation Factor is taken as one (1) in all calculations in this report.

EMISSION FACTOR: A representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.

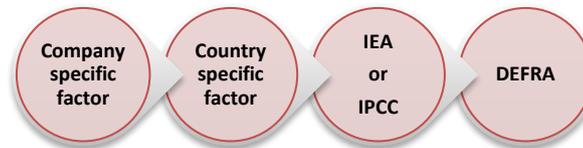
2.3 TIER CONCEPT

The Intergovernmental Panel on Climate Change (IPCC) has classified the methodological approaches in three different Tiers, according to the quantity of information required, and the degree of analytical complexity.

Tier 1 employs the gain-loss method described in the IPCC Guidelines and the default emission factors and other parameters provided by the IPCC. **Tier 2** generally uses the same methodological approach as Tier 1 but applies emission factors and other parameters which are specific to the country. At **Tier 3**, higher-order methods include models and can utilize data to address company specific circumstances. Properly implemented, these methods can provide estimates of greater certainty than lower tiers.

In this report, the “highest tier available” approach is used to reduce uncertainty and error in calculations and to achieve a more accurate result. Thus, emission factors used in this study follow a hierarchical path from most specific known factor to the most generic. For any given activity, if the company has a specific emission factor that it can accurately calculate, that factor is prioritized in the calculations. If no emission factor is specified by

the company, then the country specific factors reported by the country in which the activity takes place is used. If the activity in subject has no country specific factors, then IEA, IPCC or DEFRA published factors are used in that order, taking into the consideration of the time frame that the activity takes place. Below image shows a diagram of the emission factor hierarchy.



For all the emission factors used in calculation the greenhouse gas inventory of Sunrise Design Textile with their data sources, please see Appendix 3.

2.4 QUANTIFICATION AND CALCULATION OF GHG EMISSIONS

The followed methodology used to quantify the GHG inventory is in accordance with the ISO 14064-1 guidelines and specifications. All five fundamental principles are addressed adequately: relevance, completeness, consistency, accuracy, and transparency. In summary the quantification methodology can be explained as the following:

1. Identification of GHG sources and sinks,
2. Selection of quantification methodology,
3. Selection and collection of GHG activity data,
4. Selection or development of GHG emission or removal factors,
5. Calculation of GHG emissions and removals.

Identification of GHG sources and sinks

Sunrise Design Textile's GHG sources and sinks were identified based on all activities within the organizational/reporting boundaries and the determined reporting categories of this study.

Selection of quantification methodology

Due to the fact that Sunrise Design Textile does not measure emissions directly, calculation methodology has been used for quantification of emissions. Calculations were done based on measured GHG activity data multiplied by GHG emission or removal factors. (See below for calculation formula)

Selection and collection of GHG activity data

Once activities relevant to the Company's GHG boundaries were selected, activity data were collected at site level by GHG Site Responsible(s) and consolidated using QuickCarbon software which allows activity data to be entered as soon as its available. Correctness and consistency of the results are kept at the highest possible level by confirmation of collected data via solid evidences such as utility bills and meter readings. Activity data along with evidence documents are all recorded in controlled web based environment of QuickCarbon software. The entered data are then checked by the main reporting responsible for completeness, consistency and accuracy before it was turned into this report.

Selection or development of GHG emission or removal factors

Selection of GHG emission or removal factors were done as explained in the previous (Section 2.2).

Calculation of GHG emissions and removals

All data was calculated using the web-based QuickCarbon Software. This software uses a calculation methodology for quantifying the GHG emissions inventory using emissions source activity data multiplied by GHG emissions factors. The formula for Sunrise Design Textile 's greenhouse gas emission calculations is as follows:

Greenhouse Gas Emission Amount (tons) = GHG Activity Data x GHG Emission Factor (tons of GHG / activity data) x Oxidation Factor x Global Warming Potential

3. GHG EMISSION INVENTORY

3.1 REPORTING YEAR RESULTS

Greenhouse gas emissions resulting from Sunrise Design Textile 's activities within its reporting and organizational boundaries for 2021 is a total of 182.08 tons CO₂-e. GHG offset amount by financial instruments for the same year is 7.988ton tons of CO₂-e. GHG emission amount out of offset by financial instruments is 174.092ton tons of CO₂-e. The distribution of emissions by category and gas is given below.

