
SJG Sejong Vikas Private Limited

Plot No 53, 54 & 55, Industrial Park Ammavari palli, Erramanchi Village, Penukonda Mandal,
Sri Sathya Sai District, Andhra Pradesh – 515110, India.

GHG EMISSION REPORT

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SJG Sejong Vikas Private Limited

Plot No 53, 54 & 55, Industrial Park Ammavaripalli, Erramanchi Village, Penukonda Mandal, Sri Sathya Sai District, Andhra Pradesh – 515110. India.

RESPONSIBLE MINERALS POLICY

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1. EXECUTIVE SUMMARY

1.1 Overview of Organization and Reporting Period

SJG-SV-AP is an Indian manufacturing organization engaged in the design and manufacturing of muffler and WCC assemblies and components, principally serving the automotive and related engineering sectors. The organization integrates Environmental, Social and Governance considerations into its management practices and has developed this Greenhouse Gas Emission Inventory to systematically quantify, manage and progressively reduce emissions associated with its activities and value chain. For purposes of this draft report, the GHG reporting period has been assumed as. This reporting period should be confirmed against the actual data collection sheet before formal issue or third-party verification.

1.2 Key Emission Results

Organizational Boundary

SJG Sejong Vikas Private Limited

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Sri Sathya Sai District, Andhra Pradesh – 515110, India.

Calculation period: 1st November, 2025 to 31st December, 2025

All values are in MT CO₂ e

GHG Emission Reporting Frequency: Annually

EMISSIONS	CURRENT YEAR MTCO ₂ e 1st November, 2025 to 31 st December, 2025
Scope 1	4.676
Scope 2	107.877
Scope 3	8,673.164
Scope 3 Downstream	2.080
Scope 3 Upstream	8,671.084
Total GHG Emission	8,785.717

1.3 Highlights and Reduction Opportunities

The GHG inventory establishes SJG-SV-AP's first structured basis for understanding emissions across direct operations, purchased electricity and the wider value chain.

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The most significant finding is that approximately 98.72% of total emissions arise from Scope 3, while Scope 1 and Scope 2 jointly contribute approximately 1.28%. Consequently, significant carbon reductions will depend not only on improving factory energy efficiency but also on supplier engagement, material efficiency, low-carbon sourcing, logistics optimization, scrap reduction, product lightweighting and circular-material strategies.

2. INTRODUCTION

2.1 Purpose of the Report

The purpose of this report is to document SJG-SV-AP's organizational GHG inventory, establish transparent accounting boundaries, describe quantification methodologies, identify significant emission sources and provide a structured basis for emission-reduction planning. It also supports systematic ESG reporting and management review of climate-related performance.

2.2 Intended Users

SJG-SV-AP management, employees, customers, automotive OEMs and Tier suppliers, investors where applicable, regulatory authorities, sustainability rating organizations, ISO auditors, GHG verification bodies and other relevant interested parties.

2.3 Reporting Objectives

The objectives of this inventory are to support:

- ISO 14064-1 aligned organizational GHG reporting;
- GHG Protocol Corporate Standard reporting;
- customer and supply-chain sustainability requirements;
- ESG and sustainability disclosures;
- carbon-reduction target setting;
- identification of significant emission sources;
- future independent GHG verification;
- year-on-year performance monitoring.

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3. ORGANIZATION DESCRIPTION

3.1 Company Profile

SJG-SV-AP operates in India and undertakes the design and manufacturing of muffler and WCC assemblies and components. The manufacturing activities are assumed to include operations typically associated with automotive exhaust-system component production, including incoming material handling, forming, fabrication, welding, machining where applicable, assembly, inspection, testing, packaging, storage and dispatch. Raw materials may include steel, stainless steel, fabricated metallic components, bought-out components, welding materials, packaging materials and consumable materials.

3.2 Organizational Structure

For GHG reporting purposes, responsibility is assumed to be distributed among senior management, ESG/EHS, manufacturing, maintenance, procurement, logistics, finance, human resources and administration. The ESG/EHS function coordinates GHG data consolidation while individual departments retain responsibility for providing supporting activity records.

3.3 Operations, Facilities and Boundaries

manufacturing areas, fabrication and assembly operations, warehouses, offices, utilities, compressors, DG sets, air-conditioning systems, company-controlled vehicles, material movement activities and associated support infrastructure. Third-party suppliers and transport providers are not treated as Scope 1 unless operationally controlled by SJG-SV-AP; their relevant emissions are included within Scope 3.

