

**GHG INVENTORY**  
**ACCOUNTING**  
**CARBON FOOTPRINT**

**YEAR 2025**

**Messianic Clothing Pvt. Ltd.**

**B-18, HOSIERY COMPLEX, PHASE-II**  
**EXTENSION, NOIDA, Gautam**  
**Buddha Nagar, Uttar Pradesh**





# Objective of the report

Introduction



Clarify the report overall purpose and establish specific, measurable targets.

**01**

Measure and Track Emissions



Regularly calculating and monitoring greenhouse gas emissions from your operations.

**02**

Enhance Corporate Sustainability Strategy



Strengthening ESG practices to improve long-term business resilience and impact.

**03**

Improve Transparency and Stakeholder Communication



Openly sharing accurate sustainability data, goals, and progress with stakeholders.

**04**

Support Carbon Reduction and Offset Initiatives



Review the outcomes regularly to accurately measure progress and ensure alignment.

**05**

# Messianic

Established in 2001, Messianic Clothing Pvt Ltd is a leading production house specializing in the design and manufacturing of high-fashion garments for ladies. Based in Noida, the company has built a strong reputation for its high-quality apparel and has been exporting to prominent markets in Europe and the USA for over two decades.

With a commitment to excellence, Messianic Clothing combines advanced production techniques with an understanding of global fashion trends, offering a wide range of garments that meet the highest standards of quality and style. The company's global presence underscores its dedication to both the fashion industry and international business partnerships.



*At Messianic Clothing Pvt. Ltd., sustainability is not just a goal—it is an integral part of our business philosophy.*

At Messianic Clothing Pvt Ltd, sustainability is integral to our operations. Since inception, we have strived to provide high-quality fashion garments while minimizing our environmental impact. As we continue to expand our presence in international markets, we are committed to reducing our Greenhouse Gas (GHG) emissions and implementing sustainable practices across our processes.

This report highlights our efforts to better understand and mitigate our environmental footprint, reflecting our dedication to a greener future. We remain committed to improving our sustainability initiatives and contributing to the global movement for a more sustainable fashion industry.

- Mr. Prakul Luthra  
Director, Messianic Clothing Pvt Ltd

# CARBON FOOTPRINT REPORT

# What is a Carbon Footprint?

A carbon footprint refers to the total amount of greenhouse gas (GHG) emissions—mainly carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O)—generated throughout the lifecycle of production, from raw material extraction to end-of-life disposal.

## Key Sources of Carbon Footprint:



**Energy Consumption** – Use of fossil fuels for electricity, heating, and industrial processes.



**Transportation** – Emissions from vehicles, airplanes, and logistics.



**Manufacturing & Production** – Industrial activities, including raw material extraction and processing.



**Waste Management** – Landfills, incineration, and wastewater treatment.



**Supply Chain Activities** – Emissions from goods and services used in operations.

# Carbon Emission in Textile Industry



The sector is aligned with the National reduction target of reducing overall GHG emission intensity by **45% from 2005 levels by 2030.**



India's textile and apparel industry contributes around **65 million tonnes of CO<sub>2</sub> equivalent annually**, roughly **2% of national GHG emissions.**



As of 2026, textiles have been formally brought under India's **Carbon Credit Trading Scheme (CCTS)**, requiring companies to meet emission-reduction benchmarks.



Indian textile manufacturing remains energy-intensive, driving significant CO<sub>2</sub> emissions.

# IMPORTANCE OF GHG REPORTING

### **1. Climate Change Mitigation**

Carbon emissions, particularly CO<sub>2</sub>, are the primary drivers of climate change. Transparent reporting helps businesses, governments, and individuals track their environmental impact and take measures to reduce it.

### **2. Regulatory Compliance**

Many countries and regions have laws requiring businesses to disclose their emissions. Compliance with these regulations helps avoid penalties and ensures alignment with national and international climate goals.

