TELEMA ELECTRICALS PVT. LTD.

GHG Emission Report

2025

Organization Overview

Telema Electricals Pvt. Ltd. is engaged in the manufacturing, testing, and supply of specialist power resistor systems for railway, industrial and transmission applications. The organization manufactures technologically advanced resistor solutions used across railway transportation systems, industrial electrical applications, braking systems, harmonic filtering applications, grounding systems, and specialized engineering operations. The company serves a wide range of customers within the railway, utility, industrial, and electrical engineering sectors by providing both standard and customized resistor systems designed for demanding operational environments.

Date of Compilation - 20-02-2026

Prepared By :
Sachin Gulati
(For MSS Consulting)

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1. Verification Statement

At your request, we have performed a review of data related to GHG Emissions and the underlying data used for their calculation for the calendar year 2025.

As part of our engagement, we performed an independent assessment of the GHG Calculations methodologies, data sources, and reporting processes. Our review included validation of data accuracy, consistency, completeness, and alignment with the agreed GHG framework and business objectives.

Based on the procedures performed, we confirm that the GHG Data correctly defined and calculated, and that the supporting data is accurate and reliable within the agreed scope of review.

Our assessment was limited to the scope agreed upon and does not constitute a financial audit or assurance engagement beyond the verification of GHG data and calculations.

We appreciate the opportunity to support **Telema Electricals Pvt. Ltd.** and remain available should you require any further clarification, enhancements, or ongoing GHG governance support.

Yours sincerely,

Sachin Gulati
(Lead Auditor)

MSS Consulting

2. Executive Summary

This Greenhouse Gas (GHG) Emissions Assessment Report has been prepared to evaluate and disclose greenhouse gas emissions associated with the operational activities of Telema Electricals Pvt. Ltd. during the reporting period January 2025 to December 2025.

The report provides a structured and transparent assessment of emissions associated with:

- Fuel consumption
- Electricity usage
- Purchased materials
- Transportation activities
- Employee commuting
- Business travel
- Waste generation
- Logistics operations
- Water consumption
- Canteen activities

The objective of this assessment is to:

- Identify major emission sources across operations
- Improve energy efficiency and resource utilization
- Support sustainability and ESG initiatives
- Establish a baseline for future carbon reduction initiatives
- Improve operational environmental performance
- Support customer sustainability requirements
- Strengthen environmental governance and reporting

The assessment has been conducted in accordance of internationally accepted methodologies.

The report classifies emissions into:

Scope 1 - Direct emissions from owned or controlled sources
Scope 2 - Indirect emissions from purchased electricity
Scope 3 - Other indirect emissions occurring within the value chain

This report also establishes a baseline for future performance comparison and continuous environmental improvement.

3.Purpose of the Report

This report has been prepared to quantify, monitor, and disclose the greenhouse gas (GHG) emissions associated with the organization's operations for the reporting period.

Objectives of the Report

- To identify significant sources of greenhouse gas emissions.
- To quantify Scope 1, Scope 2, and Scope 3 emissions.
- To establish a baseline for future emission reduction initiatives.
- To support sustainability reporting and audit requirements.
- To improve energy efficiency and environmental performance.
- To align with recognized GHG accounting standards.

Reporting Period

- Reporting Period - Jan 2025 To Dec 2025

Data Collection Sources

The following operational records and supporting documents were used during the assessment:

- Electricity bills
- Fuel purchase records
- Vehicle logbooks
- Vendor invoices
- Waste disposal records
- HR travel records
- Shipment records
- Water consumption records
- Procurement records
- Canteen records

Methodology Adopted

The greenhouse gas inventory has been developed using an activity-based accounting methodology where actual operational data has been multiplied by approved emission factors.

The methodology focuses on the collection of measurable activity data from operational records and supporting documents.

GHG Emissions = Activity Data × Emission Factor

4.Greenhouse Gas (GHG) Overview

Greenhouse gases (GHGs) are gases present in the atmosphere that absorb and emit heat radiation, contributing to the greenhouse effect and global warming.
Industrial activities, energy consumption, transportation operations, and waste management practices are among the major contributors to greenhouse gas emissions.

Importance of GHG Assessment

Conducting a greenhouse gas assessment helps organizations:

- Understand environmental impacts associated with operations.
- Identify significant emission sources.
- Improve operational efficiency.
- Support sustainability and ESG initiatives.
- Meet customer and stakeholder expectations.
- Establish carbon reduction targets.
- Improve environmental risk management.

