Lanka Leather Fashion (Private) Limited

GREENHOUSE GAS ASSESSMENT REPORT 2025

(Final Report)

3rd July 2025

Table of Contents

Nomenclature

ABBREVIATIONS	EXPLANATION
BOD	Biological Oxygen Demand
CO_2	Carbon Dioxide
CEB	Ceylon Electricity Board
COD	Chemical Oxygen Demand
CH_4	Methane
CO_2e	Carbon Dioxide Equivalent
CSR	Corporate Social Responsibility
CCC	Climate & Conservation Consortium
CDP	Carbon Disclosure Project
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment Food and Rural Affairs
GHG	Greenhouse Gas
GWP	Global Warming Potential

ABBREVIATIONS	EXPLANATION
HFC	Hydrofluorocarbon
HVAC	Heating, Ventilating, and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardization
LPG	Liquid Petroleum Gas
N_2O	Nitrous Oxide
PFC	Perfluorocarbon
SF_6	Sulfur Hexafluoride
SL	Sri Lanka
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

Project Summary

Client	**Lanka Leather Fashion (Pvt) Ltd**	
Site Location	Phase 1, LPZ, Ring Road, Katunayake, Sri Lanka	
Assessment Type	Organisational Greenhouse Gas Assessment	
Applied Standards	WBCSD/WRI GHG Protocol, PAS 2060, ISO 14064-1, ZeroCarbon® Guideline	
Consolidation Approach	Organisational GHG Assessment - Operational Control	
Assessment Scope	On-Site Energy, Fugitive Emissions, Company Owned/Leased Vehicles, Electricity, Electricity Transmission and Distribution, Third-Party Deliveries, Employee Commuting & Fuel Allowance, Foreign Business Travel and Waste Disposal	
Reporting Period & Frequency	01st January 2024 – 31st December 2024 (Annual)	
Purpose of the Report	This report will mainly be used to communicate the carbon footprint of the company that is offset, monitor internal GHG performance indicators and sustainability activities aligned with the Sustainable Development Goals	
Intended User	Management and Stakeholders of Lanka Leather Fashion (Pvt) Ltd	
Dissemination Policy	No dissemination policy and the Assessment will not be made available to the public. Results may be published for sustainability reporting purposes	
Base Year	2014 (year in which the assessment was first conducted)	
Report ID	CCC/GHG/2025_07/001/V1F	
Assessor	Chathuri Ramawickrama	chathuri@carbonconsultco.com
Quality Assurance Assessor	Pasan Fernando	pasan@carbonconsultco.com
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*Responsible for handling the GHG assessment and liaising with the consultant, and for upholding, overseeing and implementing sustainable related activities

Executive Summary

Climate & Conservation Consortium conducted a comprehensive Organisational Greenhouse Gas (GHG) Assessment for Lanka Leather Fashion (Pvt) Ltd (hereon referred to as LLF) to reassess the GHG emissions of its operations for the 2024 Calendar Year Reporting Period. This GHG Assessment was based on the WBCSD/WRI GHG Protocol and ZeroCarbon® Guideline.

Table 1: GHG Emissions Summary for 2024 Calendar Year Reporting Period

Category 1	Direct GHG emissions released from sources that are owned or controlled by the company	16.78	tCO2e	2.33%
Category 2	Indirect GHG emissions associated from the generation of imported energy	166.62	tCO2e	23.14%
Category 3	Indirect emissions associated with transportation	534.14	tCO2e	74.17%
Category 4	Indirect GHG Emissions from products used by the Organisation	2.64	tCO2e	0.37%
TOTAL GHG EMISSIONS (tCO2e)		**720.19**	**tCO2e**	**100.00%**

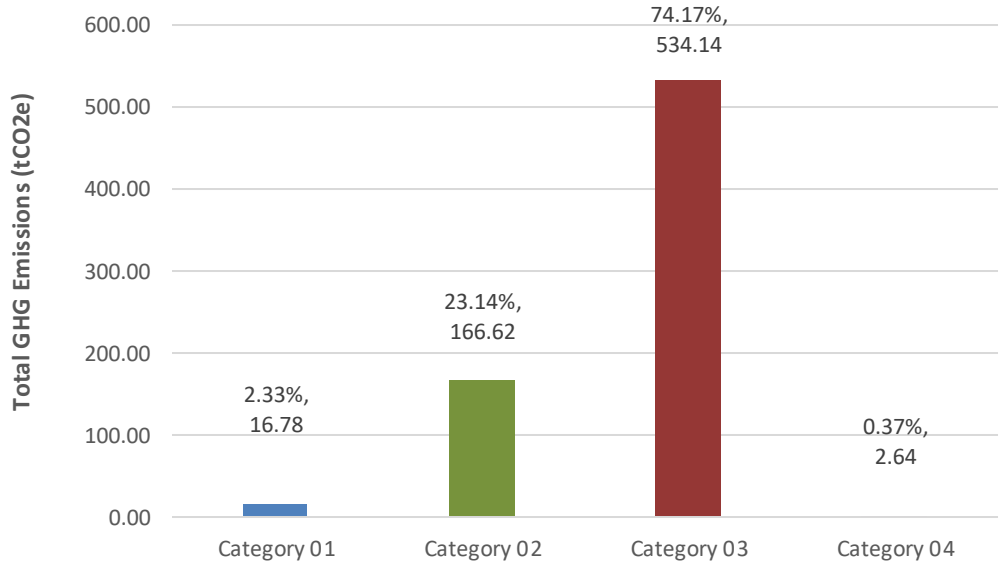


Figure 1: Overall GHG Emissions Summary

- The total GHG emissions of the facility are **720.19 tCO_2e**
- As seen in the graph, the majority of the emissions are from Category 3, followed by emissions from Category 2
- Total GHG emissions have decreased by **225.79 tCO_2e (23.87%),** from last year
- The Scope 2 emissions are reduced by **48.83 tCO2e** due to the redemption of I-RECs (120.203 MWh) from their own solar project

About the Company

Climate & Conservation Consortium

Climate & Conservation Consortium (CCC) is a firm dedicated to helping organisations develop and communicate effective sustainability practices. Our consultants are committed to helping companies reduce their environmental impact and maximise the resulting CSR and marketing opportunities. CCC provides professional services based on the fundamental principles of calculation, mitigation and communication and offers the following services:

- Corporate Carbon, Water and Waste Footprints
- Goods and Services Carbon and Water Footprints
- Facilitating the purchase of high quality, ethical carbon offsets
- Providing carbon reduction and implementation strategies
- Life Cycle Analysis (LCA) for products and services
- Sustainable business development consultancy
- Sustainability Product Labelling

1. Organisational Goals and Inventory Objectives

About the Client

Lanka Leather Fashion (Private) Limited

LLF is a European-owned and managed leather garment manufacturer located in Sri Lanka. Established in 1982, the factory is situated in the Katunayake Export Processing Zone and handles the sourcing and development of finished leather products for clients around the globe.

As consumer demand for green products and services increase globally, companies are now beginning to earn sustainability certifications to cater to the needs and wants of clients. This growing sustainability sentiment among environmentally conscious industries has allowed companies such as LLF to set an example in this area.

As an established leather products manufacturer in the country, LLF is committed towards reaffirming its status as an industry leader in environmental sustainability by recalculating the carbon footprint of its operations for a 11th consecutive year. This effort is part of a long-term commitment to reduce the company's environmental impact and become a more responsible corporate citizen, whilst ensuring it reaps the benefits of being a sustainable, ethical and eco-friendly business entity.