### **3. Corporate Responsibility & Reputation**

Consumers and investors are increasingly favoring environmentally responsible companies. Transparent reporting enhances credibility, attracts eco-conscious customers, and strengthens brand reputation.

### **4. Risk Management & Cost Savings**

Understanding emission levels helps organizations identify inefficiencies, reduce energy consumption, and cut costs. This also prepares businesses for future carbon taxes and regulatory changes.

## 5. Investor & Stakeholder Expectations

Many investors and stakeholders demand Environmental, Social, and Governance (ESG) transparency. Carbon reporting allows companies to showcase their commitment to sustainability, making them more attractive for investment.

## 6. Benchmarking & Goal Setting

By reporting emissions, organizations can set clear sustainability goals, track progress, and compare their performance against industry standards or competitors.

## 7. Supply Chain Accountability

Large corporations are increasingly requiring suppliers to disclose carbon emissions to ensure their entire supply chain is aligned with sustainability targets.

## 8. Contribution to Global Initiatives

Carbon reporting aligns with international agreements like the **Paris Agreement** and **Net-Zero Initiatives**, helping nations and industries work collectively toward a sustainable future..

# ABOUT THE ORGANIZATION

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# MESSIANIC CLOTHING PVT. LTD.

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- Messianic Clothing Pvt Ltd is a premier production house specializing in high-fashion garments for ladies. Based in Noida, India. With a strong focus on international markets, Messianic Clothing exports its products to leading fashion hubs in Europe and the USA, providing clients with garments that reflect the latest trends and high standards of quality.
- As a 100% export-oriented garment manufacturer, the company recognizes the impact of the textile and apparel industry on climate change and has taken steps to mitigate its carbon footprint.



















# ABOUT THE REPORT



The study follows **ISO 14064-1 & ISO 14064-2** for GHG accounting, covering **Scope 1, Scope 2, and Scope 3 emissions** (direct, energy indirect, and other indirect emissions). The GHG inventory report is prepared to enhance transparency and ensure compliance with stakeholder communication.



The company has conducted a **Greenhouse Gas (GHG) accounting study** for its operations from **January 1, 2025, to December 31, 2025**. The following methodologies and standards were used for assessment:

1. GHG Protocol Corporate Accounting and Reporting Standard – Greenhouse Gas Protocol
2. Corporate Value Chain (Scope 3) Accounting and Reporting Standard – Greenhouse Gas Protocol



This report also includes necessary data assumptions, exclusions, and explanations for any deviations from methodologies. The scope includes all emissions within the operational boundaries of **Messianic Clothing Pvt. Ltd., Noida**.



The facility holds all applicable pollution consents and operates under government regulations. The study involved collecting and analyzing data as per the above standards, ensuring full compliance with environmental regulations.



### **Organizational Boundary:**

Establishing an **organizational boundary** is essential for accurate greenhouse gas (GHG) emissions reporting.



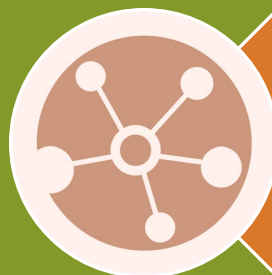
### **Period of Validity:**

This report remains valid until it is superseded by a future revision or until the Company publishes a report that modifies the approach and calculation methodology outlined herein.



### **Frequency of the Report:**

The unit plans to assess its GHG performance annually. This report covers data from January 1, 2025, to December 31, 2025, inclusive of both dates.



### **Contents:**

The report includes data collected method from various sources, and details of emission factors & proper calculation.

# Intended Use & Users of the Report

This report is a voluntary communication to various stakeholders of **Messianic Clothing Pvt. Ltd.**, including customers, management, investors, government agencies, and the public. It serves to monitor GHG emissions performance and to establish a basis for future GHG reduction targets. Stakeholders can track the company's GHG performance over time and refer to this report for future verification of carbon performance, if applicable.

