

Driving Sustainability through Innovation & Accountability

Greenhouse Gas (GHG)

Accounting Report CY 2024



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GREENHOUSE GAS ACCOUNTING REPORT CY 2024

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Driving Sustainability through Innovation & Accountability

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About This Report

We are proud to present our second Greenhouse Gas (GHG) Footprint Report, marking a significant step in our commitment to transparency and sustainability. This report provides a detailed analysis of our environmental impact, showcasing our ongoing efforts to reduce our carbon footprint. Since last year, we have been reporting Scope 1 and 2 emissions, and this year, we have expanded our GHG accounting to include Scope 3 emissions. By sharing these insights, we aim to engage our stakeholders and partners in our journey towards achieving long-term sustainability goals and fostering a more eco-friendly future.

Acronyms & Abbreviations

CH_4	Methane	ISO
CO_2	Carbon dioxide	
co₂e	Carbon dioxide equivalents	kg
CSR	Corporate Social Responsibility	N ₂ O
СҮ	Calender Year	PFC
DEFRA	Department for Environment, Food and	SDG
	Rural Affairs, U. K.	SF ₆
EF	Emission Factor	t
GHG	Green house gas	UV
HFC	Hydrofluorocarbon	WBSCD
IPCC	Intergovernmental Panel on Climate	
	Change	WRI
		YoY

)	International Organization for
	Standardization
	Kilogram
C	Nitrous oxide
2	Perfluorocarbons
G	Sustainable Development Goals
	Sulfur hexafluoride
	tonne
	Ultraviolet
SCD	World Business Council for Sustainable
	Development
21	World Resources Institute
Y	Year on Year

Key Definitions

Baseline year	A historical year used to compare the preceding year's emissions.
Carbon Footprint	The amount of Carbon Dioxide that an individual, group, or organization lets into the atmosphere in a certain time frame.
CO ₂ e	Carbon dioxide equivalent – standardi- -zation of all greenhouse gases to reflect the global warming potential relative to carbon dioxide.
Direct Emissions	Greenhouse gas emissions from facilities /sources owned or controlled by a reporting company, e.g. generators, blowers, vehicle fleets.
Indirect Emissions	Greenhouse gas emissions from facilities /sources that are not owned or controlled by the reporting company, but for which the activities of the reporting company are responsible, e.g. purchasing of electricity.
Emission Factors	Specific value which is used to convert activity data into greenhouse gas emission values.

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CALCULATION IMPACT ASSESSMENT

APPENDIX

SAEL Industries Ltd. Environment & Social Policy

SAEL shall conduct its operations in a manner that ensures compliance with legal requirements and meets the highest level of commitment towards protection of People and Environment. SAEL shall strive to safequard the environment and natural resources and promote resource efficiency in its operations.

This above is achieved through the following commitments:

- Comply with all applicable national and state level legal requirements and regulations pertaining to environment, health & safety and social aspects and provide a good workplace practices for its employees, contractors and contract workers across its operations and services.
- Implement, maintain and continually improve its management systems, process and practices that enable a safe work environment, protect the health of workers, use resources optimally reduce pollution and ensure integrity of its contractors and subcontractors;
- Regularly assess the potential E&S impacts, and risks associated with business operations and make sustained efforts to reduce the identified impacts by implementing good international industry practices (GIIP) in its operations
- Protect valuable natural resources, such as water, air and soil from contamination/degradation by ensuring strong waste management procedures and resource efficiency interventions and Take precautions to avoid environmental pollution;
- Plan for emergency support systems for handling emergencies including accidents, blackouts and natural calamities, climate change impact;
- Will not restrict workers from developing alternative mechanisms to express their grievances and protect their rights regarding working conditions and terms of employment.
- Optimize technologies and formulations, operate its equipment and technologies in accordance with the environmental protection and occupational safety rules;
- Include health, safety and environment aspects in overall decision making process and Develop occupational health and safety and emergency response related awareness amongst contractors, including subcontractors, as well as direct and indirect employees and workers engaged by and for the company, to prevent occurrence of accidents (personnel injuries and property damage) and occupational diseases;
- Employ capable and trained human resources, and build competency by providing necessary awareness and culture building activities on environment, health and safety;
- Constantly educate and train employees, contractors and indirect workforce, and strongly encourage them to protect the environment and adhere the occupational safety principles; to design the training so as to motivate the employees performing their jobs to prevent or reduce negative impacts of all activities on the environment;
- Maintain safe and conducive environment at workplace to achieve a zero accident rates and also Communicate our EHS risks, performance and progress to all our internal and external stakeholders;
- Encourage/support the adoption of an environment friendly approach by vendors (suppliers and contractors) for commitment of management and all stakeholders to the cause of protecting the environment;

