JACS LOGISTICS PVT LTD

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GHG EMISSION REPORT

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1. Executive Summary

1.1 Overview of Organization & Reporting Period

JLPL is a logistics and freight service provider in India offering Sea Freight, Air Freight, Door-to-Door Delivery, Customs Brokerage, Warehousing, Supply Chain Tracking, and Multi-Modal Transport Operations. This report covers GHG emissions for FY 2024–25.

1.2 Key Emission Results

Organizational Boundary

JACS LOGISTICS PVT LTD

Calculation period: April 2024 to March 2025

All values are in MT CO2 e

GHG Emission Reporting Frequency: Annually

EMISSIONS	CURRENT YEAR APRIL 2024 – MARCH 2025
Scope 1	1.93
Scope 2	131.78
Scope 3	139.53
Scope 3 Upstream	97.67
Scope 3 Downstream	41.86
Total GHG Emission	**273.24**

1.3 Highlights & Reduction Achievements

- 12% electricity reduction through LED retrofits.
- 18% reduction in diesel use through route optimization.
- 25% paper reduction via digital documentation.
- Vendor ESG screening initiated for transport partners.

2. Introduction

2.1 Purpose of the Report

The purpose of this report is to quantify, monitor, and transparently disclose JLPL's greenhouse gas (GHG) emissions in alignment with internationally recognized standards, including ISO 14064-1 and the GHG Protocol. It aims to enhance environmental accountability, support ESG commitments, meet customer and stakeholder requirements, identify emission reduction opportunities, and establish a credible baseline for continual improvement and future climate-related performance tracking.

2.2 Intended Users

- Customers (especially export/import clients)
- ESG rating agencies
- Investors & stakeholders
- Regulatory authorities

2.3 Reporting Objectives

- Voluntary ESG disclosure
- Customer sustainability requirement
- Alignment with international climate frameworks

3. Organization Description

3.1 Company Profile

JLPL provides integrated logistics and supply chain solutions across India, delivering comprehensive freight forwarding services through sea and air modes. The company manages end-to-end transportation, including door-to-door delivery, customs clearance, and multi-modal transport operations. JLPL also operates warehousing facilities equipped with inventory management and supply chain tracking systems to ensure efficient cargo handling and real-time visibility. By combining transportation coordination, regulatory compliance support, and storage solutions, JLPL enables seamless domestic and international trade movements. Its operational network supports exporters, importers, and commercial clients with reliable, cost-effective, and timely logistics services aligned with quality, safety, and ESG commitments.

3.2 Organizational Structure

- Head Office
- 3 Branch Offices
- 2 Warehousing Facilities

3.3 Operations & Facilities

- Leased warehouses
- Office buildings
- Company-owned vehicles (limited)
- Outsourced transport fleets

4. Reporting Boundary

4.1 Organizational Boundary – Operational Control Approach

JLPL has adopted the Operational Control Approach for defining its organizational boundary in accordance with ISO 14064-1 and the GHG Protocol. Under this approach, JLPL accounts for 100% of greenhouse gas emissions from operations over which it has authority to introduce and implement operating policies, environmental procedures, and health and safety standards, regardless of ownership structure.

4.2 Operational Boundary

The operational boundary includes all significant emission sources categorized under Scope 1 (direct emissions), Scope 2 (indirect energy emissions), and relevant Scope 3 (other indirect emissions). This covers fuel consumption in company-controlled vehicles, purchased electricity for offices and warehouses, outsourced logistics activities, employee commuting, business travel, waste management, and other value chain emissions that are material to JLPL's logistics operations.

4.3 Entities Covered

This GHG inventory covers all JLPL operations within India that fall under its operational control. The reporting boundary includes the Head Office, regional branch offices, warehousing facilities, and controlled transport operations. Emissions from leased facilities and company-managed logistics activities are included where JLPL has operational authority, ensuring comprehensive coverage of its nationwide freight forwarding and supply chain service operations.

5. Reporting Period

- **Start Date:** 01 April 2024
- **End Date:** 31 March 2025
- **Reporting Frequency**: Annual

6. GHG Accounting Methodology

6.1 Standards Followed

- ISO 14064-1
- GHG Protocol

6.2 Calculation Approach

6.3 Tools Used

- MS Excel-based carbon accounting tool
- India Grid Emission Factor database

7. Emission Sources Identification

- Direct Sources
- Diesel (company vehicles)
- Refrigerant leakage (AC units)
- Indirect Sources
- Purchased electricity
- Third-party transport
- Air & sea freight
- Waste disposal
- Employee commuting
- Business travel

8. GHG Scope Classification

8.1 Scope 1 – Direct Emissions (1.93 tCO_2e)

Source	Emissions (tCO_2e)
Mobile combustion (Diesel vehicles)	1.62
Fugitive emissions (Refrigerants)	0.31
Total Scope 1	**1.93**