**Scopes covered:** Scope 1, Scope 2 and Scope 3

**Management Details:**

**Mr. Prakul Luthra** | Director

**Verifier:** Mr. Rajiv Chaturvedi

**Verifier Certificate:** ISO 14064-1 & ISO 14064-2

**Certificate No.:** 117874925 / 165946641:

**Issued by:** SGS India Pvt. Ltd.

**Accounting & Verification by:** Green Compliance Services

# Carbon Footprint – GHG Inventory Reporting

## **Quantification of GHG emissions and removals**

GHG emissions are quantified following the GHG Protocol, but removals are not quantified due to lack of verifiable data. No biogenic fuel is used within the operational boundary.

## **Calculation steps:**

- Identification of GHG sources/sinks
- Selection of quantification methodology
- Selection and collection of GHG activity data
- Selection or development of GHG emission factors
- Calculation of GHG emissions



Recycled



Natural

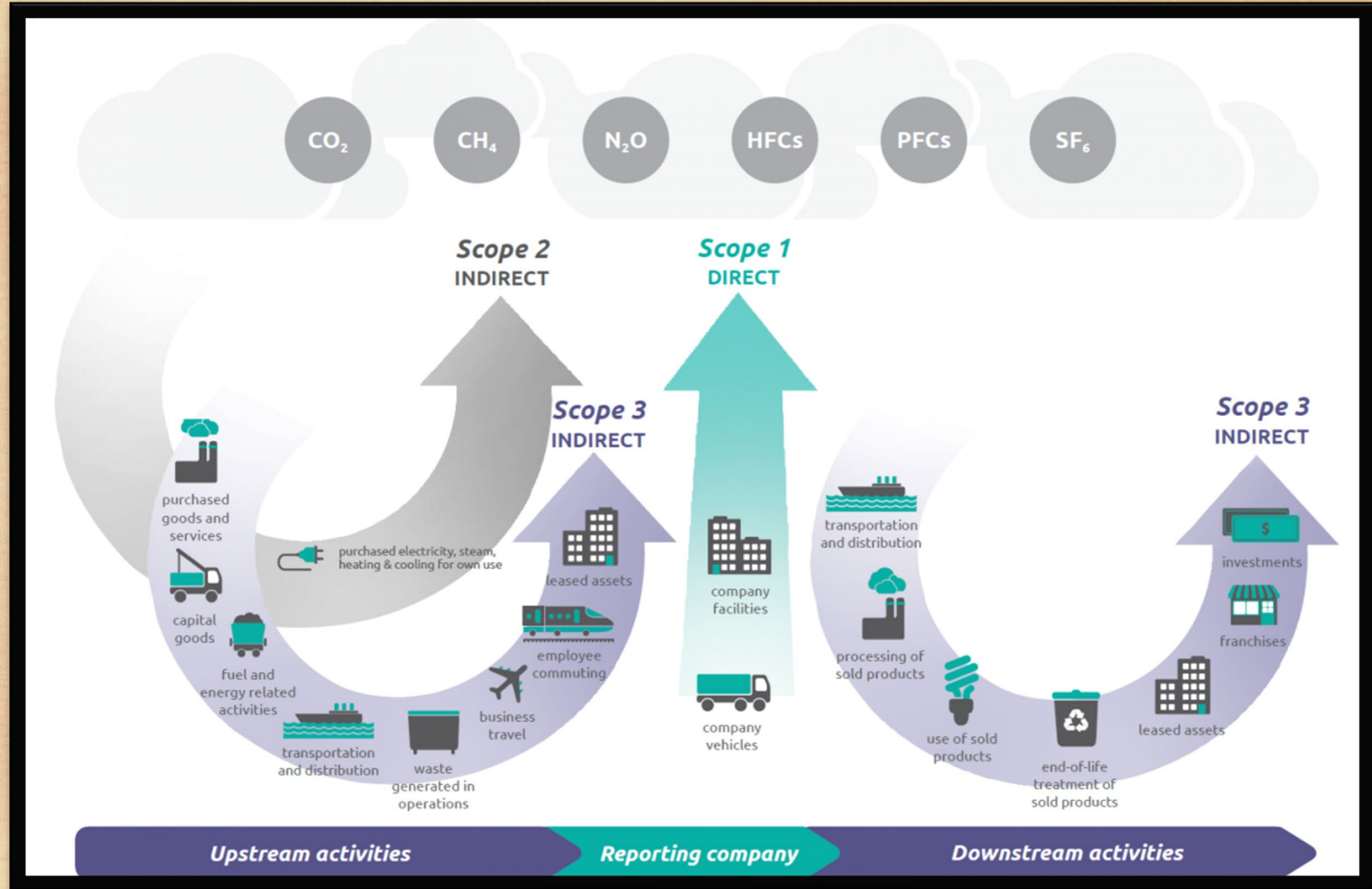


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Carbon friendly

# SCOPE 1, SCOPE 2, SCOPE 3 EMISSIONS

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- **Direct emissions:** Include fossil fuel consumption, PNG gas in DG sets, boilers, and other equipment, HFC replenishment in ACs, and fuel use in vehicles under direct administrative control of the unit.
- **Energy indirect emissions:** Result from the electricity purchased from the grid.
- **Other indirect emissions:** Arise from fuel consumption in vehicles used for material transportation, final product dispatch, and employee commutation.



# Identification of GHG Sources and sinks

<b>Source GHG Unit</b>			
<b>Scope 1 (Direct Emissions)</b>			
<b>Combustion Sources</b>	Stationary combustion in diesel generators	CO <sub>2</sub>	tCO <sub>2</sub>