Major Greenhouse Gases Covered

Gas	Chemical Formula	Common Sources
Carbon Dioxide	CO_2	Fuel combustion, electricity usage
Methane	CH_4	Fuel combustion, waste disposal
Nitrous Oxide	N_2O	Combustion processes
Hydrofluorocarbons	HFCs	Refrigeration and cooling systems

Emission Classification

Scope	Description
Scope 1	Direct emissions from owned or controlled sources
Scope 2	Indirect emissions from purchased electricity
Scope 3	Other indirect emissions across the value chain

5.Organizational Boundary Approach

Data Quality Considerations

The assessment has been conducted using the Operational Control Approach.

Boundary Type	Selected Approach
Production Department	YES
Maintenance Department	YES
HR & Administration	YES

Emission Sources Included

Category	Included Sources
Fuel Combustion	Diesel Consumption
Mobile Sources	Owned Petrol Vehicles
Purchased Electricity	Hydro Electricity
Purchased Materials	Steel Sheet Purchased
Logistics	Incoming & Outgoing Transport
Employee Commuting	Employee Car & Two-Wheeler Travel
Business Travel	Air, Car, Bus & Train Travel
Waste	Steel Waste & Paper Waste
Water Consumption	Water Consumption
Canteen Activities	Veg Meals in Canteen

6.Scope 1 Emissions (Direct Emissions)

Scope 1 emissions are direct greenhouse gas emissions from sources owned or controlled by the organization.

Stationary Combustion

Activity	Consumption	Emissions
Diesel Consumption	3605 L	9.66 MT CO_2e

Mobile Combustion

Activity	Distance	Emissions
Large Petrol Car – Owned Vehicles	31,379 km	6.34 MT CO_2e

Scope 1 Total

Category	Emissions
Scope 1 Total	16.00 MT CO_2e

7.Scope 2 Emissions (Indirect Energy Emissions)

Scope 2 emissions are indirect emissions associated with purchased electricity consumed by the organization.

Electricity Source	Scope	Emissions
Hydro Electricity – Market Based	Scope 2	~0.00 MT CO_2e
Hydro Electricity – Location Based	Scope 2	73.87 MT CO_2e

The organization utilizes hydro-based renewable electricity resulting in negligible market-based Scope 2 emissions.

8.Scope 3 Emissions (Value Chain Emissions)

Scope 3 emissions include indirect emissions from activities not directly controlled by the organization.

Categories Considered

Category	Emissions (MT CO_2e)
Purchased Materials	111.94
Incoming Transportation	81.33
Outgoing Transportation	65.49
Business Travel	6.28
Employee Commuting	5.66
Waste Generation	0.71
Water Consumption	0.63
Canteen Activities	4.57

Purchased Materials

Material	Quantity	Emissions
Steel Sheet Purchased	58,916 kg	111.94 MT CO_2e

Business Travel

Activity	Distance	Emissions
Air Travel	22,606 km	3.01 MT CO_2e
Business Travel by Bus/Train	94,466 km	2.83 MT CO_2e
Business Travel by Car	2,300 km	0.44 MT CO_2e

Canteen Activities

Activity	Quantity	Emissions
Veg Meals in Canteen	9,144 Meals	4.57 MT CO_2e

Employee Commuting

Activity	Distance	Emissions
Employee Travel by Car	14,268 km	2.71 MT CO_2e
Employee Travel by 2-Wheeler	64,077 km	2.95 MT CO_2e

Logistics Operations

Activity	Distance	Emissions
Incoming Vehicle Transport	451,813 km	81.33 MT CO_2e
Outgoing Vehicle Transport	363,833 km	65.49 MT CO_2e

Waste Generation

Waste Type	Quantity	Emissions
Steel Waste	8,407 kg	0.17 MT CO_2e
Paper & Board Waste	6,000 kg	0.54 MT CO_2e

Water Consumption

Activity	Quantity	Emissions
Water Consumption	1,839 KL	0.63 MT CO_2e

Canteen Activities

Activity	Quantity	Emissions
Veg Meals in Canteen	9,144 Meals	4.57 MT CO_2e

Upstream and Downstream

Metric	Value
Gross Upstream Scope 3 Emissions	211.12 MT CO_2e
Gross Downstream Scope 3 Emissions	65.49 MT CO_2e

Scope 3 Total

Category	Emissions
Scope 3 Total	276.61 MT CO_2e

9.Consolidated GHG Emissions Summary

The consolidated emissions summary provides an overview of greenhouse gas emissions generated across all operational categories included within the reporting boundary.

