



MOSCO PRINTS INDIA PRIVATE LIMITED

No. 25, 23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli,
Bengaluru, Karnataka- 560 068. India.

GHG EMISSION REPORT

For the Year April 2024 to March 2025




Form No: MPIPL/CSRMS/F-480

Issue No: 01

Rev No : 00

Date : 21st April, 2025

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
		Issue No: 01
	GHG EMISSION REPORT	Rev No : 00
		Date : 21 st April, 2025

1. Executive Summary

1.1 Overview of Organization and Reporting Period

MPIPL is an India-based company engaged in the Design, Manufacture and Supply of Printed Products, Cartons, Rigid Gift Boxes, Shipper Boxes, Labels, Stickers, Books, and POP materials. This report presents the quantified greenhouse gas emissions for FY 2024–25 in accordance with ISO 14064-1 and the GHG Protocol.

1.2 Key Emission Results

Organizational Boundary

MOSCO PRINTS INDIA PVT LTD

No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli,
Bengaluru, Karnataka - 560 068. India.

Calculation period: April 2024 to March 2025


All values are in MT CO₂ e

GHG Emission Reporting Frequency: Annually

Scope	CURRENT YEAR APRIL 2024 – MARCH 2025
Scope 1	434.13
Scope 2	90.49
Scope 3	544.18
Scope 3 Upstream	256.76
Scope 3 Downstream	287.42
Total	1068.80

1.3 Highlights & Reduction Achievements

- Transition to partial LED lighting in production units.
- Increased procurement of recycled paperboard.
- Optimization of transport routes reducing fuel usage.
- Implementation of waste segregation and recycling program.

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
	GHG EMISSION REPORT	Issue No: 01
		Rev No : 00
		Date : 21st April, 2025

2. Introduction

2.1 Purpose of the Report

This report quantifies and discloses MPIPL's GHG emissions to support climate transparency, regulatory alignment, and ESG commitments.

2.2 Intended Users

- Customers (especially export clients)
- Regulatory authorities
- Investors and stakeholders
- ESG rating agencies

2.3 Reporting Objectives

- Compliance with ISO 14064-1
- Voluntary disclosure under ESG framework
- Meeting customer sustainability requirements

3. Organization Description

3.1 Company Profile


MPIPL operates in the printing and packaging manufacturing sector, supplying customized cartons, rigid boxes, labels, books, and POP materials across India and overseas.

3.2 Organizational Structure

The company operates under centralized management with departments including Production, Procurement, Logistics, Quality, Maintenance, and Administration.

3.3 Operations, Facilities & Boundaries

- 1 Manufacturing facility (India)
- Printing machines (offset/flexo)
- Die-cutting and box-forming lines
- DG sets for backup power
- Warehouse and dispatch unit

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
		Issue No: 01
	GHG EMISSION REPORT	Rev No : 00
		Date : 21 st April, 2025

4. Reporting Boundary

4.1 Organizational Boundary

MPIPL follows the **Operational Control Approach** under ISO 14064-1 and GHG Protocol.

4.2 Operational Boundary

Includes Scope 1, Scope 2, and relevant Scope 3 categories.

4.3 Entities Covered

- Manufacturing plant
- Corporate office
- Warehouse & logistics operations

5. Reporting Period

Start Date: 01 April 2024

End Date: 31 March 2025

Frequency: Annual Reporting

6. GHG Accounting Methodology

6.1 Standards Followed


- ISO 14064-1:2018
- GHG Protocol Corporate Accounting & Reporting Standard

6.2 Calculation Approach

GHG Emissions = Activity Data × Emission Factor

6.3 Tools Used

- Excel-based GHG calculation sheets
- India Grid Emission Factor Database
- IPCC 2006 Guidelines

	<p style="text-align: center;">MOSCO PRINTS INDIA PVT LTD</p> <p style="text-align: center;">No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.</p>	<p>Form No: MPIPL/CSRMS/F-480</p>
		<p>Issue No: 01</p>
	<p>GHG EMISSION REPORT</p>	<p>Rev No : 00</p>
		<p>Date : 21st April, 2025</p>

7. Emission Sources Identification

7.1 Direct Sources

- Diesel consumption in DG sets
- Fuel use in company-owned vehicles
- Refrigerant leakage (AC units)

7.2 Indirect Sources

- Purchased electricity
- Purchased raw materials (paperboard, ink)
- Transportation (inbound & outbound)
- Waste disposal
- Employee commuting
- Business travel

7.3 Scope Categorization

Sources mapped as per GHG Protocol Scopes 1, 2, and 3.