- Develop communication and cooperation with the public administration bodies, professional public, employees and other parties concerned with the environmental protection issues and safety and health protection during work. Ensure participation of workers or their representatives in discussing tasks and objectives in the area of safety and health protection during work;
- Select suppliers and contractors, including sub-contractors considering their ability to operate in environmentally and socially responsible manner, and to provide safe and healthy work environment to their employees and workers, in compliance with this Policy, other applicable Policies of the SAEL's ESMS and specific Environmental, Health, Safety and Social contractual requirements;
- Committed to employing individuals on the basis of merit, having readiness to align with the business strategy, possessing required competencies to fit in the organization's culture and will integrate smoothly and productively into the organization to meet current and future business requirements;
- Committed to be an equal opportunity employer and does not discriminate against any employee or job applicant because of his or her community, colour, religion, national origin, gender, orientation, or age;
- Strongly opposes the use of child labour and does not employ persons below 18 years of age. SAEL also mandate that its vendors (suppliers and contractors) does not employee child labour and comply with the local laws in this regard;
- Strongly oppose gender-based violence and harassment, and mandate that its vendor(s) will oppose gender-based violence and harassment;
- Strongly oppose any form of modern slavery or forced labour within the workforce or vendors and implement sufficient systems to monitor the same;
- Recognizes that all employees have a right to work in an environment in which the dignity of individuals is respected and which is free from harassment. It is committed to eliminating intimidation or harassment of or in any form;
- Safeguard the interests of stakeholders and affected communities through periodic engagement, participation and information disclosure, and effective management of grievances resulting from operations and services as well as any unplanned events;
- Implement necessary safeguards to maintain the identity, dignity, and protect human rights of all the employees;
- Implement socially useful programs for welfare and sustainable development of the local community through targeted Corporate Social Responsibility (CSR) initiatives.
- SAEL will undertake analysis of alternatives prior to retrenchment to reduce the adverse impacts on workers. Committed to comply with all legal and contractual requirements related to notification of public authorities, and provision of information to, and consultation with workers and their organizations
- Establish an information disclosure and reporting mechanism to apprise relevant environmental and social information to relevant stakeholders, and especially to the impacted community.
- Establish procedures to monitor and measure the effectiveness of the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements.
- Establish key E&S performance indicators through adoption of E&S goals and objectives and ensure continuous improvement through performance evaluation across all operations

The primary agency responsible for implementing this policy and its objectives across the organization is the ESG Committee of SAEL. In order to meet its objectives successfully, the same shall be supported by other departments of SAEL as per requirement.

Executive Summary

Climate change poses significant risks to natural ecosystems and human societies, potentially disrupting economies, social structures, and the global ecological balance. In response, governments, businesses, and individuals are adopting various strategies to mitigate greenhouse gas (GHG) emissions. The effectiveness of these efforts depends on precise measurement, continuous monitoring, accurate reporting, and thorough verification of GHG emissions and removals. Achieving this requires coordinated collaboration across international, regional, national, and local levels.

SAEL is proud to present its third annual GHG Accounting Report for the calendar year 2024, providing a comprehensive assessment of our carbon footprint. This report reaffirms our unwavering commitment to sustainability, a fundamental pillar of our corporate mission. Aligned with the 2030 Sustainable Development Goals (SDGs) and our policy on reducing greenhouse gas (GHG) emissions, it offers a detailed accounting and quantitative analysis of Scope 1, 2, and 3 emissions.







Allocation of emission avoidance by project category.

Our climate change targets



Reduce absolute **GHG** emissions

Install energy efficient equipments



Establishing plantations to contribute to afforestation endeavors.