1.2 Greenhouse Gases and Impact on Global Warming

The GHGs taken into account are indicated in Table 2 where the Global Warming Potential (GWP) is taken from the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report, 2014 (AR5).

Table 2: Global Warming Potentials

Greenhouse Gas	Chemical Formula	GWP
Carbon dioxide	CO_2	1
Methane	CH_4	28
Nitrous Oxide	N_2O	265
Hydrofluorocarbons	HFCs	4 - 12,400
Perfluorocarbons	PFCs	6,630 - 11,100
Sulfurhexafluoride	SF_6	23,500
Nitrogen Trifluoride	NF_3	16,100

2. Assessment Boundary and Scope

2.1 Assessment Boundary

As per the GHG Protocol, the Assessment Boundary for a business entity can be set according to its Financial or Operational Control. For this assessment, the boundary is set as Operational Control.

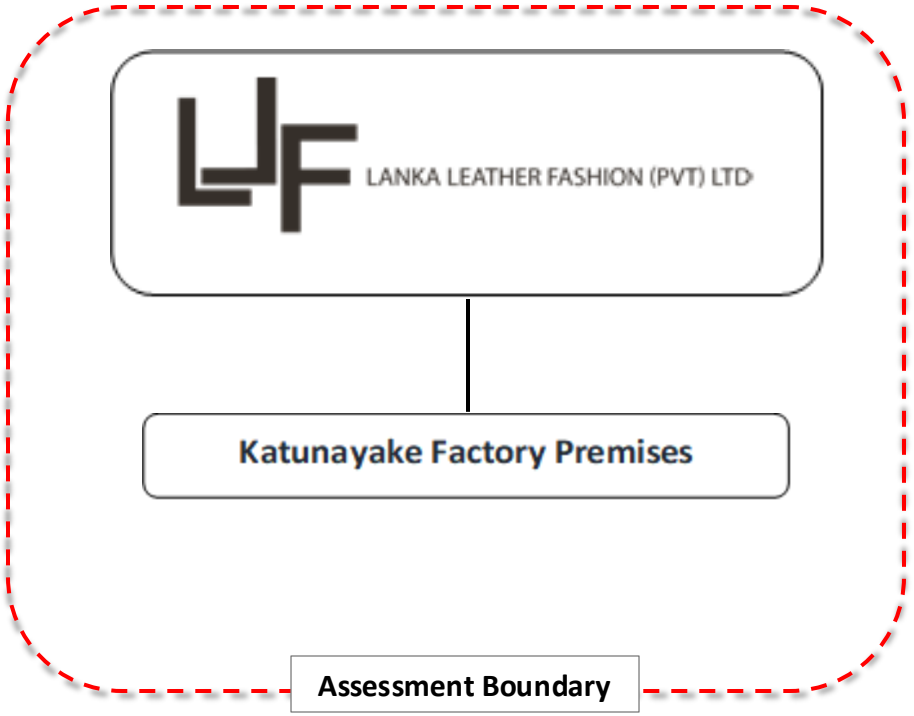


Figure 2: Organisational Structure and Assessment Boundary

2.2 Emissions Sources Included in the Assessment

- **Direct Emissions – Category 1:** Direct GHG emissions and removals (On-site Energy, Fugitive Emissions, Company Owned vehicles)
- **Indirect Emissions – Category 2:** Indirect GHG emissions from imported energy (Purchased Electricity and Electricity Transmission & Distribution[T&D] Losses)
- **Indirect Emissions – Category 3:** Indirect GHG emissions from transportation (Third-party Deliveries, Employee Commuting & Fuel Allowance, Foreign/Local Business Travel, Waste Transportation)
- **Indirect Emissions – Category 4:** Indirect GHG emissions from products used by organisation (Waste Disposal, Water consumption)
- **Indirect Emissions – Category 5:** Indirect GHG emissions associated with the use of products from the organisation *[NOT CONSIDERED/APPLICABLE]*

Figure 3: Emissions Sources

3. GHG Inventory of Emissions and Removals

3.1 Quantification Approach

- **Quantification Methodology**

GHG assessments are generally carried out in accordance with one of two internationally recognised standards for accounting and reporting corporate greenhouse gas emissions. The best known and most widely accepted is the Greenhouse Gas Protocol - Corporate Accounting and Reporting Standard (GHG Protocol), developed in a partnership with the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI). This assessment has been done in accordance with the GHG protocol, ISO 14064-1 and is also compliant with the Carbon Disclosure Project (CDP). Both these standards provide guidelines regarding organisational and operational boundaries, quantification and standard reporting practices. For this study, client-supplied data was analysed, and the GHG emissions were quantified using the most current emission factors in line with the GHG Protocol.

Figure 4: WBCSD/WRI GHG Protocol

- **Selection of Emission Factors**

Emission factors were sourced from DEFRA/DECC's 'Environmental Reporting: Guidelines for Company Reporting on Greenhouse Gas Emissions' (2024), Indian GHG Program (2015), and the U.S. Environmental Protection Agency Inventories (2008/2013) and IPCC Guidelines for National Greenhouse Gas Inventories (2006). The emission factor for electricity was obtained from the Sri Lanka Energy Balance Report published by the Sri Lanka Sustainable Energy Authority (2022).

The aforementioned emission factors were selected for the quantification of all applicable emissions of a business entity. Emission factors have been prioritised according to National, Regional and International categories. National factors were only available for electricity, and Indian factors were used to quantify emissions from passenger transportation to increase accuracy (as it is most appropriate for Sri Lanka) and International factors (DEFRA) have been used for all other emission sources.