8. GHG Scope Classification

8.1 Scope 1 – Direct Emissions (434.13 tCO₂e)

- Stationary Combustion: DG set diesel use
- Mobile Combustion: Company delivery vehicles
- Fugitive Emissions: Refrigerant leakage from AC systems
- Process Emissions: Not applicable (printing industry)

Gas-wise breakup (estimated):

- CO₂: 96%
- CH₄: 2%
- N₂O: 2%

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
		Issue No: 01
	GHG EMISSION REPORT	Rev No : 00
		Date : 21 st April, 2025

8.2 Scope 2 – Indirect Energy Emissions (90.49 tCO₂e)

- Purchased Electricity from India Grid

No purchased steam or cooling.

8.3 Scope 3 – Other Indirect Emissions (544.18 tCO₂e)

Upstream (256.76 tCO₂e):

- Raw materials (paper, ink, adhesives)
- Waste disposal
- Employee commuting
- Business travel

Downstream (287.42 tCO₂e):

- Transportation & logistics
- Product distribution
- End-of-life treatment of sold packaging


9. GHG Data Collection & Quality

9.1 Data Sources

- Fuel purchase invoices
- Electricity bills
- Procurement records
- Logistics bills
- HR commuting surveys

9.2 Accuracy & Reliability

- Primary data used where available
- Secondary emission factors applied
- Estimated uncertainty ±5–10%

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
	GHG EMISSION REPORT	Issue No: 01
		Rev No : 00
		Date : 21st April, 2025

9.3 Data Management Controls

- Cross-verification with finance records
- Monthly tracking sheets
- Internal review by ESG team

10. Emission Factors

10.1 Sources Used:

- IPCC 2006 Guidelines
- DEFRA 2024 Emission Factors
- India Grid Emission Factor (CEA)
- GHG Protocol databases


10.2 Units:

- Diesel: kg CO₂e/litre
- Electricity: kg CO₂e/kWh
- Transport: kg CO₂e/ton-km

11. Calculation Results

11.1 Total GHG Emissions

Scope	Emissions (tCO ₂ e)
Scope 1	434.13
Scope 2	90.49
Scope 3	544.18
Total	1,068.80

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
		Issue No: 01
	GHG EMISSION REPORT	Rev No : 00
		Date : 21 st April, 2025

11.2 Emission Breakdown by Source

Source	% Contribution
Raw Materials	24%
Logistics	27%
Diesel (DG & Vehicles)	38%
Electricity	8%
Others	3%

11.3 Emission Intensity Indicators (Assumed)

Assumptions:

- Employees: 120
- Annual Production: 2,500 MT packaging material
- CO₂e per employee = **8.91 tCO₂e/employee**
- CO₂e per MT production = **0.43 tCO₂e/MT**

12. Base Year & Trend Analysis

Base Year: FY 2024–25

Justification: First formal ISO 14064 quantification year.

Future reports will compare year-on-year performance.

No structural changes during reporting period.


13. Uncertainty Assessment

13.1 Sources of Uncertainty:

- Emission factor variability
- Supplier data estimations
- Commuting assumptions

13.2 Method:

- Sensitivity analysis $\pm 10\%$ on major contributors

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
	GHG EMISSION REPORT	Issue No: 01
		Rev No : 00
		Date : 21st April, 2025

13.3 Confidence Level:

Moderate to High (90–95%)

14. Data Quality Assessment

Activity Data Quality: High (Primary records)

Emission Factor Quality: Medium to High (International databases)

14.1 Validation:

- Internal ESG review
- Finance reconciliation

15. GHG Reduction Initiatives

- Energy-efficient printing machines
- LED lighting replacement
- Solar feasibility assessment underway
- Increased recycled board usage
- Vendor engagement for low-carbon logistics

15.1 Future Goals:


- 10% reduction in Scope 1 & 2 by 2027
- Renewable energy adoption target
- Supplier carbon reporting integration

16. Conclusions

MPIPL's total carbon footprint for FY 2024–25 is **1,068.80 tCO₂e**, with Scope 3 being the largest contributor. The company has established a robust baseline and integrated climate accountability into its ESG framework.

16.1 Opportunities:

- Renewable energy transition
- Sustainable raw material sourcing
- Low-emission transport partnerships

	MOSCO PRINTS INDIA PVT LTD No. 25,23/1, 1st Cross, Yallakunte Village, Old Mangamana Palya, Bommanahalli, Bengaluru, Karnataka - 560 068. India.	Form No: MPIPL/CSRMS/F-480
	GHG EMISSION REPORT	Issue No: 01
		Rev No : 00
		Date : 21st April, 2025

16.2 Plan for Next Reporting Period:

- Implement rooftop solar
- Improve Scope 3 supplier data accuracy
- Conduct third-party verification

17. Appendices

17.1 Reference Standards:

- ISO 14064-1:2018
- GHG Protocol Corporate Standard
- IPCC 2006 Guidelines



Prepared By: **MOHAMED DHARIQ H**
QMS




Approved By: **SUSHIL KUMAR J**
MANAGING DIRECTOR