Main Figures

The green	nouse gas emissions, avoidance attributable to our business operatio	ns
Emissions Sc	ope & Activities	tCO ₂ e
Scope 1		42,562.83
Emissions from	m Fuel Consumption (Excluding Power Generation, Leased Asset)	3,133.80
Emissions from	m Biomass Fuel Consumption (For Power Generation)	38,554.23
Fugitive emiss	sions (resulting from SF ₆ release out of electrical equipments)	874.80
Scope 2		57,407.05
Emissions due	e to grid electricity purchase for various purposes	57,407.05
Scope 3		2,476.90
Category 1	Purchased goods and services	13.20
Category 2	Capital goods	1.68
Category 3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	0
Category 4	Upstream transportation and distribution	0
Category 5	Waste generated in operations	9.76
Category 6	Business travel	280.79
Category 7	Employee commuting	1,796.41
Category 8	Upstream leased assets	0
Category 9	Downstream transportation and distribution	0
Category 10	Processing of sold products	0
Category 11	Use of sold products	0
Category 12	End-of-life treatment of sold products	0
Category 13	Downstream leased assets	375.07
Category 14	Franchises	0
Category 15	Investments	0
Total Emissio	n in (tCO₂e)	1,02,446.79
Operational <i>i</i>	Activities	tCO₂e
Emission avoidance due to supply of energy to Grid - Biomass to Energy projects		3,90,859.40
Emission avoidance due to supply of energy to Grid - Solar PV		3,58,235.83
Total Emissio	n Avoidance (tCO2e)	7,49,095.23

*The Emission Estimation Toolkit" based on which results are presented above can be downloaded from this link: https://disk.yandex.com/i/Zwla-Bz0kFMtJQ

Emission Avoidance Analysis

■ The greenhouse gas emission avoidance attributed to our business operations

Emission avoidance due to supply of energy to Grid - Biomass to Energy projects	3,90,859.40
Emission avoidance due to supply of energy to Grid - Solar PV	3,58,235.83
Total Emission Avoidance (tCO2e)	7,49,095.23

The emissions generated from biomass combustion stand at 38,554.23 tCO₂e, while the emissions prevented by supplying waste-to-energy to the grid amount to 3,90,859.40 tCO₂e. This highlights a substantial positive contribution by SAEL towards mitigating greenhouse gas emissions.



SAEL is proud to make direct contributions towards achieving the Sustainable Development Goals (SDGs)



1. Introduction

The Earth's climate system is a delicate balance of incoming and outgoing solar radiation. Approximately 70% of the sun's visible and ultraviolet (UV) radiation penetrates the atmosphere, with portions absorbed by water vapor, aerosols, and ozone. The remaining radiation reaches the Earth's surface, where it is either absorbed or reflected. However, greenhouse gases (GHGs) such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) trap outgoing heat, disrupting this natural equilibrium. Scientific evidence in 2024 underscores that rising concentrations of these gases are intensifying global warming, leading to more frequent and severe climate disasters-ranging from record-breaking heatwaves and prolonged droughts to intensified cyclones and unprecedented glacial melting.

India, particularly vulnerable to climate change, has witnessed alarming shifts in weather patterns. The country is grappling with erratic monsoons, increased instances of urban flooding, prolonged dry spells, and extreme heatwaves affecting millions. These climatedriven disruptions not only threaten public health and biodiversity but also impact economic stability, food security, and energy reliability. With India's rapidly growing energy demand and fluctuating costs, businesses must proactively manage carbon emissions and climate-related risks to ensure long-term resilience and sustainable growth.

A critical step in this transition is understanding and mitigating carbon footprints. Our second GHG Accounting Report for the calendar year 2024 provides key insights into emissions sources, energy consumption patterns, and opportunities for decarbonization. By embedding effective emissions management into business strategy, we contribute to sustainable operational transformation, enhance climate resilience, and support India's commitment to a low-carbon future.









1.1. DESCRIPTION OF THE COMPANY

At SAEL, we are steadfast in our mission to accelerate India's transition to clean and cost-effective energy solutions for baseload power. As one of the nation's fastest-growing energy providers, we are dedicated to transforming the energy sector and driving nationwide progress.

Our focus remains on delivering environmentally sustainable and economically feasible energy solutions. We actively engage in the advancement and deployment of renewable energy technologies, energy efficiency initiatives, and initiatives aimed at expanding energy access to underserved communities.

Recognizing that reliable energy access is fundamental to improving the quality of life for our customers and the communities we serve, we remain deeply committed to ensuring the delivery of Sustainable & Affordable Energy for Life.



2. Greenhouse Gas Inventory

2.1. OVERVIEW

SAEL Industries Limited meticulously documents emissions from all its activities and businesses in the greenhouse gas emissions (GHG) inventory. This inventory adheres to established standards and guidelines, encompassing a comprehensive framework that includes, among other criteria, the following:

- The Greenhouse Gas Protocol, which is recognized as the most widely used international accounting tool for the government and business sector.
- 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.
- Intergovernmental Panel on Climate Change (IPCC) Guidelines.

While establishing the GHG inventory for activities and businesses, representatives from SAEL Industries Limited's ESMS department have implemented the principles outlined in "The Greenhouse Gas Protocol."