3.2 Assessment Results

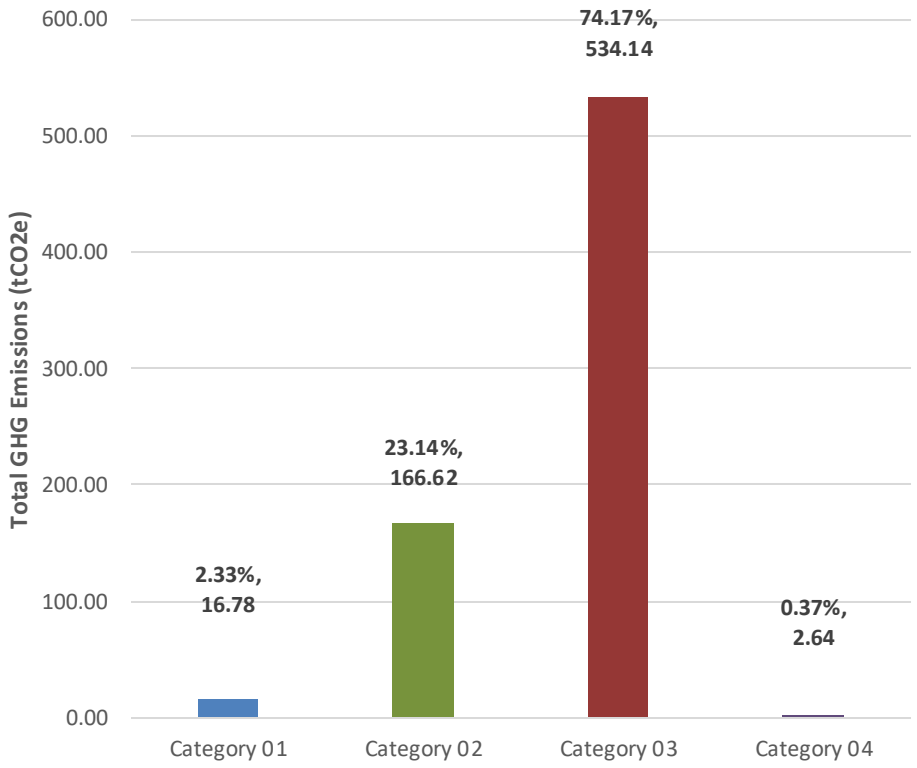


Figure 4: Overall GHG Emissions Summary

- The gross overall emissions for LLF is **720.19 tCO_2e.**
- As seen in Figure 4, the most significant emissions are from Category 3, which accounts for 74.17% (534.14 tCO_2e) of the total GHG emissions.
- Second highest emissions are from Category 2 amounting to 23.14% (166.62 tCO_2e) of the total GHG emissions. The Scope 2 emissions are reduced by 48.83 tCO_2e due to the redemption of I-RECs (120.203 MWh) from LLF's own solar project.
- Category 1 and Category 4 combined only account for 2.70% (19.42 tCO_2e) of the total GHG emissions.

Category 1: **Direct GHG Emissions and Removals**
Category 2: **Indirect GHG Emissions from Imported Energy**
Category 3: **Indirect GHG Emissions from Transportation**
Category 4: **Indirect GHG Emissions from Products used by the Organisation**

3.3 Results by Emissions Source

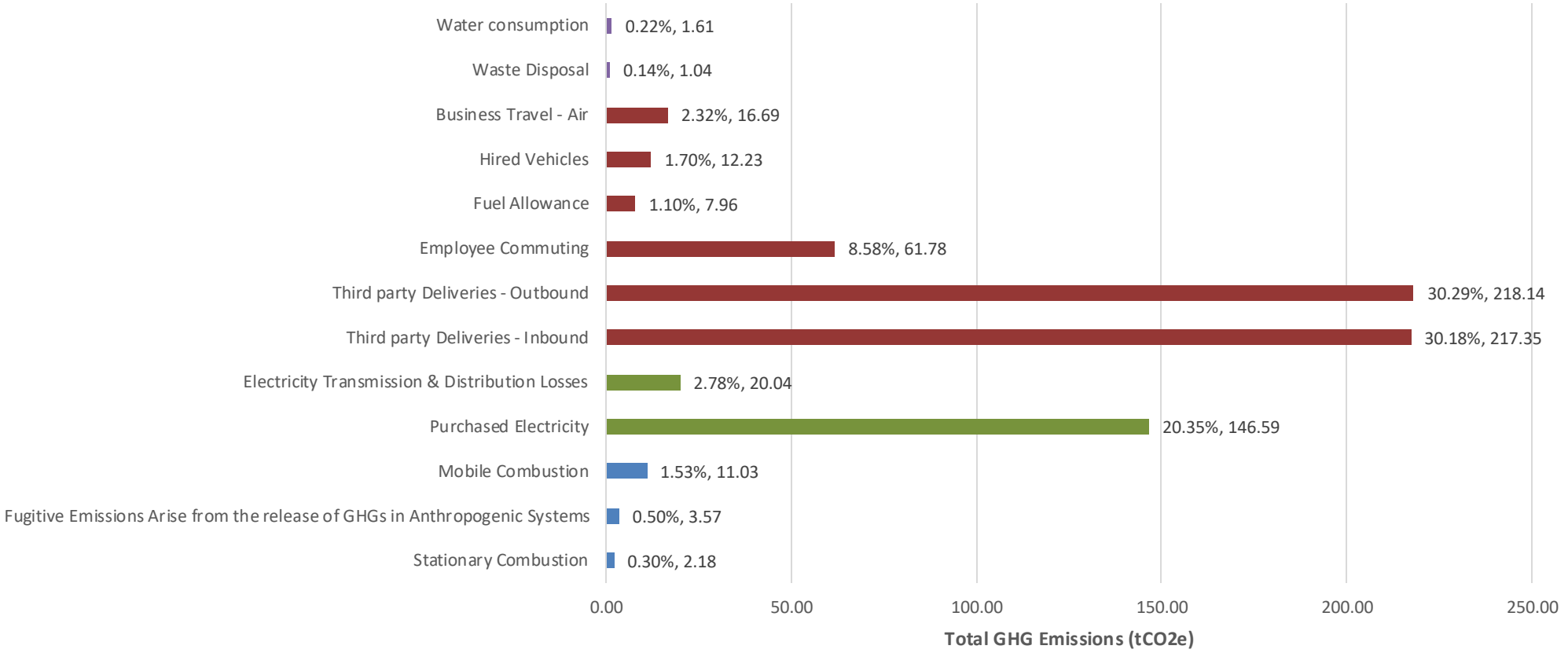


Figure 5: Source-wise GHG Emissions Breakdown

- When considering individual emissions sources, emissions from Third-Party Deliveries – Outbound amounts to the highest at 218.14 tCO_2e (30.29%).
- Inbound Third-Party Deliveries, the second highest is 30.18% (217.35 tCO_2e) of the total emissions.
- The Purchased Electricity accounts for 20.35% (146.59 tCO_2e) of the total emissions.

3.4 GHG Emissions Comparison over a 11-year Period

Figure 6: Overall GHG Emissions Comparison

- Figure 6 shows a comparison between GHG assessments from 2014 to 2024. As shown in Figure 6, the total GHG emissions have decreased by approximately 225.79 tCO_2e (23.87%) when compared to the previous year. However, when compared with the base year, there is a marginal increase of approximately 12.39 tCO_2e (1.75%).
- Compared to the previous year, GHG emissions from Category 1 have decreased by 57.26 tCO_2e (77.34%), and GHG emissions from Category 2 have decreased by 26.60 tCO_2e (13.77%) due to I-RECs.
- Further the other categories also have dcreased by the following values:
  - Category 3: 128.74 tCO_2e (19.42%)
  - Category 4: 13.17 tCO_2e (83.29%)