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Category 1 (Direct)	165.193 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	166.266 tons
Category 2 (Indirect – Imported Energy)	15.61 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	15.61 tons
Category 3 (Indirect – Transportation)	-	-	-	-	-	-	-	-
Category 4 (Indirect – Products Used by Company)	0.204 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.204 tons
Category 5 (Indirect – Use of Products from Company)	-	-	-	-	-	-	-	-
Category 6 (Indirect – Other Sources)	-	-	-	-	-	-	-	-
TOTAL	181.007 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	182.08 tons
Offset by Financial Instruments	7.988 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	7.988 tons
OUT OF OFFSET - TOTAL	173.019 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	174.092 tons

A detailed breakdown of emission subcategories under each category is given in Appendix 5.

4. UNCERTAINTIES

Inventory Uncertainties

In this inventory, the activity data used in the calculations is the primary data provided by Sunrise Design Textile from approved bills and/or measured data via company meters, software and other registered data. If the

precision information (ie. error margin) of a measurement equipment or calculation method is known, it is defined as a “Register” in QuickCarbon software with its precision information. This information is then used for calculating the overall uncertainty of the emissions inventory in accordance with the GHG Protocol guidance on uncertainty assessment. A list of predetermined Registers used in the inventory calculations of this report with their precision information can be found in Appendix 6. For all those other registers, of which a precision information was not available, a default value of 2.000% was used.

Emission Factor Uncertainties

The uncertainties of the emission factors from the IPCC are taken as 7%. The uncertainty of the EIA data used for the Electricity Emission Factor is 5%.

Uncertainty Calculation and Evaluation

As a result of calculations made with Sunrise Design Textile’s data, general uncertainty has emerged as **± 4.831%**. According to the GHG Protocol this uncertainty can be ranked **High**.

Calculated uncertainty levels for specific activities are given in the table below:

Emissions Category	Activity Data Uncertainty	Emission Factor Uncertainty	Calculated Uncertainty	Uncertainty Ranking
Category 1 - Direct / Direct Emissions / Fire Extinguishers / CO2	2.000%	0.000%	± 2.000%	High
Category 1 - Direct / Stationary Combustion / Space Heating / Natural Gas	2.000%	7.000%	± 7.280%	Good
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Gasoline	2.000%	7.000%	± 7.280%	Good
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Diesel	2.000%	7.000%	± 7.280%	Good
Category 2 - Indirect - Imported Energy / Electricity Consumption / Purchased Electricity From Grid	2.000%	7.000%	± 7.280%	Good
Category 4 - Indirect - Used Products (Upstream) / Water / Water Supply	2.000%	7.000%	± 7.280%	Good
Category 4 - Indirect - Used Products (Upstream) / Waste Generated in Operations / Wastewater	2.000%	7.000%	± 7.280%	Good

5. APPENDICES

APPENDIX 1 – CALORIFIC VALUES USED IN CALCULATIONS

Fuels	Calorific Value	Reference
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Gasoline	10,400 kcal / kg	Turkey
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Diesel	10,200 kcal / kg	Turkey
Category 1 - Direct / Stationary Combustion / Space Heating / Natural Gas	12,313.43 kcal / kg	Turkey