- Relevance: An appropriate inventory boundary that reflects the GHG emissions of the company and serves the decision-making needs of users.
- Completeness: Accounting of all emission sources within the chosen inventory boundary. Any specific exclusion is disclosed and specified.
- Consistency: Meaningful comparison of information over time and transparently documented changes.
- Transparency: Data inventory sufficiency and clarity, where relevant issues are addressed coherently.
- Accuracy: Minimized uncertainty and avoided systematic over or under quantification of greenhouse.

2.2. Activity Data

In computing the GHG Footprint for SAEL Industries Limited, we identified all pertinent greenhouse gas emissions specific to our processes and activities. We collected activity data and offered explanations where such data was unavailable, along with recommendations for enhancing future data recording practices.

2.3. CALCULATION METHOD

The Carbon footprint study accounted for all six Kyoto GHG emissions;

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)

Metric tonnes Carbon dioxide equivalent (tCO₂e) is the main unit of measurement which allows different greenhouse gases to be compared on a like for like basis relative to one unit of CO₂.

Applied furmula (for emission calculations)

GHG Emission (tCO_2e) = Activity (unit of activity) x Emission Factor (tCO_2e) unit of activity) GHG Emission (tCO_2e) = Fugitive emissions (unit of release) x GWP

The Greenhouse Gas Protocol - A Corporate Accounting and Reporting Standard, Revised Edition, was developed in a partnership between The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBSCD) in 2004.



- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur Hexafluoride (SF6)

2.4. SCOPE AND BOUNDARIES

The scope and boundary of our GHG emission calculations include the corporate and site offices, solar, biomass, and PV module manufacturing operations, as well as other assets of SAEL Industries Limited, located across various cities in India.



2.5. OPERATIONAL LIMITS

The approach adopted is a financial control approach. SAEL Industries Limited accounts for carbon footprint emissions from activities it has financial control over. Financial control is established when an organization has the authority to steer the financial and operational strategies of an operation, intending to derive economic advantages from its activities.

Since its inception, SAEL Industries Limited has operated as an energy producer with minimal emissiongenerating activities, including during the reporting period covered in this report. As a result, the GHG footprint report for CY 2024 accounts for only specific emission categories. This report exclusively includes documented emissions under Scope 1, Scope 2, and Scope 3 for the reporting period. According to the Greenhouse Gas Protocol (The GHG Protocol) emissions are divided into direct and indirect emissions. Direct emissions are emissions originating from owned or controlled sources by the reporting entity. Indirect emissions are generated as a consequence of the reporting entity's activities, yet they occur at sources owned or controlled by another entity. The direct and indirect emissions are divided into three Scopes:



SCOPE 2			
INDIRECT			
EMISSIONS FROM			
ENERGY / UTILITIES			

SCOPE 1 DIRECT EMISSIONS FROM SOURCES (ON SITE)

Companies shall separately account for and report on emissions from Scope 1 and 2. Scope 3 is an optional reporting category (WRI and WBCSD, 2004).

Our coverage of reporting is as follows;

• Scope 1: Direct Emissions from sources that are owned or controlled by the company.	• Scope 2: Indirect Emissions generated in the production of electricity, heat or steam consumed by the company.	• Scope 3: Indirect Emissions from sources not owned or directly controlled by the company but that are a consequence of the activities of the company
REPORTING COMPANY	UPSTREAM, DOWNS	TREAM ACTIVITIES
Company facilities Company equipments	Purchased electricity, heating and cooling for own use	 Business travel and employee commuting Fuel-and energy related activities Purchased goods and services Capital goods Downstream Leased Assets Waste generated in operations



2.6. ORGANIZATIONAL LIMITS

The GHG emissions and avoidance inventory in this report includes all the business and activities in accordance with the criterion of financial consolidation, in accordance with the shareholding percentages.

Company:

• SAEL Industries Limited and its associated Special Purpose Vehicle (SPV) entities.

Offices:

Includes all of the offices that are related to the activities described previously.

2.7. REPORTING PERIOD

The reporting period is set from January 1, 2024 to December 31, 2024.

2.8. DATA QUALITY AND COMPLETENESS

Emission Source	Data Quality	Data Resolution	Applied assumptions
Fuel Combustion		Data/Emission category	None
Electricity procurement or grid injection.		Consumption/month/location	None
Waste Generated		Data/Emission category	None
Business travel & Employee Commute		Consumption/month/location	None
Leased Assets(Downstream)		Data/Emission category	None
Procured goods, services, and capital assets		Consumption/month/location	None

Good – No changes recommended

Satisfactory – Could be improved

Weak – A priority area for improvement

2.9. RELEVANCY AND EXCLUSIONS

The following exclusions of emission sources (and their explanations) are described below:

• Fugitive emissions from fire extinguishers, and air conditioning units are considered relevant but have not been included in the emissions inventory.