3.5 Category 1 GHG Emissions Comparison over a 11-year Period

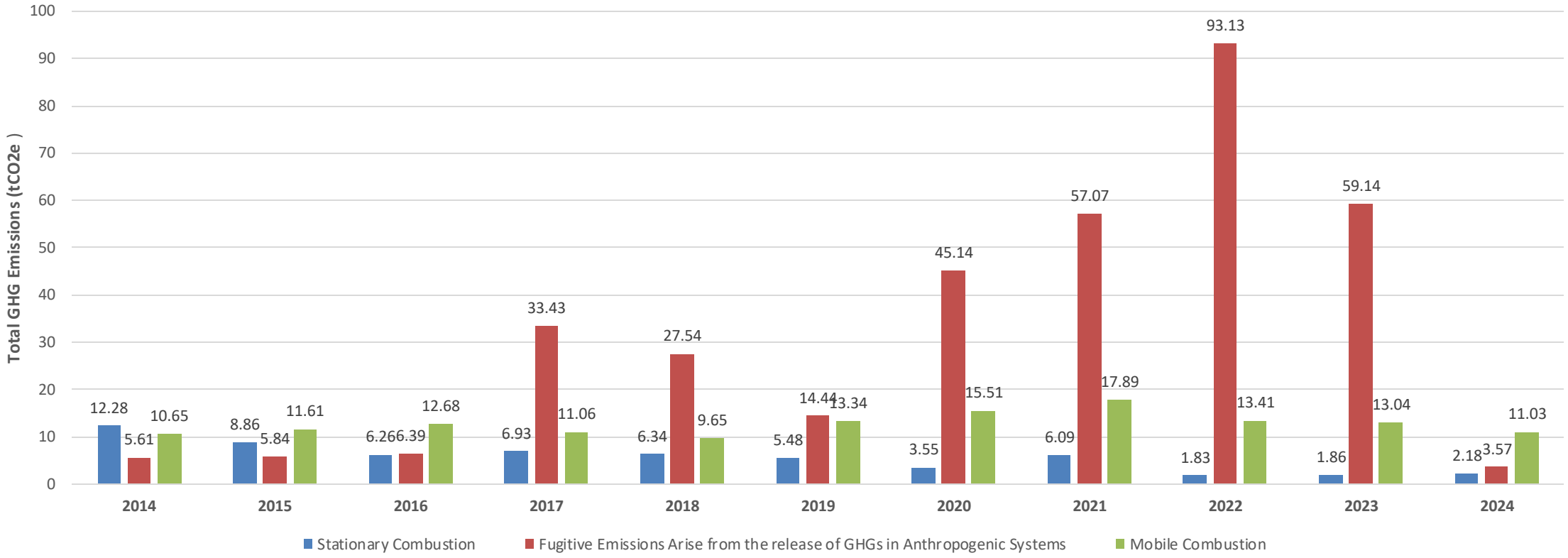


Figure 7: Category 1 GHG Emissions Comparison

- Fugitive Emissions have drastically decreased due to a reduction in air-conditioner refrigerant gas leakages (R410A) compared to the previous years. It has decreased by 55.57 tCO_2e (94%) when compared to last year and is the primary reason for the decrease in Category 1 emissions.
- Company Owned Vehicle emissions has slightly decreased by 2.01 tCO_2e (15.4%) over the 2023 calendar year.

3.6 Category 2 GHG Emissions Comparison over a 11-year Period

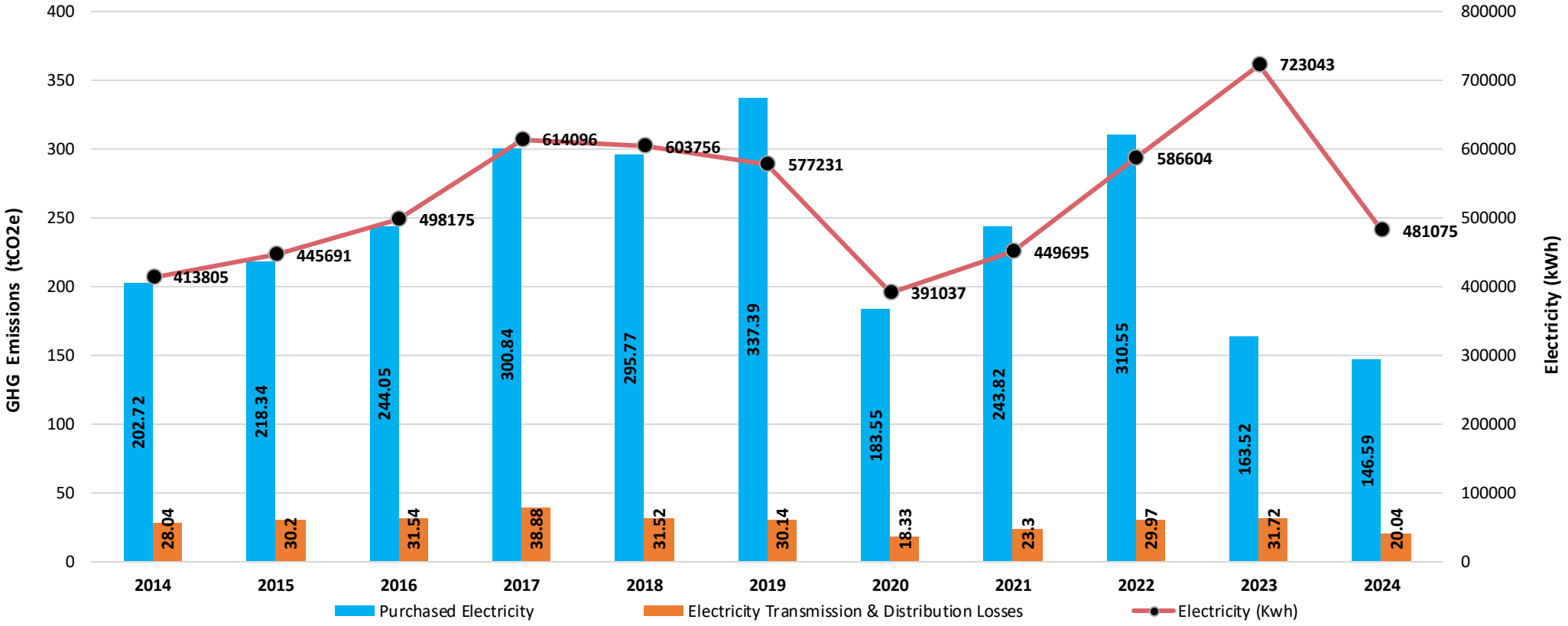


Figure 8: Category 2 GHG Emissions Comparison

- As seen in Figure 8, Purchased Electricity emissions have decreased by 16.93 tCO_2e (10.36%) compared to the previous year. Further LLF's Purchased Electricity consumption has reduced due to the internal solar consumption. As Figure 8 illustrates, Purchased Electricity emissions further reduced by 48.83 tCO_2e due to the redemption of I-RECs (*120.203 MWh - which is not indicated in the electricity consumption value*) from their own solar project.