APPENDIX 2 – GLOBAL WARMING POTENTIAL VALUES

Gas Type	GWP	Reference
CO2	1 kg / kg	IPCC 2014

APPENDIX 3 – EMISSION FACTORS

Emission Factors for Category 1 (Direct) Emissions

Emission Source	EF CO ₂		EF CH ₄		EF N ₂ O		Reference
	Base Year	Report Year	Base Year	Report Year	Base Year	Report Year	
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Gasoline		69,300kg / TJ		3.8kg / TJ		5.7kg / TJ	IPCC 2006
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Diesel		74,100kg / TJ		3.9kg / TJ		3.9kg / TJ	IPCC 2006
Category 1 - Direct / Stationary Combustion / Space Heating / Natural Gas		56,100kg / TJ		1kg / TJ		0.1kg / TJ	IPCC 2006

Emission Factors for Category 2 (Indirect – Imported Energy) Emissions

Emission Source	EF CO ₂		EF CH ₄		EF N ₂ O		Reference
	Base Year	Report Year	Base Year	Report Year	Base Year	Report Year	
Category 2 - Indirect - Imported Energy / Electricity Consumption / Purchased Electricity From Grid		0.38kg / kWh		0kg / kWh		0kg / kWh	Climate Transparency 2021

Emission Factors for Category 4 (Indirect – Products Used by Company) Emissions

Emission Source	EF CO ₂		EF CH ₄		EF N ₂ O		Reference
	Base Year	Report Year	Base Year	Report Year	Base Year	Report Year	
Category 4 - Indirect - Used Products (Upstream) / Water / Water Supply		0.15kg / m ³					Defra 2021
Category 4 - Indirect - Used Products (Upstream) / Waste Generated in Operations / Wastewater		0.27kg / m ³					Defra 2021

APPENDIX 4 – EMISSIONS INVENTORY by BUSINESS UNIT for 2021

Category 1 (Direct) Emissions of Sunrise Design Textile by Business Unit

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Merkez	165.193 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	166.266 tons
Şube	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons
TOTAL	165.193 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	166.266 tons

Category 2 (Indirect – Imported Energy) Emissions of Sunrise Design Textile by Business Unit

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Merkez	14.592 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	14.592 tons
Şube	1.018 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	1.018 tons
TOTAL	15.61 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	15.61 tons

Category 4 (Indirect – Products Used by Company) Emissions of Sunrise Design Textile by Business Unit

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Merkez	0.204 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.204 tons
Şube	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons
TOTAL	0.204 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.204 tons

APPENDIX 5 – EMISSIONS INVENTORY by ACTIVITY for 2021

The following breakdown of emissions only includes emissions resulting from activity data input to QuickCarbon software. Activity breakdowns of linked companies whose emissions information were directly entered are not available in the below tables. They can be separately found in Appendix 4 – Emissions Inventory by Business Unit.

Category 1 (Direct) Emissions of Sunrise Design Textile by Activity

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Category 1 - Direct / Direct Emissions / Fire Extinguishers / CO ₂	0.072 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.072 tons
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Gasoline	2.104 tons	0.003 tons	0.046 tons	0 tons	0 tons	0 tons	0 tons	2.153 tons
Category 1 - Direct / Mobile Combustion / Company Owned Vehicles / Diesel	59.906 tons	0.088 tons	0.836 tons	0 tons	0 tons	0 tons	0 tons	60.83 tons
Category 1 - Direct / Stationary Combustion / Space Heating / Natural Gas	103.111 tons	0.051 tons	0.049 tons	0 tons	0 tons	0 tons	0 tons	103.211 tons
TOTAL	165.193 tons	0.143 tons	0.93 tons	0 tons	0 tons	0 tons	0 tons	166.266 tons

Category 2 (Indirect – Imported Energy) Emissions of Sunrise Design Textile by Activity

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Category 2 - Indirect - Imported Energy / Electricity Consumption / Purchased Electricity From Grid	15.61 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	15.61 tons
TOTAL	15.61 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	15.61 tons

Category 4 (Indirect – Products Used by Company) Emissions of Sunrise Design Textile by Activity