4. REPORTING BOUNDARY

4.1 Organizational Boundary

Under this approach, the organization accounts for 100% of Scope 1 and Scope 2 emissions from operations over which it has authority to introduce and implement operating policies. Activities outside operational control

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4.2 Operational Boundary

Scope 1: Direct emissions from sources owned or controlled by SJG-SV-AP.

Scope 2: Indirect emissions associated with purchased electricity and, where applicable, purchased heat, steam or cooling.

Scope 3: Other indirect value-chain emissions resulting from activities attributable to SJG-SV-AP but occurring from sources owned or controlled by other organizations.

4.3 Entities and Locations Covered

The current report assumes that all SJG-SV-AP Indian operations represented within the submitted data collection sheet are consolidated within the inventory. Any additional manufacturing plants, warehouses or offices excluded from the submitted data should be evaluated and incorporated before external verification.

5. REPORTING PERIOD

Start Date: 01 November 2025

End Date: 31 December 2025

GHG reporting is intended to be performed **annually**. The organization should maintain consistent calendar-year reporting to facilitate meaningful year-on-year comparisons.

6. GHG ACCOUNTING METHODOLOGY

6.1 Standards Followed

- ISO 14064-1:2018 – Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
- GHG Protocol – A Corporate Accounting and Reporting Standard.
- GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.
- Appropriate IPCC guidance and recognized national/international emission-factor databases are used for individual calculation parameters.

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6.2 Calculation Approach

- GHG Emission = Activity Data × Applicable Emission Factor × GWP**

For fuel combustion:

- Emissions = Quantity of Fuel Consumed × Fuel Emission Factor**

For purchased electricity:

- Scope 2 Emissions = Electricity Consumption × Applicable Grid Emission Factor**

For refrigerants:

- Emissions = Refrigerant Released × Refrigerant GWP**

For purchased materials:

- Emissions = Material Quantity × Cradle-to-Gate Emission Factor**

For transport:

- Emissions = Distance × Load / Vehicle Activity × Appropriate Transport Emission Factor**

All results are converted into tonnes of carbon dioxide equivalent (tCO₂e).

6.3 Tools and Software

The submitted inventory appears to have been consolidated into a GHG data collection sheet. For future reporting, SJG-SV-AP may maintain a controlled spreadsheet/database containing activity data, emission factors, factor sources, calculations, evidence references, responsible persons and approval status.

7. EMISSION SOURCES IDENTIFICATION

Activity	Potential GHG Source	Scope
DG sets / generators	Diesel combustion	Scope 1
Boilers/heating equipment, if applicable	Fuel combustion	Scope 1
Company vehicles	Petrol/diesel/CNG	Scope 1
Air-conditioning systems	Refrigerant leakage	Scope 1
Manufacturing processes	Process-related emissions, if applicable	Scope 1
Purchased grid electricity	Electricity consumption	Scope 2
Steel/stainless steel/components	Purchased goods	Scope 3
Packaging materials	Purchased goods	Scope 3
Inbound logistics	Third-party transport	Scope 3
Waste treatment	Waste generated	Scope 3
Business travel	Air/rail/road travel	Scope 3
Employee commuting	Employee transport	Scope 3



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Capital equipment	Purchased capital goods	Scope 3
Outbound transport	Third-party delivery	Scope 3
Product disposal/recycling	End-of-life treatment	Scope 3

8. GHG SCOPE CLASSIFICATION

8.1 Scope 1 – Direct GHG Emissions

Potential stationary combustion sources include diesel consumed by DG sets and fuel consumed in boilers, furnaces or heating systems where applicable. Actual source-level consumption was not available in the submitted summary and should therefore be maintained separately within the supporting GHG calculation workbook. Fuel consumed by vehicles owned or operationally controlled by SJG-SV-AP is classified under Scope 1. Fuel consumption should preferably be obtained from fuel bills, vehicle logs, fuel cards or reimbursement records.