3.7 Category 3 GHG Emissions Comparison over a 11-year Period

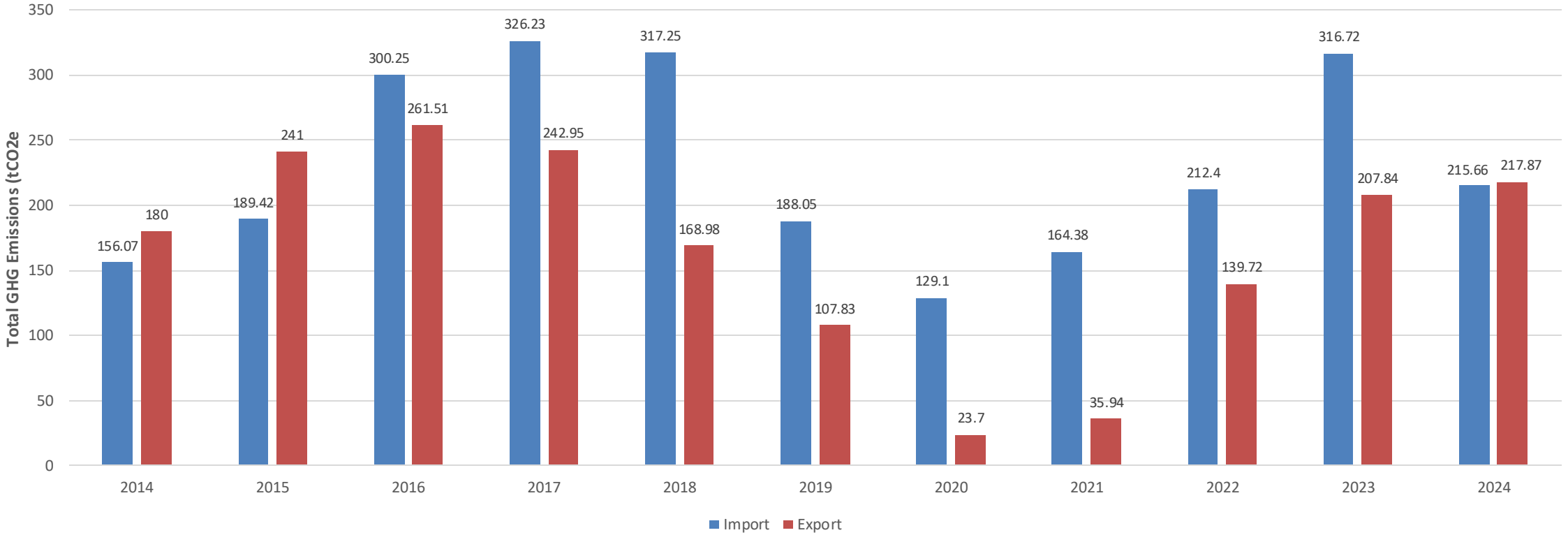
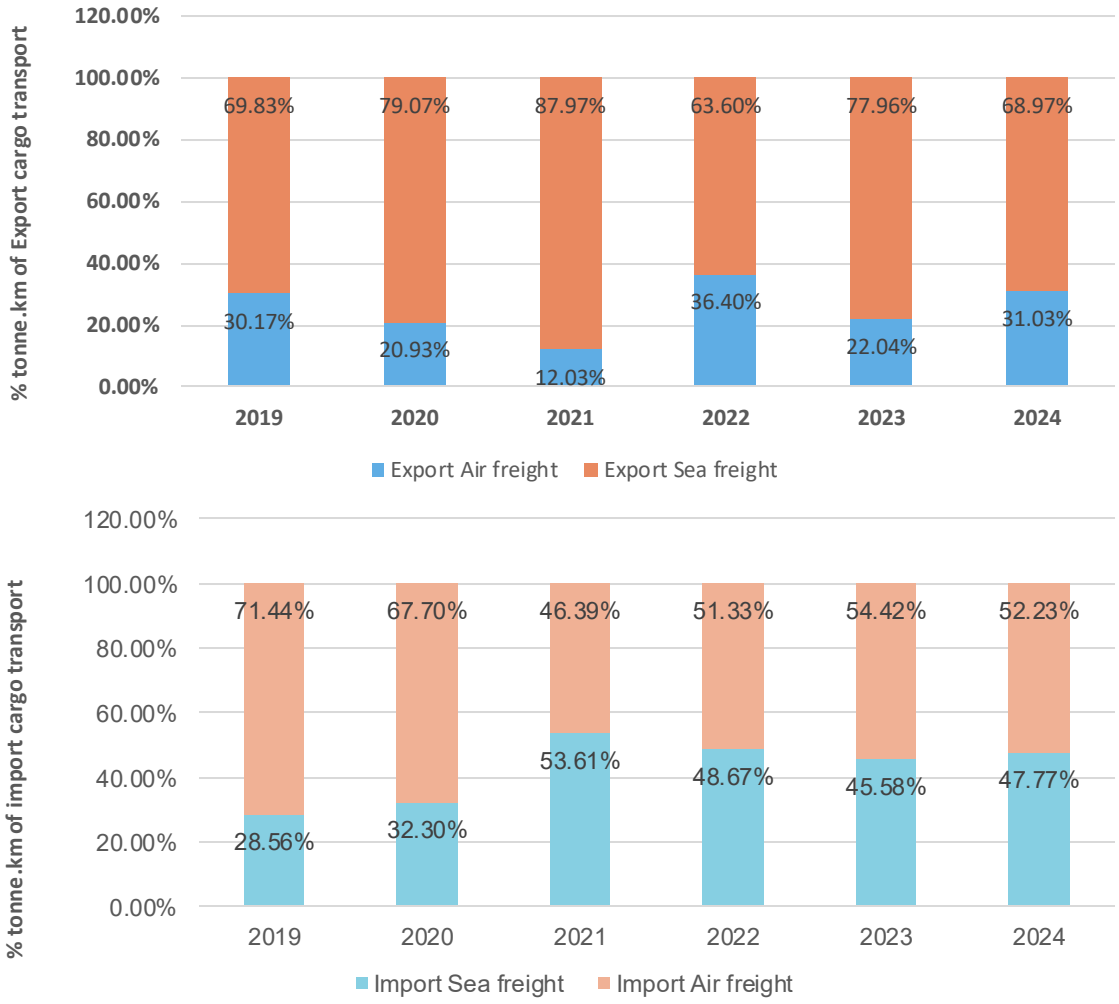


Figure 9: Category 3 Imports & Exports GHG Emissions Comparison

- There is an increase in export emissions of approximately 10.03 tCO_2e (4.83%) and decreased in import emissions of approximately 101.06 tCO_2e (31.91%) when compared to the previous year.
- This increase in export emissions can be attributed to the usage of more air freight than sea freight, as the air freight will emit more GHG emissions rather than the sea freight.

3.7 Category 3 GHG Emissions Comparison over a 11-year Period (cont'd)



- As seen in Figure 9, there is an 8.99% increase from sea to air freight in exports when compared to the last year. There is also a 2.19% increase from air to sea freight in imports this year when compared to last year.
- The comparison is done using "tonne.km" values. The values for this particular comparison have been used *without filtering incoterms** to better identify the significance of the change in freight transportation method. However, the quantification of import GHG emissions *does account for incoterms.*

** Please refer Lanka Leather Fashion (Pvt) Ltd, Greenhouse Gas Report 2020 for more information on incoterm usage.*

3.7 Category 3 GHG Emissions Comparison over a 11-year Period (cont'd)

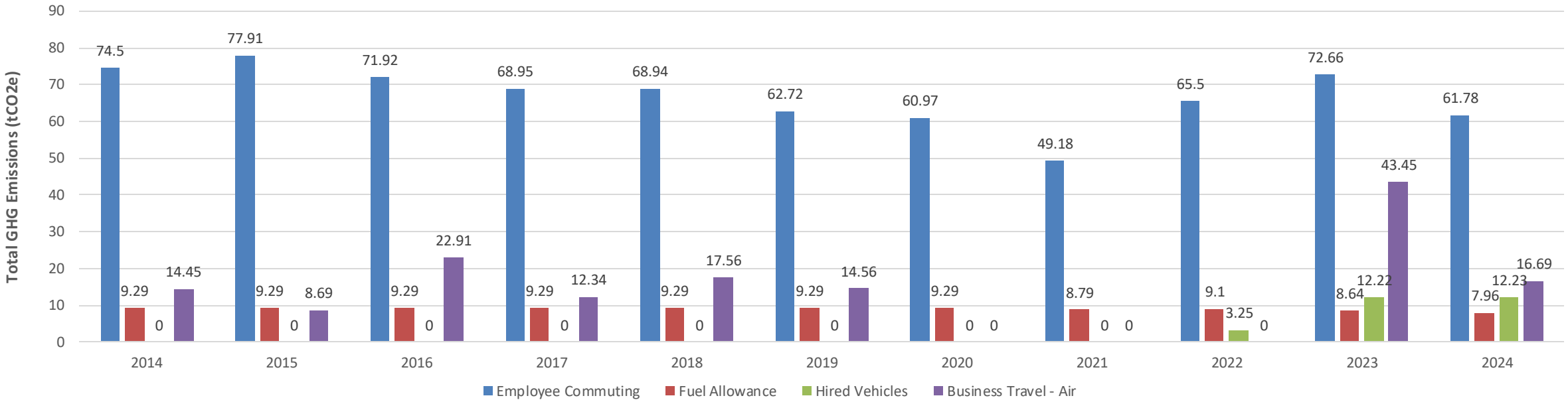


Figure 10: Category 3 Employee Commuting & Fuel Allowance GHG Emissions Comparison