Emissions (t CO ₂ -e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	TOTAL
Category 4 - Indirect - Used Products (Upstream) / Water / Water Supply	0.07 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.07 tons
Category 4 - Indirect - Used Products (Upstream) / Waste Generated in Operations / Wastewater	0.135 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.135 tons
TOTAL	0.204 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0 tons	0.204 tons

APPENDIX 6 – IREC Certificate



This Redemption Statement has been produced for

SUNRISE DESIGN TEKSTİL SAN. VE DIŞ. TİC. A.Ş.

by

CK ENERJİ ORTAKLIĞI TOPTAN ELEKTRİK SATIŞ A.Ş.

confirming the Redemption of

6

I-REC Certificates, representing 6 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**Istanbul
Turkey**

in respect of the reporting period

2021-07-01 to 2021-07-31

The stated Redemption Purpose is

40Z000052370548E 40Z000052370547G 40Z0000512944813 40Z0000512944813
40Z000053236839X



Evident



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

5 4 7 9 3 7 5 2

<https://evident.app/public/certificates/en/HRMz2gHtUo75AdKd75y173F4H1b1Et4F1IGAWZ9>

Redeemed Certificates

Production Device Details						
Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO ₂ / MWh)
35 KALE JES-1	Turkey	Renewable heat: Geothermal	Organic rankine cycle: CHP	Yes	2018-10-20	0.000
Redeemed Certificates						
From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer	
0000-0001-0844-5974	0000-0001-0844-5979	6	Inc	2021-01-01 - 2021-05-31	Foton	

Auditor Notes

This statement is proof of the secure and unique redemption of the I-RECs stated above for the named beneficiary to be reported against consumption in the country during the reporting year stated. I-RECs are assigned to a beneficiary at redemption and cannot be further assigned to a third party. No other use of these I-RECs is valid under the I-REC Standard.

Where offset attributes are 'inc' the device registrant, who exclusively holds the environmental attribute rights, has undertaken never to release carbon offsets in association with these MWh; 'exc' means carbon offsets relating to these MWh may be traded independently at some point in the future.

For labelling scheme information please refer to the scheme's website. Labelling scheme listing may not be exhaustive.

Thermal plant emit carbon as part of the combustion process. Whilst this is not zero carbon, it is generally recognised as carbon neutral where the source is recent biomass.



This Redemption Statement has been produced for

SUNRISE DESIGN TEKSTİL SAN. VE DIŞ. TİC. A.Ş.

by

CK ENERJİ ORTAKLIĞI TOPTAN ELEKTRİK SATIŞ A.Ş.

confirming the Redemption of

3

I-REC Certificates, representing 3 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**Istanbul
Turkey**

in respect of the reporting period

2021-08-01 to 2021-08-31

The stated Redemption Purpose is

40Z000052370547G 40Z000052370548E 40Z000053236839X



Evident



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

3 9 9 6 1 2 7 0

<https://evident.app/public/certificates/en/HRMz2gHtUo75AdKd75y173F4H1b1Et4F1IGAWZ9>

Redeemed Certificates

Production Device Details						
Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO ₂ / MWh)
35 KALE JES-1	Turkey	Renewable heat: Geothermal	Organic rankine cycle: CHP	Yes	2018-10-20	0.000
Redeemed Certificates						
From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer	
0000-0001-0837-5793	0000-0001-0837-5795	3	Inc	2020-04-01 - 2020-12-31	Foton	

Auditor Notes

This statement is proof of the secure and unique redemption of the I-RECs stated above for the named beneficiary to be reported against consumption in the country during the reporting year stated. I-RECs are assigned to a beneficiary at redemption and cannot be further assigned to a third party. No other use of these I-RECs is valid under the I-REC Standard.

Where offset attributes are 'inc' the device registrant, who exclusively holds the environmental attribute rights, has undertaken never to release carbon offsets in association with these MWh; 'exc' means carbon offsets relating to these MWh may be traded independently at some point in the future.