- CO_2 – 1.88
- CH_4 – 0.03
- N_2O – 0.02

8.2 Scope 2 – Indirect Energy Emissions (131.78 tCO_2e)

Source	Emissions (tCO_2e)
Purchased Electricity (Offices + Warehouses)	131.78

8.3 Scope 3 – Other Indirect Emissions (139.53 tCO_2e)

Upstream (97.67 tCO_2e)

- Purchased goods & services
- Fuel- and energy-related activities
- Waste disposal
- Employee commuting
- Business travel

Downstream (41.86 tCO_2e)

- Outsourced road freight
- Air freight emissions
- Sea freight emissions
- Last-mile delivery

9. GHG Data Collection & Quality

GHG data for JLPL is collected from verified operational records, including electricity bills, fuel purchase invoices, freight transport records, and HR-based employee commuting surveys. Primary consumption data is used for fuel and electricity to ensure higher accuracy and reliability. Secondary emission factors from recognized national and international databases are applied for conversion into tCO_2e. Data completeness is ensured through structured data collection templates covering all operational sites. Internal controls include cross-verification of consumption data with finance and accounts records, periodic management review, and monthly reconciliation to detect discrepancies and maintain transparency, consistency, and audit readiness.

10. Emission Factors

Emission factors applied in this inventory are sourced from internationally and nationally recognized databases, including DEFRA 2024, the India Grid Emission Factor published by the Central Electricity Authority (CEA), and the GHG Protocol databases. Standard conversion units used include $kgCO_2e$ per kWh for electricity consumption, $kgCO_2e$ per litre of diesel for fuel combustion, and $kgCO_2e$ per ton-km for freight transportation activities, ensuring methodological consistency and comparability.

11. Calculation Results

11.1 Total GHG Emissions

Scope	tCO_2e
Scope 1	1.93
Scope 2	131.78
Scope 3	139.53
Total	**273.24**

11.2 Emission Breakdown by Source

Category	tCO_2e
Electricity	131.78
Third-party Freight	86.45
Employee commuting	21.20
Business travel	14.00
Fuel (Company Vehicles)	1.62
Refrigerants	0.31
Waste	17.88

11.3 Emission Intensity Indicators

- Employees: 85
- Revenue-based logistics handling: 120,000 tons cargo

Indicator	Value
tCO_2e per employee	3.21
tCO_2e per 1,000 tons cargo	2.27

12. Base Year & Trend Analysis

FY 2024–25 represents JLPL's first formal greenhouse gas (GHG) inventory year, established in accordance with ISO 14064-1 and the GHG Protocol. This base year serves as the reference point for tracking future emission performance. All reduction targets, performance improvements, and climate action initiatives will be benchmarked against this baseline to ensure measurable progress and consistent year-on-year comparison.

13. Uncertainty Assessment

The primary sources of uncertainty in JLPL's GHG inventory include estimated freight ton-kilometer calculations for outsourced transport activities, variability in emission factors derived from secondary databases, and assumptions used in employee commuting surveys. Freight distances and load factors were estimated where exact transport data was unavailable, which may introduce minor deviations. Emission factors are subject to periodic updates and regional variations. Commuting data relies on employee declarations and standard travel distance assumptions

14. Data Quality Assessment

Parameter	Rating
Fuel Data	High
Electricity Data	High
Freight Data	Medium
Emission Factors	High

15. GHG Reduction Initiatives

♣ Energy Efficiency

JLPL has implemented energy efficiency measures across its warehouses and offices to reduce electricity consumption and associated Scope 2 emissions. LED lighting systems have replaced conventional fixtures to improve energy performance and lower maintenance requirements. Additionally, a solar rooftop feasibility assessment has been initiated to evaluate the potential for renewable energy adoption, aiming to reduce grid electricity dependence and strengthen long-term carbon reduction commitments.

♣ Logistics Optimization

To minimize fuel consumption and indirect emissions, JLPL has introduced route optimization software to improve trip planning, reduce empty runs, and enhance delivery efficiency. Load consolidation practices have also been strengthened to maximize vehicle utilization and reduce the number of trips required. These initiatives help lower transportation-related emissions, improve operational efficiency, and reduce overall logistics costs.

♣ Digitalization

JLPL promotes digital transformation to reduce paper consumption and administrative emissions. E-documentation systems have been implemented for freight processing, invoicing, and shipment tracking. Paperless customs processing has further streamlined documentation workflows and reduced physical paperwork. These measures not only decrease resource consumption but also enhance operational transparency, data accuracy, and overall environmental performance.

♣ Future Goals

JLPL has established measurable climate objectives to strengthen its ESG strategy. The company targets a 20% reduction in Scope 2 emissions by 2028 through renewable energy and efficiency improvements. A supplier carbon disclosure program will be introduced to improve Scope 3 transparency. Additionally, JLPL plans phased adoption of electric vehicles (EVs) for last-mile delivery operations.

16. Conclusion

JLPL's total carbon footprint for FY 2024–25 amounts to. The largest contributors are purchased electricity under Scope 2 and third-party logistics operations under Scope 3. These emission sources reflect the energy-intensive nature of warehousing and outsourced freight activities, highlighting key areas for targeted emission reduction and operational efficiency improvements.