- GHG emissions from Employee Commuting have decreased by 14.98% compared to the last year. There is a 12.72 tCO_2e (17.08%) reduction compared to the base-year due to the different emission factors used to quantify emissions at the time.
- Fuel allowance-related GHG emissions have slightly decreased 7.9% compared to the last year and have decreased by 14.34% (1.33 tCO_2e) compared to the base year.
- Business travel GHG emissions have drastically decreased (61.58%) compared to the last year. There is also increased of 15.53% compared to the base year.
- GHG emissions from hired vehicles are almost the same as last year, at approximately 12.23 tCO_2e.

3.8 Category 4 GHG Emissions Comparison over a 11-year Period

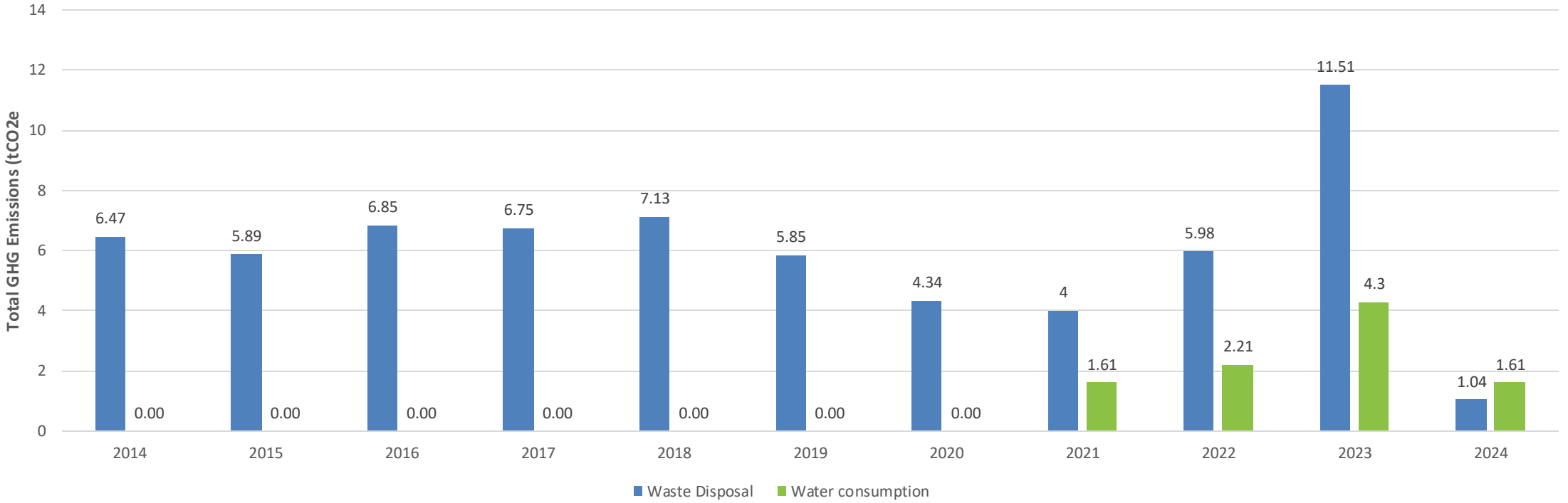


Figure 11: Category 4 GHG Emissions Comparison

- Category 04 includes GHG emissions from Waste Disposal and Water Consumption.
- Category 04 GHG emissions have not exceeded 1% of total emissions over the past the year and this year it accounts for 0.33% of the total emissions. Waste Disposal GHG emissions have reduced by approximately 90.99% (10.47 tCO_2e) due to the different emission factors used to quantify emissions at the time.
- GHG Emissions from Water Consumption have decreased by 62.62% (2.96 tCO_2e) compared to the last year.

3.9 GHG Emission Reduction Projects

Table 3 : Solar Generated Electricity in 2024

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Total
LLF Solar Generation (kWh)	32,057	16,781	0	24,893	4,745	4,575	2,710	2,886	7,313	5,209	6,948	12,086	120,203

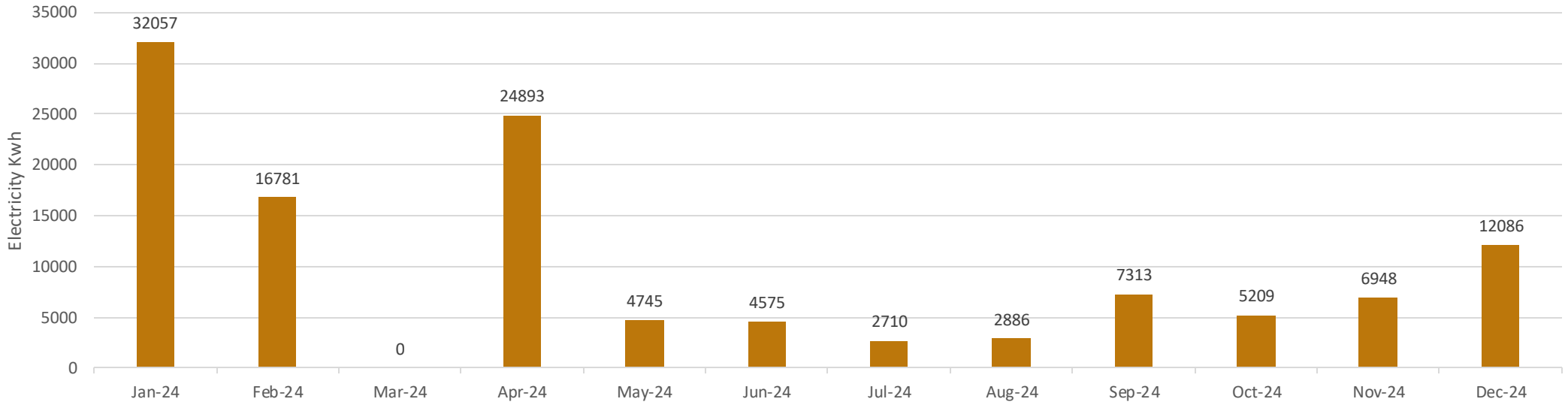


Figure 12: Solar Generated Electricity per Month in 2024 (Jan to Dec)

- Total electricity generated through the rooftop solar installation and exported to the grid was **120.203** Mwh.
- GHG emissions avoided due to the displacement of electricity from the National Grid as a result of the above was 48.83 tCO_2e.