Overall Emission Summary

Emission Category	Emissions (tCO_2e)	Contribution %
Scope 1 Emissions	16	4.36
Scope 2 Emissions (Location-Based)	73.87	20.15
Scope 3 Emissions	276.61	75.49
Total GHG Emissions	366.48	100

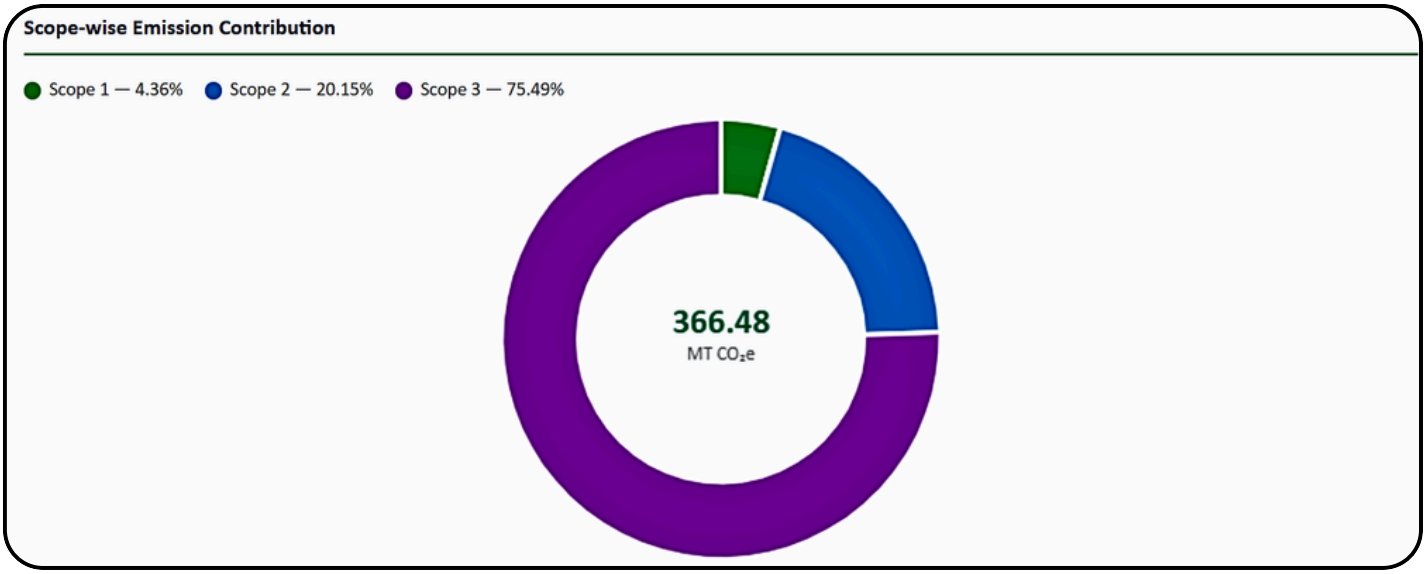
Suggested Analysis Areas

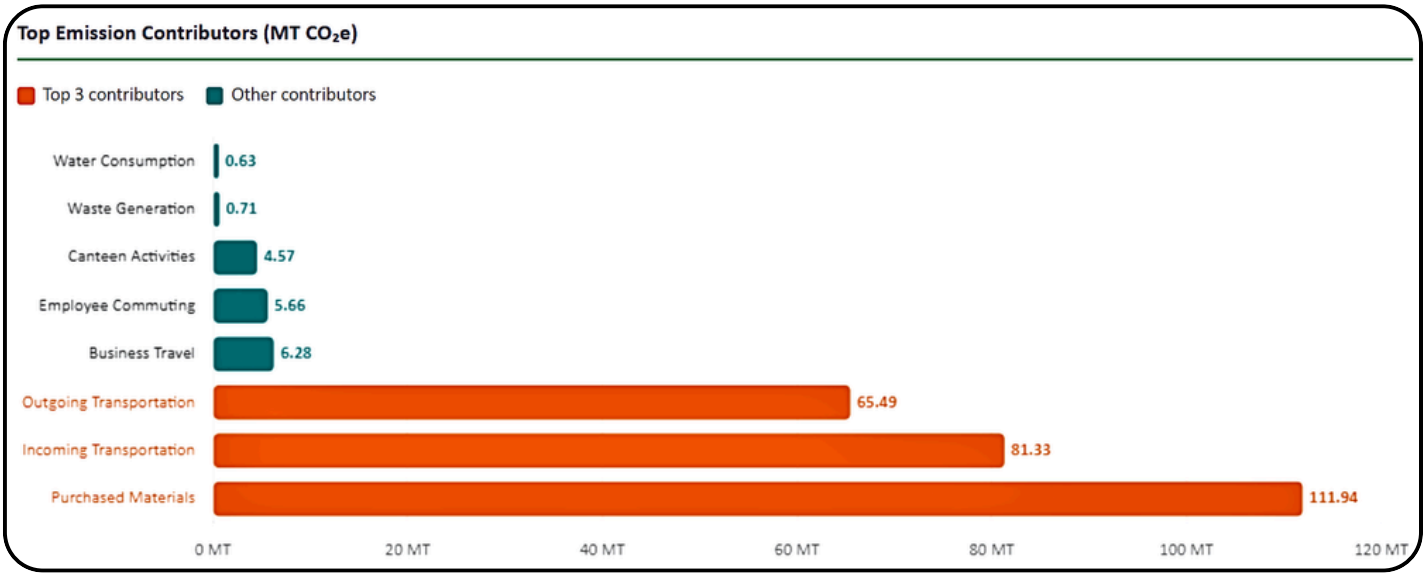
- Monthly electricity consumption trends
- Fuel consumption analysis
- Scope-wise emission contribution
- Employee commuting analysis
- Transportation optimization opportunities
- Operational efficiency improvement