8.2 Scope 2 – Indirect Energy Emissions

Scope 2 = 107.877 tCO₂e This represents approximately **1.228%** of the organization's total GHG emissions. The main source is assumed to be purchased grid electricity used for production equipment, welding processes, compressors, lighting, HVAC, offices, utilities and material-handling operations. Where renewable energy certificates, green power contracts or other contractual instruments are used, the organization should report both location-based and market-based Scope 2 emissions where applicable under the GHG Protocol. Purchased steam, heat or cooling has not been identified from the submitted data and is assumed not material unless subsequent evidence indicates otherwise.

8.3 Scope 3 – Other Indirect Emissions

Total Scope 3 = 8,673.164 tCO₂e

Upstream emissions = 8,671.084 tCO₂e

Downstream emissions = 2.080 tCO₂e

Scope 3 accounts for approximately **98.719%** of SJG-SV-AP's total footprint. Given the organization's manufacturing activities, significant upstream emissions are expected to arise primarily from purchased steel, stainless steel, components, raw materials, outsourced manufacturing, transportation and other purchased goods and services.

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9. GHG DATA COLLECTION AND QUALITY

9.1 Data Sources

Recommended primary evidence includes electricity bills, diesel invoices, fuel records, refrigerant maintenance records, production records, purchase registers, material consumption statements, supplier invoices, waste manifests, transporter records, employee commuting surveys and business travel documentation.

9.2 Collection Method

Departmental activity data should be collected monthly and consolidated annually by the ESG/EHS coordinator. Information should be checked against supporting financial, procurement and utility records before final calculations are approved. Departmental activity data shall be collected monthly and consolidated annually by the ESG/EHS Coordinator. Collected information shall be reviewed for completeness, accuracy, consistency, and reasonable trends. Data shall be cross-checked against supporting financial, procurement, utility, production, and operational records. Any discrepancies shall be investigated and corrected. Final calculations shall be independently checked, documented, and approved by authorized management personnel.

9.3 Accuracy, Completeness and Reliability

The reported corporate totals are considered the primary inventory results supplied through the uploaded GHG data collection sheet. However, because source-level activity quantities were not included in the submitted summary, traceability from the reported tCO₂e totals to individual invoices or operational records cannot be evaluated within this draft report.

9.4 Data Management Controls

Data ownership, monthly collection, evidence retention, emission-factor version control, calculation checking, change control, approval, backup, access control and annual management review. The organization shall establish clear data ownership, conduct monthly data collection, retain supporting evidence, and maintain emission-factor version control. Calculations shall undergo documented checking and validation. Changes to data, factors, or methodologies shall follow formal change control. Reports require authorized approval. Data shall be securely backed up with controlled access. Management shall conduct an annual review for accuracy, compliance, and continual improvement.

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10. EMISSION FACTORS

Emission factors should be selected according to source geography, technology, fuel type and reporting year.

Emission Source	Recommended Reference
Diesel/petrol/LPG/natural gas	IPCC / recognized national factors
Purchased electricity – India	Central Electricity Authority applicable grid factor
Refrigerants	IPCC GWP values
Transportation	DEFRA or recognized transport databases
Air/business travel	DEFRA or recognized aviation factors
Materials	Supplier-specific EPD/PCF, recognized LCA databases
Waste	DEFRA, national database or waste-treatment-specific factors
Employee commuting	DEFRA/IPCC/national transport factors

11. CALCULATION RESULTS

11.1 Total GHG Emissions

Scope	tCO ₂ e	Contribution
Scope 1	4.676	0.053%
Scope 2	107.877	1.228%
Scope 3	8,673.164	98.719%
TOTAL	8,785.717	100.000%

11.2 Scope 3 Structure

Classification	tCO ₂ e	% of Scope 3
Upstream	8,671.084	99.976%
Downstream	2.080	0.024%
Total	8,673.164	100%

11.3 Graphical Representation

Scope 1: 0.053%

Scope 2: 1.228%

Scope 3: 98.719%

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11.4 Emission Intensity Indicators

The submitted GHG summary does not contain employee numbers, production tonnage, turnover or production quantity. Consequently, actual intensity results cannot be reliably calculated. For manufacturing operations, tCO₂e per tonne of production is recommended as the principal physical intensity KPI because it reduces distortion caused by changes in product mix and organizational headcount.