3.10 Data Quality

Table 4: Summary of Quality of Data Collected

SCOPE	CATEGORY NAME	EMISSIONS SOURCE	DATA QUALITY
1	Direct GHG emissions and removals	• On-site Energy Generation	Complete
		• Fugitive Emissions	Complete
		• Company Owned & Leased Vehicles	Complete
2	Indirect GHG emissions from imported energy	• Purchased Electricity	Complete
		• Electricity Transmission & Distribution Losses	Complete
3	Indirect GHG emissions from transportation	• Third-party Deliveries	Complete
		• Employee Commuting	Complete
		• Fuel Allowance	N/A
		• Foreign Business Travel	Complete
		• Waste Transportation	Complete
		• Hired Vehicles	Complete
4	Indirect GHG emissions from products used by the Organisation	• Waste Disposal	Estimated
	Water Consumption	• Water Consumption	Complete

3.11 Assumptions and Exclusions

ASSUMPTIONS

Company Owned Vehicles

Company owned vehicle mileage values in litres were calculated using a km/L conversion factor. Each vehicle has a separate km/L conversion factor that had been calculated beforehand.

Hired Vehicles

Company owned vehicle mileage values in litres were calculated using a km/L conversion factor. Each vehicle has a separate km/L conversion factor that had been calculated beforehand.

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4. GHG Reductions and Performance Tracking

4.1 Key Performance Indicators

GHG emissions should be monitored against these parameters to gauge Company performance. Notable KPIs to gauge factory performance for the 2024 assessment are indicated in the table below.

Table 5: Key Performance Indicators

KPI	Value
Total Emissions ($kgCO_2e$)/Production Piece	4.91
Total Emissions ($kgCO_2e$)/Export Piece	4.92
kWh/Production Piece	3.28
tCO_2e/Employee	1.25
Import Emissions ($kgCO_2e$)/Production Piece	1.47
Export Emissions ($kgCO_2e$)/Export Piece	1.49

- Primary KPIs are related to the total GHG emissions against production and export quantities.
- A KPI for electricity against production quantity was also developed due to its significant impact on GHG emissions.
- Since the most significant emissions throughout the years have been related to imports and exports, KPIs have been developed for the emissions of the same against production and export quantities.

4.2 Key Performance Indicator Comparison

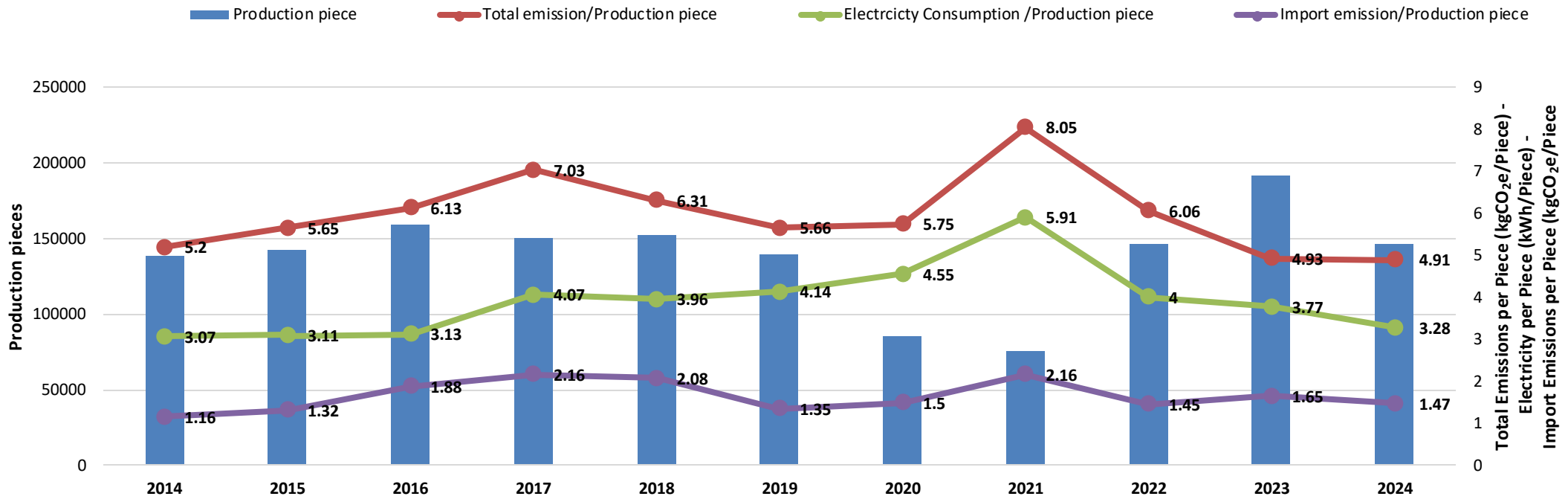


Figure 13: Total Emissions, Import Emissions and Electricity Consumption per Production Piece vs. Production Quantity

- Figure 13 depicts the primary KPIs from Table 5, compared across the past 11 years against the quantities of pieces produced. The KPIs continue to be positive as they have been across all years.
- Compared to last year:
  - Total Emissions per Piece has decreased by 0.43%
  - Import Emissions per Piece has decreased by 10.92%
  - Electricity Consumption per Piece has decreased by 13.02%

4.2 Key Performance Indicator Comparison (cont'd)

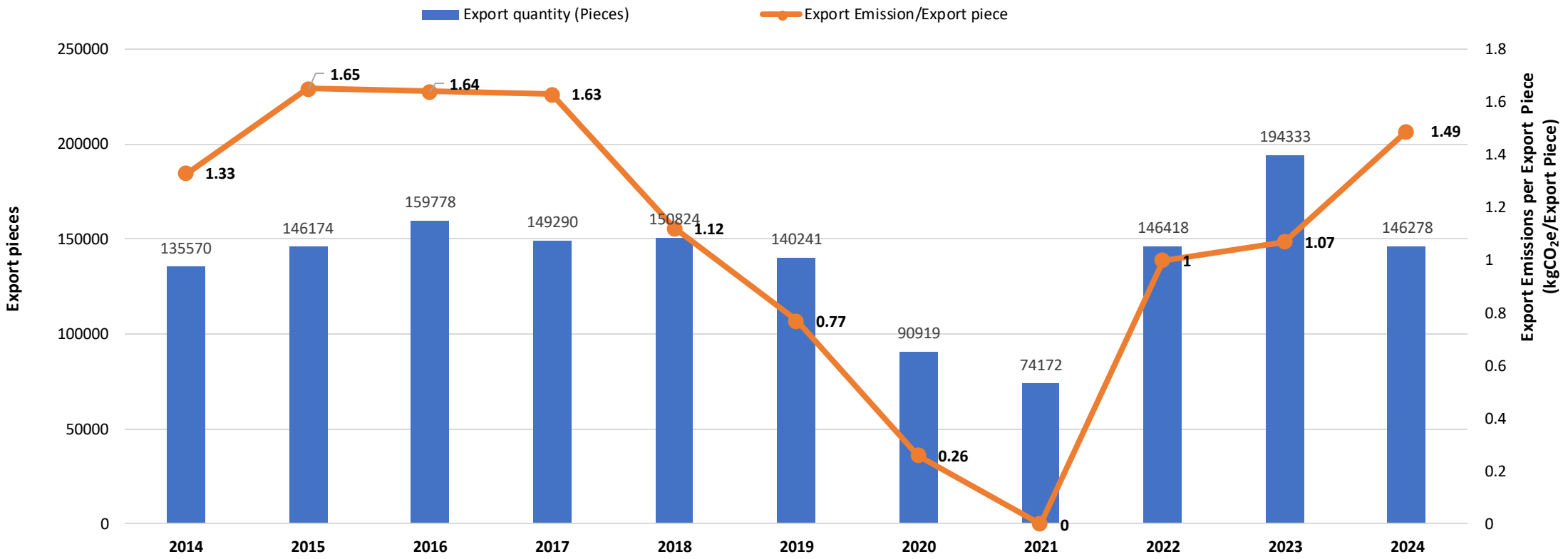


Figure 14: Export Emissions per Export Piece vs. Production Quantity

- The export emissions per piece have significantly increased by 39.20% compared to the previous year, due to a 24.73% decrease in export quantity.
- Compared to the base-year, the same KPI has increased by 11.99%.