	Stationary combustion in boiler	CO <sub>2</sub>	tCO <sub>2</sub>
	Refrigerant loss	CO <sub>2</sub>	tCO <sub>2</sub>
	LPG used in canteen	CO <sub>2</sub>	tCO <sub>2</sub>
<b>Mobile Emissions</b>	Fossil fuel consumption in company-owned vehicles	CO <sub>2</sub>	tCO <sub>2</sub>
<b>Scope 2 (Energy Indirect Emissions)</b>			
<b>Purchased electricity from grid</b>	Emissions associated with power generation in the power plants connected to the regional grid	CO <sub>2</sub>	tCO <sub>2</sub>
<b>Scope 3 (Other Indirect Emissions)</b>			
<b>Transportation &amp; Employee Commutation</b>	Fossil fuel consumption in third party vehicles	CO <sub>2</sub>	tCO <sub>2</sub>

*There are no relevant GHG sinks for the operations for this unit.*





# Stationary Combustion

Activity	Activity Data Required	Units
<b>CO<sub>2</sub> emissions from fossil fuel (diesel) Consumption</b>	Diesel Consumed	Litres
	Density of diesel	Kg/lit
	NCV of diesel	TJ/Gg
	Emission factor of diesel(EF)	tCO <sub>2</sub> /TJ
<b>CO<sub>2</sub> emissions from fossil fuel (PNG) Consumption</b>	PNG Consumed	kg
	NCV of PNG	TJ/kT
	Emission factor of PNG (EF)	tCO <sub>2</sub> /TJ
<b>CO<sub>2</sub> Emissions from LPG Consumption</b>	Amount of LPG used	kg
	NCV of LPG	TJ/Gg
	Emission factor of LPG	tCO <sub>2</sub> /TJ

**Remarks:**

*Density of diesel assumed as 0.82 kg/ lit*

## Other Emission Sources

<b>Emission Source</b>	<b>Activity Data Required</b>	<b>Units</b>
HFC emission from refrigerant top up	Amount of HFC top up	Metric tonnes

## Energy Indirect Emissions

<b>Emission Source</b>	<b>Activity Data Required</b>	<b>Units</b>
<b>Purchase of grid electricity</b>	Electricity imported from the grid	kWh
	Emission factor of grid	tCO <sub>2</sub> /kWh

