

SHREEJI FILTERS & SCREEN PVT LTD



GHG INVENTORY REPORT

FY 2024-25

Prepared By: EKI Energy Services Ltd

Reporting Period: April 1, 2024 - March 31, 2025

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Executive Summary

This GHG Inventory Report presents the comprehensive carbon footprint assessment of **Shreeji Screen and Filters Pvt Ltd** for the financial year 2024-25. The assessment has been conducted in accordance with the *GHG Protocol Corporate Accounting and Reporting Standard*.

In their commitment to reducing their carbon footprint, Shreeji Screen and Filters Pvt Ltd proactively partnered with EKI Energy Services Ltd as their trusted consultant. EKI Energy Services played a crucial role in helping Shreeji assess their greenhouse gas emissions across Scope 1 and Scope 2, in compliance with the GHG Protocol Corporate Standard.

This collaboration highlights Shreeji's dedication to sustainability and environmental responsibility. By working with EKI Energy Services, they are making significant strides toward minimizing their environmental impact and integrating eco-friendly practices into their operations. Accurate GHG emissions assessment provides Shreeji with a strong foundation for developing and implementing effective carbon reduction strategies, ultimately contributing to a greener and more sustainable future.

Standards underpinning the studies

The GHG Protocol Framework

The GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.

Key Elements:

- Scope 1: Direct GHG emissions from sources owned or controlled by the organization.
- Scope 2: Indirect GHG emissions from the generation of purchased electricity, steam, heating and cooling.

Key Findings

Emission Category	Emissions (tCO ₂ e)	Percentage
Scope 1 (Direct)	0.141	0.31%
Scope 2 (Indirect)	44.06	99.69%
Total Emissions	44.2	100%
5% Buffer	2.21	-
Retirement Target	46.41	-

Table 1 Emission Distribution

Carbon Neutrality Target

To achieve carbon neutrality for FY 2024-25, Shreeji requires retirement of **48 carbon credits** (rounded up for complete assurance).

1. Organizational Profile

1.1 Company Overview

Shreeji Screen and Filters Pvt Ltd is a leading manufacturer of industrial filtration systems, specializing in edible oil filters, industrial screens, and precision filtration equipment. The company operates two manufacturing units in Vasai East, Maharashtra, serving diverse industrial sectors across India.

Legal Name: Shreeji Screen and Filters Pvt Ltd

Industry Sector: Manufacturing - Industrial Filtration Systems

Primary Products: Filters, Printing Mesh, industrial screens, Tea Bags, Biodegradable Envelops

Registered Office: A-26, Anand Mangal Industrial Estate, Sativali, Waliv Phata, Vasai East, Thane - 401208, Maharashtra, India

1.2 Reporting Boundary

Organizational Boundary Approach: Operational Control Accounting and Reporting Standard

Facilities Covered: Entire manufacturing facility at Vasai East location, including:

- Manufacturing Unit 1
- Manufacturing Unit 2

Emission Sources	Emissions Identified	Emissions Reported	Status	Calculation Method
Scope 1: Direct Emissions				
Stationary Combustion	LPG in Canteen	LPG Consumption	Included	Average data method
Mobile Combustion	Company owned vehicles	Not applicable	No vehicles owned	Not applicable
Process Emissions	No process identified	Not applicable	Not applicable	Not applicable
Fugitive Emissions	AC refrigerants	Zero refilling in FY	Included (zero)	Not applicable
Scope 2: Indirect Emissions from Purchased Electricity				
Location-Based	Purchased electricity from Grid	Purchased electricity from Grid	Included	Average data method

Table 2 Emission Sources and Type

Reporting Period: April 1, 2024 to March 31, 2025

2. Methodology and Standards

2.1 Accounting Standards Applied

This inventory has been prepared in accordance with:

- GHG Protocol Corporate Accounting and Reporting Standard

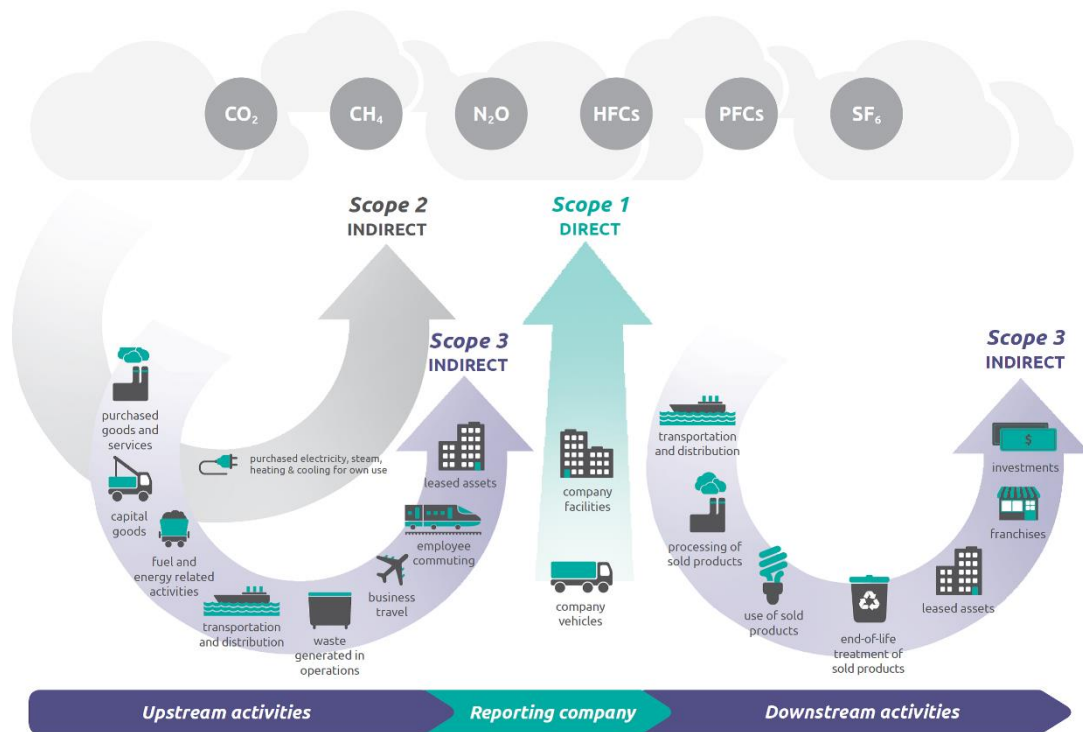


Figure 1 Various Emission Sources according to GHG Protocol

2.2 Operational Control Approach

Under the operational control approach, Shreeji accounts for **100% of GHG emissions** from operations over which it has full authority to introduce and implement operating policies. This includes all energy consumption, fuel use, and fugitive emissions within the facility premises.

2.3 Reporting Scopes

- **Scope 1 (Direct Emissions):** GHG emissions from sources owned or controlled by Shreeji (Stationary combustion, Mobile combustion, Fugitive emissions).
- **Scope 2 (Energy Indirect Emissions):** GHG emissions from the generation of purchased electricity. (Location Based)

2.4 Exclusion of GHG Emission

Scope 3 emissions are excluded from Shreeji Screen and Filters Pvt Ltd's FY 2024-25 carbon neutrality calculation due to limited data availability.

This is Shreeji's first comprehensive GHG inventory, focusing exclusively on Scope 1 and Scope 2 emissions. Scope 3 categories were not quantified at this stage due to:

- No historical data collection systems
- Supplier emissions data unavailable
- Employee commute patterns undocumented

Future Plan: Scope 3 baseline measurement will begin FY 2025-26 with supplier engagement and employee surveys.

3. Emission Sources and Quantification

3.1 Scope 1: Direct Emissions

3.1.1 Stationary Combustion

Source: LPG Consumption in Canteen

The facility operates a common canteen for both manufacturing units. LPG is used for cooking and food preparation.

- Activity Data: 48 kg
- Emission Factor: 2.93936 kgCO₂e/kg (DEFRA 2025)
- **Emissions: 0.141 tCO₂e**

3.1.2 Mobile Combustion

Source: Company-Owned Vehicles

No company-owned vehicles operated during FY 2024-25. **Emissions: 0.000 tCO₂e**

3.1.3 Fugitive Emissions

Air Conditioning Refrigerants:

The facility operates 6 split air conditioning units. As confirmed through client declaration, no refrigerant refilling was carried out during FY 2024-25, and no refrigerant leakage was reported during the reporting period. **Emissions: 0.000 tCO₂e**

Fire Extinguishers (CO₂ Type):

No refilling conducted during reporting period. **Emissions: 0.000 tCO₂e**

Total Scope 1 Emissions: 0.141 tCO₂e (including 5% buffer considerations in final summary)

3.2 Scope 2: Energy Indirect Emissions

Shreeji follows the location-based method to calculate Scope 2 emissions, reflecting the average carbon intensity of the local power grid. As the company procures 100% of its electricity from MSSEDCL, emissions are determined by multiplying the total units consumed by the official emission factors provided by the Central Electricity Authority (CEA) of India.