Please refer table 3 in the Annexure for a detailed summary of all KPIs across 2014 to 2024

5. Observations and Recommendations

5.1 Observations and Recommendations

ENERGY

- **Observation**

Since most of the recommendations have already been implemented, measures could now be taken to set department-wise benchmarks at the factory following detailed analyses of energy consumption.

Recommendation

To conduct a Level II Energy Audit to identify further opportunities for energy and cost savings.

Observations

Inefficient light fixtures have been converted to LEDs.

Automated sensors have been installed for production line lights to automatically switch on and off depending on the sufficiency of natural light from skylights.

Communication to encourage employee to save electricity *(i.e. stickers near light switches)*

THIRD-PARTY DELIVERIES

- **Observation**

An increase in air freight (% tonne-km) over sea freight in imports. However, compared to last year, it has decreased, which is a good sign.

Recommendation

Gradually communicate with suppliers to provide forecasts with sufficient time to allow raw materials to be transported via sea freight.

6. About the Certification

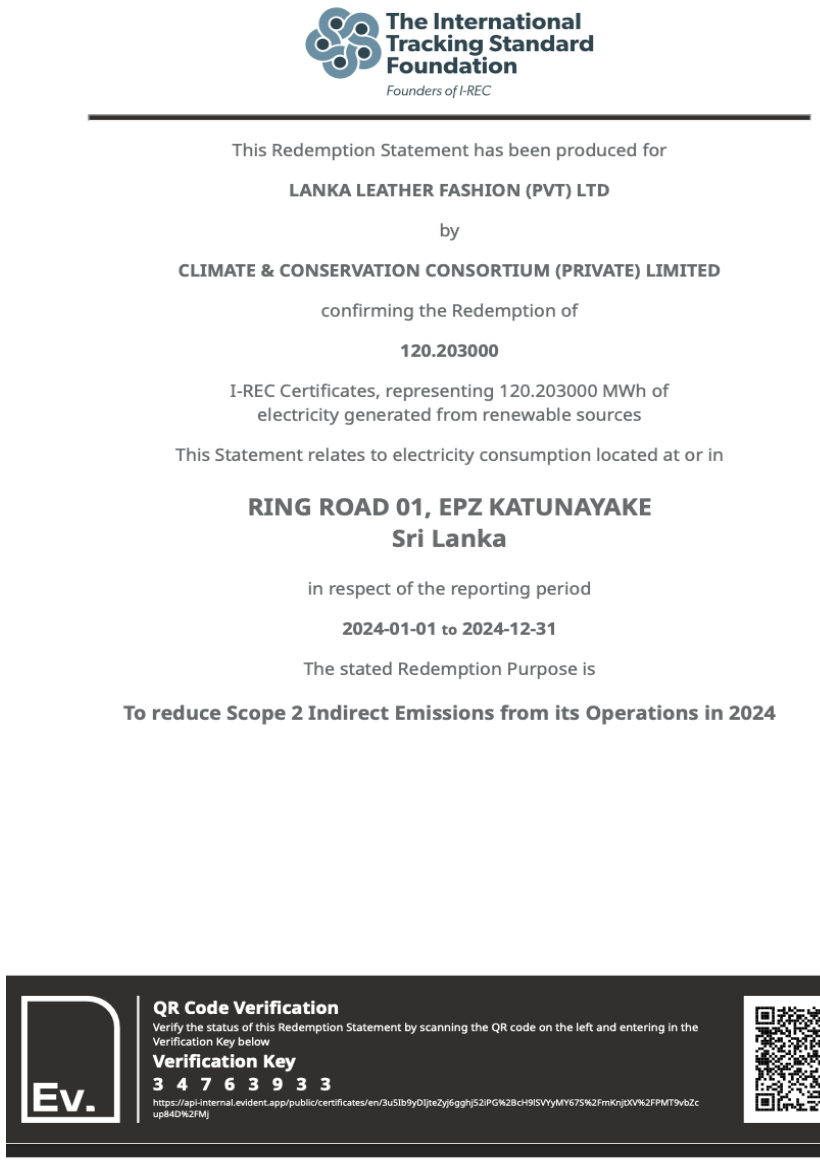
6.1 Carbon Neutrality Achievement of LLF

LLF is a Carbon Neutral business entity. The company has achieved this by compensating for its emissions across all categories through the use of Carbon Credits and International Renewable Energy Certificates (I-RECs).

Emissions from Categories 1, 3 and 4 were negated by supporting an external Renewable Energy Project in return for an equivalent amount of internationally registered and verified credits. Category 2 emissions have been partially compensated for by utilising I-RECs, with the remainder offset through Carbon Credits.

6.2 About the I-REC Certification

The Category 2 emissions of LLF have been reduced by 48.83 tCO2e as a result of using 120.203 MWh of internally-generated I-RECs.



The International Tracking Standard Foundation

Founders of I-REC

This Redemption Statement has been produced for

LANKA LEATHER FASHION (PVT) LTD

by

CLIMATE & CONSERVATION CONSORTIUM (PRIVATE) LIMITED

confirming the Redemption of

120.203000

I-REC Certificates, representing 120.203000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

RING ROAD 01, EPZ KATUNAYAKE
Sri Lanka

in respect of the reporting period

2024-01-01 to **2024-12-31**

The stated Redemption Purpose is

To reduce Scope 2 Indirect Emissions from its Operations in 2024

Ev.

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 4 7 6 3 9 3 3

https://api-internal.evident.app/public/certificates/en/3uSIb9yDIjteZyj6gghjS2iPG%2BcH9ISVYyMY67S%2FmKnjtXV%2FPMT9vbZcup84D%2FMj

6.3 About the ZeroCarbon® Certification

- Following the GHG Assessment of Lanka Leather Fashion (Pvt) Ltd, the company has offset its Organisational Carbon Footprint of **720.19** tCO2e for the 2024 Reporting Period by purchasing an equivalent amount of internationally registered Carbon Credits to make the carbon footprint zero.

- Lanka Leather Fashion (Pvt) Ltd has therefore been certified as a 'ZeroCarbon® Company' and retains its Carbon Neutral status.

6.4 Carbon Credit Project Supported

Promotion of Renewable Energy Generation in India

Project type: Renewable energy
Region: Asia

Description

This Programme of Activities (REG-PoA) promotes renewable energy generation across India including Karnataka, Rajasthan, Maharashtra, and Madhya Pradesh. Registered under the UNFCC CDM Standard, it supports the development of renewable energy plants and delivers energy to the Indian grids.

Each CDM Programme Activity (CPA) under this REG PoA will comprise of wind and solar renewable energy plants, which will improve the social, economic, environmental and technological wellbeing of those directly impacted.

7. References

7. References

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