For labelling scheme information please refer to the scheme's website. Labelling scheme listing may not be exhaustive.

Thermal plant emit carbon as part of the combustion process. Whilst this is not zero carbon, it is generally recognised as carbon neutral where the source is recent biomass.



This Redemption Statement has been produced for

SUNRISE DESIGN TEKSTİL SAN. VE DIŞ. TİC. A.Ş.

by

CK ENERJİ ORTAKLIĞI TOPTAN ELEKTRİK SATIŞ A.Ş.

confirming the Redemption of

5

I-REC Certificates, representing 5 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**Istanbul
Turkey**

in respect of the reporting period

2021-09-01 to 2021-09-30

The stated Redemption Purpose is

40Z0000512944813 40Z000052370548E 40Z000052370547G 40Z000053236839X



Evident



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

6 7 0 0 4 6 5 5

<https://evident.app/public/certificates/en?HMK2jgYUo754dKv075j2z1s0w8hmp4g779RmccuM=>

Redeemed Certificates

Production Device Details						
Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO ₂ / MWh)
3S KALE JES-1	Turkey	Renewable heat: Geothermal	Organic rankine cycle: CHP	Yes	2018-10-20	0.000
Redeemed Certificates						
From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer	
0000-0001-0838-0907	0000-0001-0838-0911	5	Inc	2020-04-01 - 2020-12-31	Foton	

Auditor Notes

This statement is proof of the secure and unique redemption of the I-RECs stated above for the named beneficiary to be reported against consumption in the country during the reporting year stated. I-RECs are assigned to a beneficiary at redemption and cannot be further assigned to a third party. No other use of these I-RECs is valid under the I-REC Standard.

Where offset attributes are 'inc' the device registrant, who exclusively holds the environmental attribute rights, has undertaken never to release carbon offsets in association with these MWh; 'exc' means carbon offsets relating to these MWh may be traded independently at some point in the future.

For labelling scheme information please refer to the scheme's website. Labelling scheme listing may not be exhaustive.

Thermal plant emit carbon as part of the combustion process. Whilst this is not zero carbon, it is generally recognised as carbon neutral where the source is recent biomass.

6. REFERENCES:

Report Standards:

- ISO 14064-1 : 2018 / <https://www.iso.org/standard/66453.html>
- TS EN ISO 14064-1 : 2019 / <https://intweb.tse.org.tr/Standard/Standard/Standard.aspx?081118051115108051104119110104055047105102120088111043113104073083084082085104098111116108088069>
- Greenhouse Gas (GHG) Protocol Corporate Standard / <https://ghgprotocol.org/corporate-standard>

Emissions Factors:

- IPCC Guidelines for National Greenhouse Gas Inventories : 2006 / <https://www.ipcc.ch/report/2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/>
- DEFRA Greenhouse gas reporting: conversion factors: 2017-2018-2019-2020-2021 / <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>
- IEA Emission Factors : 2018 / <https://www.iea.org/data-and-statistics/data-product/emissions-factors>
- EPA Emission Factors : 2014-2015 / <https://www.epa.gov/air-emissions-factors-and-quantification>
- T.C. Enerji ve Tabii Kaynaklar Bakanlığı - Enerji Kaynaklarının ve Enerjinin Kullanımında Verimliliğin Artırılmasına Dair Yönetmelik : 2011 / <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=15437&MevzuatTur=7&MevzuatTertip=5>
- Climate Transparency Electricity Emission Factors: 2019-2020-2021 / <https://www.climate-transparency.org/g20-climate-performance>
- Türkiye Ulusal Elektrik Şebekesi Emisyon Faktörü Bilgi Formu: 2019-2021 / <https://enerji.gov.tr/evced-cevre-ve-iklim-turkiye-ulusal-elektrik-sebekesi-emisyon-faktoru>

QuickCarbon, www.quickcarbon.com