Location	Consumption (kWh)	Emissions (tCO ₂ e)
Unit 1	19,819	14.07
Unit 2	42,239	29.99
Total	62,058	44.06

Table 3 Unit 1 and Unit 2 Emission Distribution

Emission Factor Applied: 0.710 kgCO₂/kWh (CEA CO₂ Baseline Database, Version 21.0)

Total Scope 2 Emissions: 44.06 tCO₂e

3.3 Total Organizational Emissions

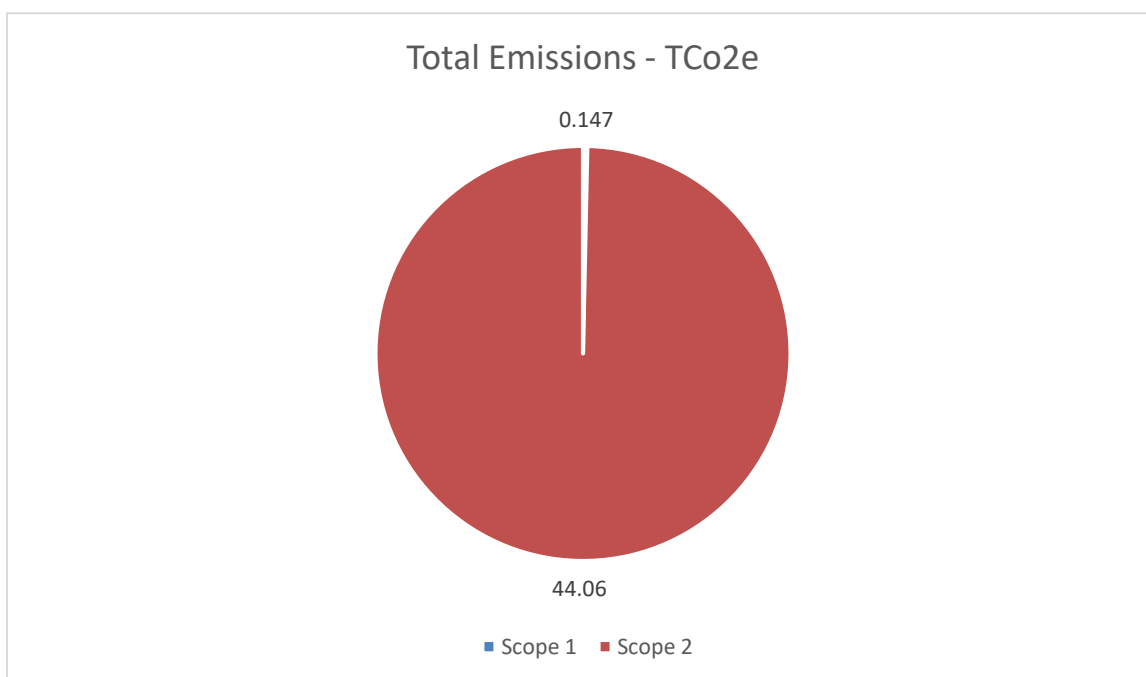


Figure 2 Total Emissions

Scope	Emissions (tCO ₂ e)	% of Total
Scope 1	0.141	0.31%
Scope 2	44.06	99.69%
Subtotal	44.20	100.00%
5% Precautionary Buffer	2.21	-
Total (with buffer)	46.41	-

Scope	Emissions (tCO ₂ e)	% of Total
Retirement Target (rounded)	48	-

Table 4 Scope 1 and 2 Emissions

4. Data Quality and Uncertainty

4.1 Data Sources

- **Electricity:** MSEDCL utility bills (High Quality/Primary)
- **LPG:** Purchase invoices (High Quality/Primary)
- **Refrigerants:** Client confirmation sheet (High Quality/Primary)
- **Factors:** CEA & UK DEFRA 2025 (High Quality/Official Standards)

4.2 Uncertainty Analysis (5% Buffer)

Shreeji has voluntarily applied a 5% uncertainty buffer to all calculated emissions, in alignment with GHG Protocol guidance. This conservative approach accounts for meter reading tolerances, rounding discrepancies, and minor sources of emissions not explicitly captured in the inventory.