# Mobile Combustion

Emission Source	Activity Data Required	Units
<b>Emissions due to mobile combustion</b>	Fuel Consumed	Litres
	Density of the fuel	Kg/lit
	NCV of the fuel	TJ/Gg
	Emission factor of fuel	tCO <sub>2</sub> /TJ

# Other Indirect Emissions

Emission Source	Activity Data Required	Units
<b>Emissions due to mobile combustion</b>	Fuel Consumed in third party vehicles	Litres
	Density of fuel	Kg/lit
	NCV of fuel	TJ/Gg
	Emission factor of fuel	tCO <sub>2</sub> /TJ



# Messianic Clothing Pvt. Ltd.

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Environmental Data

Year 2025

# Factory Data - 2025

YEAR 2025																
S.No.	Description	GHG Scope	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1	Shipment	Yearly	Pcs	119522	76401	84820	36965	36710	54060	81074	51974	30715	6235	19011	74786	672273
2	Shipment	Yearly	Kg	31415	22272	23914	10301	11416	14216	22092	16536	11211	2276	6939	27297	199885
3	Production	Yearly	Pcs	101475	87428	94745	45867	38472	52460	98721	58295	15899	22640	31884	53828	701714
4	Production	Yearly	Kg	23339	20108	21791	10549	9789	16887	29406	22218	6415	6330	7827	13095	187754
7	Manpower	Yearly	Number	438	420	387	346	334	360	413	405	240	255	300	356	355
8	Working Days	Yearly	Number	26	24	24	26	26	25	27	25	26	23	25	27	304

# Scope 1 Data - 2025

## YEAR 2025

S.No.	Description	GHG Scope	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1	<b>PNG consumed in Boiler (50 kg)</b>	Scope 1	SCM	500	463	381	326	469	709	464	500	525	280	426	505	5548
2	<b>PNG consumed in Boiler (50 kg)</b>	Scope 1	SCM	500	463	381	326	469	709	464	500	525	280	426	505	5548
3	<b>PNG consumed in Tumbler 1</b>	Scope 1	SCM	1650	1317	1009	785	547	795	1320	666	407	585	767	1282	11130
4	<b>PNG consumed in Tumbler 2</b>	Scope 1	SCM	1650	1317	1009	785	547	795	1320	666	407	585	767	1282	11130
5	<b>PNG consumed in Tumbler 3</b>	Scope 1	SCM	1650	1317	1009	785	547	795	1320	666	407	585	767	1282	11130
6	<b>PNG consumed in Tumbler 4</b>	Scope 1	SCM	1650	1317	1009	785	547	795	1320	666	407	585	767	1282	11130
7	<b>PNG consumed in Tumbler 5</b>	Scope 1	SCM	1650	1317	1009	785	547	795	1320	666	407	585	767	1282	11130
8	<b>PNG consumed in DG Set</b>	Scope 1	SCM	21	10	17	100	200	80	148	28	19	10	28	0	661
9	<b>Total PNG consumed</b>	Scope 1	SCM	9272	7518	5823	4680	3873	5475	7675	4358	3105	3494	4715	7419	67407
10	<b>Diesel consumed in DG set</b>	Scope 1	Ltr	384	124	278	646	1116	624	701	280	180	172	103	170	4777
11	<b>Refrigerant AC R32</b>	Scope 1	Kg	0	0	0	0	0	0	9	2	2	0	0	0	12
12	<b>Company Owned Cars - Petrol</b>	Scope 1	Ltr	7280	6720	6720	7280	7280	7000	7560	7000	7280	6440	7000	7560	85120

Scope	Emission source category	t CO2e
Scope 1	Fuels	148.09
	Refrigerants	8.10
	Factory Owned Vehicle	15.72
	<b>Total Scope 1</b>	171.91

## Scope 2 Data - 2025

YEAR 2025																
S.No.	Description	GHG Scope	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1	Government Grid Electricity	Scope 2	KwH	38248	31292	31604	33028	35472	44182	48838	43422	34182	24106	24054	29926	418354