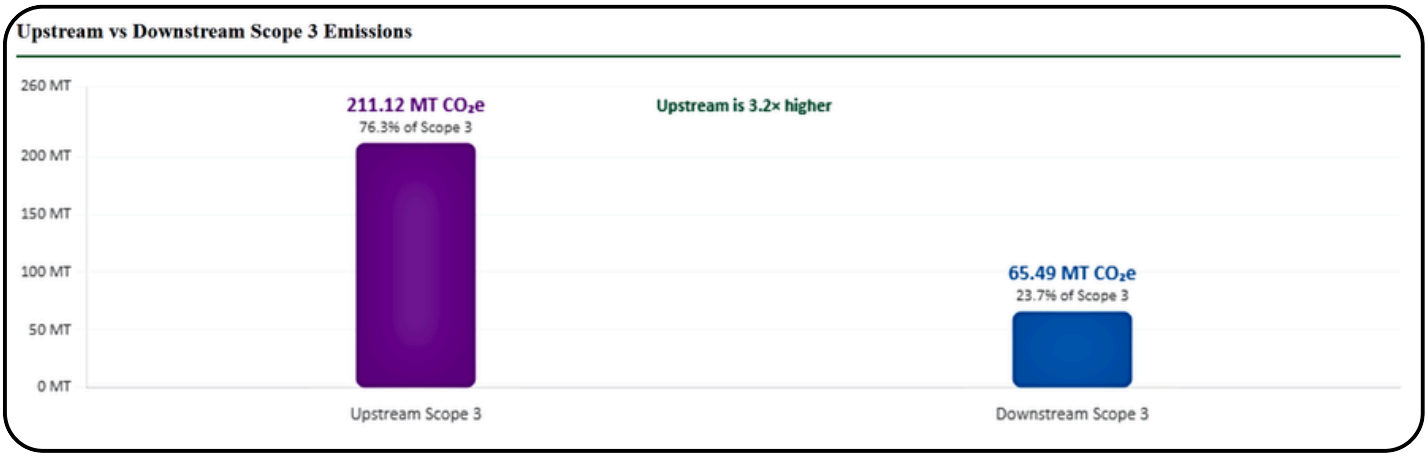
Key Observations

- Scope 3 emissions represent the largest contribution to organizational emissions.
- Purchased steel sheets are the highest individual emission contributor.
- Transportation and logistics operations contribute significantly to Scope 3 emissions.
- Hydro-based electricity results in negligible market-based Scope 2 emissions.
- Employee commuting emissions remain comparatively lower than logistics activities.

10.Graphical Analysis - DASHBOARD







11.Assurance and Conclusion

External Assurance

External third-party verification has not been conducted for the current reporting period.

Declaration

The greenhouse gas emissions presented in this report have been quantified in accordance with the Greenhouse Gas Protocol methodology using available operational data and applicable emission factors.

Conclusion

This Greenhouse Gas (GHG) Emissions Assessment Report provides a structured evaluation of emissions associated with the operational activities of Telema Electricals Pvt. Ltd.

The assessment enabled the organization to:

- Identify significant emission sources
- Quantify direct and indirect emissions
- Understand major operational emission contributors
- Establish a sustainability baseline
- Identify operational improvement opportunities

12.Annexures

Annexure A – Data Sources

Document	Available
Electricity Bills	Yes
Fuel Purchase Records	Yes
Production Records	Yes
Vehicle Logs	Yes
Waste Disposal Records	Yes
Procurement Records	Yes
HR Travel Records	Yes
Water Consumption Records	Yes
Canteen Records	Yes
Refrigerant Logs	No

Annexure B – Key Operational Data

Month	Electricity (kWh)	Diesel (L)	Process Scrap	Water (KL)
January	8204	282.2	600	118
February	5976	257.98	700	121
March	6260	242.67	300	142
April	7848	270.67	348	145
May	8204	324.16	604	145
June	11056	499.94	668	179
July	11848	312.21	990	136
August	10432	311.38	1500	212
September	7559	313.12	1000	203
October	8748	282.38	300	161
November	8721	286.92	997	139
December	9419	221.87	400	138

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END OF REPORT