12. BASE YEAR AND TREND ANALYSIS

Year	Scope 1	Scope 2	Scope 3	Total tCO ₂ e	Change from Base
2025 Base	4.676	107.877	8,673.164	8,785.717	–
2026	To report	To report	To report	To report	To calculate
2027	To report	To report	To report	To report	To calculate

12.3 Base-Year Recalculation

The base year should be recalculated when structural changes significantly affect comparability, including: acquisition or divestment of facilities, outsourcing or insourcing of significant operations, corrections of significant errors, material changes in calculation methodology or availability of substantially improved data. Minor organic production changes should normally not trigger base-year recalculation.

13. UNCERTAINTY ASSESSMENT

13.1 Sources of Uncertainty

Potential uncertainty arises from activity data estimates, meter accuracy, supplier data, transport distances, employee commuting assumptions, waste-treatment routes, emission-factor selection and Scope 3 secondary database factors. Scope 1 and Scope 2 normally have lower uncertainty because data are generally based on direct invoices and metered consumption. Scope 3 typically carries higher uncertainty because supplier-specific primary data may not always be available.

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13.2 Assessment Method

Scope	Indicative Uncertainty	Rating
Scope 1	±5–10%	Good
Scope 2	±3–8%	Good
Scope 3	±15–30%	Medium
Overall Inventory	Dominated by Scope 3 uncertainty	Medium

13.3 Confidence Level

For future formal uncertainty analysis, SJG-SV-AP should aim to quantify uncertainty at approximately a 95% confidence level where sufficient statistical information exists. For Scope 3 categories based on secondary emission factors, qualitative uncertainty classification may be more practical.

14. DATA QUALITY ASSESSMENT

Area	Activity Data Quality	EF Quality	Overall Assessment
Fuel combustion	High	High	Good
Purchased electricity	High	High	Good
Refrigerants	Medium/High	High	Good
Raw materials	Medium	Medium	Medium
Logistics	Medium	Medium	Medium
Waste	Medium	Medium	Medium
Business travel	High	High	Good
Employee commuting	Medium	Medium	Medium
Product end-of-life	Low/Medium	Medium	Medium

15. GHG REDUCTION INITIATIVES

15.1 Energy Efficiency

SJG-SV-AP should progressively improve manufacturing energy performance through high-efficiency motors, compressed-air leak prevention, optimum compressor pressure, efficient welding equipment, LED lighting, preventive maintenance, shutdown controls and energy-performance monitoring.

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15.2 Renewable Electricity

Feasibility should be evaluated for rooftop solar, renewable electricity procurement, green tariff mechanisms or other credible renewable energy arrangements. Scope 2 should be tracked using appropriate location-based and, where applicable, market-based accounting.

15.3 Low-Carbon Material Procurement

Because Scope 3 is dominant, steel and other metal procurement represents a major potential decarbonisation opportunity. SJG-SV-AP should engage suppliers regarding: recycled-content steel, low-carbon steel, renewable-energy-based manufacturing, supplier GHG inventories, product carbon footprints and verified environmental product declarations.

15.4 Product Lightweighting

Engineering teams should assess opportunities to optimize muffler and WCC assembly designs while maintaining required performance, durability, thermal characteristics and customer specifications. Lower material consumption can directly reduce upstream embedded carbon.

15.5 Scrap Reduction and Circularity

Process optimization should target reduction of sheet-metal scrap, fabrication losses, welding rejection, rework and defective components. Metal scrap should be segregated and routed to authorized recycling channels.

15.6 Sustainable Logistics

Logistics emissions can be reduced through vehicle load optimization, route planning, local sourcing, consolidated shipments, supplier proximity strategies and adoption of lower-emission transportation where commercially feasible.

15.7 Waste and Water Reduction

Although water reduction does not always directly generate large GHG savings, resource-efficiency programs can reduce associated pumping, treatment and wastewater energy. Waste minimization also reduces emissions associated with material production and waste treatment.

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16. CONCLUSIONS

This indicates that future reduction programs should prioritize purchased raw materials, especially metal-based inputs, supplier decarbonization, material utilization, manufacturing scrap reduction and upstream logistics. Operational energy efficiency and renewable electricity remain important but will address a comparatively smaller share of the full footprint. For the next reporting period, SJG-SV-AP should strengthen source-level data traceability, calculate individual Scope 3 categories, collect production and employee data for intensity reporting, maintain evidence supporting each calculation and undertake an annual GHG management review.