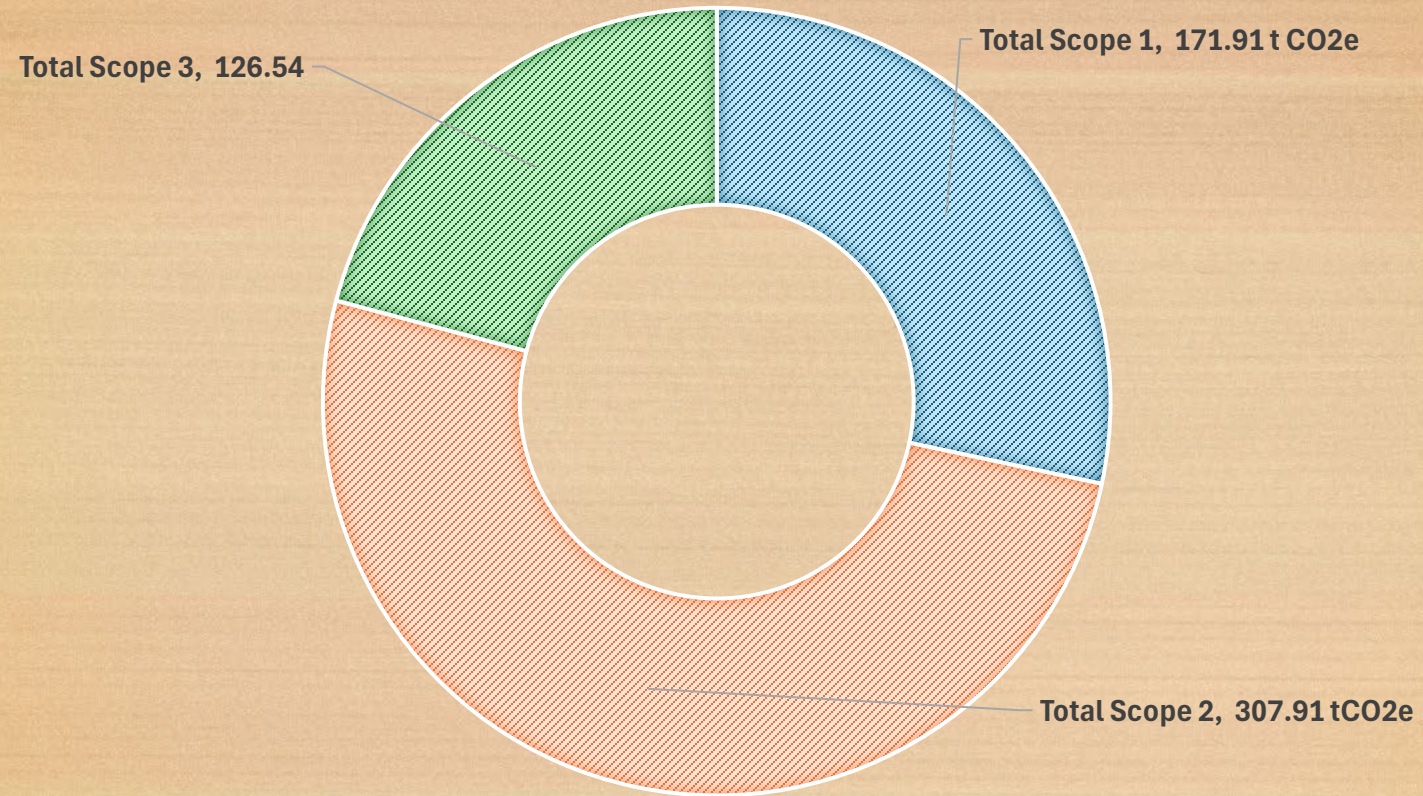
Scope	Emission source category	t CO2e
Scope 2	Emissions from the generation of purchased electricity	307.91
	<b>Total Scope 2</b>	<b>307.91</b>