5. Emission Breakdown and Analysis

- **Scope 1: Direct Emissions**

Category	UOM	Total Qty	t-CO2	t-CH4	t-N2O	t-CO2e
Stationary Combustion						
LPG in Canteen	Kg	48	0.135	0.001	0.005	0.141
Mobile Combustion						
Company Vehicles	-	0	0.000	0.000	0.000	0.000
Fugitive Emissions						
AC Refrigerants	Kg	0	0.000	0.000	0.000	0.000
Fire Extinguishers	Kg	0	0.000	0.000	0.000	0.000
Total Scope 1 Emissions						0.141

Table 5 Scope 1 emissions breakdown by source

- **Stationary Combustion Details:**

- LPG Consumption in Canteen:**

- Activity Data: 48 kg
 - Emission Factor: 2.93936 kgCO₂e/kg (DEFRA 2025)
 - Emissions: 0.0677 tCO₂e (before 5% buffer)

- **Fugitive Emissions:**

- **6 Split AC Units:** Zero refilling during FY 2024-25.
 - **CO₂ Fire Extinguishers:** No refilling conducted during reporting period

- **Scope 2: Energy Indirect Emissions**

Shreeji procures 100% of its electricity from the Maharashtra State Electricity Distribution Company Limited (MSEDCL).

Location	Consumption (kWh)	Emissions (tCO ₂ e)
Unit 1	19,819	14.07
Unit 2	42,239	29.99
Total	62,058	44.06

Table 6 Electricity consumption and emissions by location

Emission Factor Applied: 0.710 kgCO₂/kWh (CEA CO₂ Baseline Database, Version 21.0)

6. Conclusion

Shreeji Screen and Filters Pvt. Ltd. has successfully completed its first comprehensive Greenhouse Gas (GHG) inventory. The total assessed emissions for the reporting period amount to 46.41 tCO₂e. In line with best practices, an additional uncertainty, resulting in a total of 48 tCO₂e. The Company has offset the entire 48 tCO₂e through the retirement of verified carbon credits, thereby achieving carbon neutrality for the reporting year. Through this initiative, Shreeji demonstrates its commitment to responsible manufacturing, climate action, and transparent environmental stewardship.

7. Appendices

Appendix A: Glossary

- CO₂e:** Carbon Dioxide Equivalent.
- Scope 1:** Direct GHG emissions.
- Scope 2:** Indirect GHG emissions from purchased energy.
- GHG Protocol:** International accounting standard.

Appendix B: Emission Factor References

Activity	UOM	kgCO ₂	kgCH ₄	kgN ₂ O	kgCO ₂ e	Source
Scope 1						
LPG Consumption	kg	2.840	0.004	0.015	2.939	DEFRA 2025
Scope 2						
Grid Electricity (MH)	kWh	0.710	-	-	0.710	CEA V21.0

Table 7 Emission factors for various activities

- Data Quality:** All emission factors are sourced from internationally recognized databases:
- CEA (Central Electricity Authority):** Official India grid emission factors
 - DEFRA (UK Government):** Comprehensive greenhouse gas conversion factors for company reporting

Appendix C: Carbon Neutrality Certificate

Shreeji Screen and Filters Pvt Ltd has achieved carbon neutrality for FY 2024-25 by retiring **48 Verified Carbon Units (VCUs)** from the **3 MW Hydro Power Project by Darjeeling Power Pvt. Ltd.** in Himachal Pradesh, India, registered under the Verified Carbon Standard (VCS). These credits, covering 48 tCO₂e (including a 5% precautionary buffer), were permanently retired on 04 February 2026 specifically for “achieving company-level carbon neutrality for FY 2024-25,” ensuring that Shreeji’s net emissions for the year are zero and that the retirement is uniquely attributable, transparent, and verifiable via the project serial number recorded in the registry.

<https://registry.verra.org/app/projectDetail/VCS/1739>

Communication

This GHG report has been prepared with the primary purpose of providing internal stakeholders with a comprehensive understanding of our organization's greenhouse gas emissions. The report aims to serve as a valuable resource for informing internal decision-making processes, facilitating strategic planning, and guiding our sustainability efforts. The content of this report is intended to be used internally to assess our environmental performance, identify areas for improvement, and set targets for reducing our greenhouse gas emissions. By analysing the data presented in this report, we can gain insights into the sources and drivers of our emissions, evaluate the effectiveness of our current mitigation strategies, and make informed decisions to enhance our environmental sustainability.

List of Consultants

Below mentioned is the list of consultants who supported in GHG Footprint calculation and reporting.

Consultant Name	Role
Mr. Akhil MP	Project Lead
Mr. Mohit Pareek	Project Member
Mr. Basant Jha	Technical Reviewer

Report Prepared By: EKI Energy Services Ltd