## Scope 3 Data - 2025

YEAR 2025																
S.No.	Description	GHG Scope	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1	Shipping Distance Kms By HGV Vehicle - Diesel	Scope 3	Km	30500	35912	27871	21749	12958	14968	28464	20938	12504	9025	12227	27767	254884
2	Employee Commute By Car Petrol	Scope 3	Km	10400	9600	9600	10400	10400	10000	10800	10000	10400	9200	10000	10800	121600
3	Employee Commute By Motorcycle Petrol	Scope 3	Km	63700	58800	58800	63700	63700	61250	66150	61250	63700	56350	61250	66150	744800

Scope	Emission source category	t CO2e
Scope 3	Freighting goods	42.67
	Transmission and distribution losses	4.18
	Employees commuting	79.69
	<b>Total Scope 3</b>	126.54

# Total Scope – Year 2025



SCOPE EMISSION  
NORMALIZED

YEAR 2025

## Normalized GHG Emission - per Kg and per Pc Shipment– Year 2025

Absolute ss	Scope 1 tCO2e	Scope 2 tCO2e	Scope 3 tCO2e	Total Scope tCO2e
Year 2025	171.91	307.91	126.54	606.36
Normalised	Scope 1 tCO2e <u>Per Pc</u>	Scope 2 tCO2e <u>Per Pc</u>	Scope 3 tCO2e <u>Per Pc</u>	Total Scope tCO2e <u>Per Pc</u>
Year 2025	0.0003	0.0005	0.0002	0.0009
Normalised	Scope 1 tCO2e <u>Per Kg</u>	Scope 2 tCO2e <u>Per Kg</u>	Scope 3 tCO2e <u>Per Kg</u>	Total Scope tCO2e <u>Per Kg</u>
Year 2025	0.0009	0.0015	0.0006	0.0030

# COMPARITIVE STUDY

YEAR 2023 - 2025

### Absolute & Normalized Air Emission Trend

<b>Emission</b>	<b>Scope 1 tCO2e</b>	<b>Scope 2 tCO2e</b>	<b>Scope 3 tCO2e</b>	<b>Total Scope tCO2e</b>
<b>Year 2023 (Absolute)</b>	170.90	316.46	243.75	731.11
<b>Year 2023 (Normalized)</b>	0.0003	0.0005	0.0004	0.0012
<b>Emission</b>	<b>Scope 1 tCO2e</b>	<b>Scope 2 tCO2e</b>	<b>Scope 3 tCO2e</b>	<b>Total Scope tCO2e</b>
<b>Year 2024 (Absolute)</b>	176.19	344.97	254.83	775.99
<b>Year 2024 (Normalized)</b>	0.0003	0.0005	0.0004	0.0011
<b>Emission</b>	<b>Scope 1 tCO2e</b>	<b>Scope 2 tCO2e</b>	<b>Scope 3 tCO2e</b>	<b>Total Scope tCO2e</b>
<b>Year 2025 (Absolute)</b>	171.91	307.91	126.54	605.99
<b>Year 2025 (Normalized)</b>	0.0003	0.0005	0.0002	0.0009

# RECOMMENDATIONS

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01

### **Improve Energy Efficiency in Operations**

Implement energy-efficient equipment, optimize production processes, and conduct regular energy audits to reduce electricity consumption, thereby lowering Scope 2 emissions.

02

### **Adopt Renewable Energy Sources**

Increase the use of renewable electricity such as solar power or green energy procurement to reduce emissions associated with purchased electricity.

## Suggestions to reduce GHG emission

03

### **Optimize Fuel Consumption in Direct Operations**

Improve maintenance of boilers, generators, and company vehicles, and adopt fuel-efficient technologies to reduce Scope 1 emissions.

04

### **Promote Sustainable Transportation and Logistics**

Encourage carpooling, public transport, or shuttle services for employees. Optimize freight routes and reduce empty truck runs or shift to lower-emission logistics options to reduce Scope 3 emissions.

# END OF REPORT