2.10. EMISSION FACTORS

Emission factors convert activity data (e.g. amount of fuel used, kilometers driven, and kilowatt-hours of purchased electricity) into a value indicating carbon dioxide equivalent (CO₂e) emissions generated by that activity. The emission factors were identified based on the default values adopted by the IPCC, and The GHG Protocol, DEFRA, US EPA as well as individual researches.

For the applicable emission factors used, please refer to the corresponding Excel toolkits.



3. Methodology & Calculation

3.1. FUEL RELATED & FUGITIVE EMISSION

Methodology

Scope & Assumptions

Emissions from fuel consumption and fugitive emissions associated with equipment directly owned and operated by SAEL are classified as Scope 1 emissions.

Acitivity Data

GHG emissions from fuel consumption and fugitive emissions were calculated based on data provided by various SAEL teams for the period from January 1, 2024, to December 31, 2024.

Emission Factor & Calculations

The emission factor for fuel consumption was derived from the DEFRA - UK Government GHG Conversion Factors for Company Reporting, Full Factor Set 2024, Version 1.1. Emissions associated with the release of Sulfur Hexafluoride (SF_6) into the environment were calculated by multiplying the total quantity of SF₆ released by its Global Warming Potential (GWP) over a 100-year time horizon. The GWP value was sourced from the IPCC Sixth Assessment Report (AR6).

SAEL Industries Limited generated a cumulative emission of 42,562.83 tCO,e from various types of fuel (Liquid fuel such as Diesel, Petrol & Solid Fuel as Biomass) consumption during CY 2024.

Organizational activities and associated equipment released a total of 36 kg of SF_6 into the environment during the calendar year 2024, resulting in emissions equivalent to 874.80 tCO₂e.

3.2 ELECTRICITY EMISSIONS

Methodology

Scope & Assummptions

Emissions stemming from electricity consumption are categorized within Scope 2 (Indirect emissions) and encompass the emissions linked to the electricity procured by the company.

Activity Data

The calculation of GHG emissions from "Electricity consumption" was derived from the information and assumptions furnished by SAEL Industries Private Limited, covering the period from January 1, 2024, to December 31, 2024

Emission Factor

The emission factor utilized for electricity consumption was sourced from the Guidelines provided by the Central Electricity Grid Authority.

Calculations

In CY 2024, SAEL Industries Limited procured and consumed electricity across its offices and project sites, resulting in total emissions of 57,407.05 tCO2e.

3.3. MOBILITY EMISSIONS

3.3.1. Employee Commuting

Methodology

Scope & Assumptions

Staff commuting emissions are categorized as Scope 3 (Indirect emissions) and encompass emissions generated from the transportation of employees between their residences and workplaces.

Activity data

GHG emissions from employee commuting were calculated based on the results of a representative poll conducted among SAEL's employees in 2024. Employees were asked about the distance travelled between their homes and workplaces and their means of transportation. GHG emissions were calculated by multiplying the travelled distance (288 days per year, back and forth), fuel/energy consumption with the respective CO₂e emissions factor accounting for the different means of transportation for period starting from January 1, 2024 to December 31, 2024.

Emission Factor & Calculations

The emission factor for various transportation modes and fuel types used in passenger vehicles was sourced from DEFRA – UK Government GHG Conversion Factors for Company Reporting, full factor set 2024, Version 1.1.

Staff commuting during the calendar year 2024 contributed to cumulative emissions of 1,796.41 tCO₂e due to various modes of transport.

The most commonly preferred modes of transportation among SAEL's workforce across projects and offices are;





r Bike







For background calculation of represented results you may download and refer to our toolkit from this link:

A) https://disk.yandex.com/i/NqCeWquVz0Rlhg

c) https://disk.yandex.com/i/4PmI-SXdz-Tbew

- B) https://disk.yandex.com/i/kojWvXmaqwxFJQ
- D) https://disk.yandex.com/i/218R3ev4ISVAPg

INTRODUCTION GHG INVENTORY METHODOLOGY & CALCULATION



3.3.2. Business Travel Methodology

Scope & Assumptions

Business travel emissions are classified as Scope 3 (Indirect emissions) and encompass emissions stemming from the transportation of employees for business-related activities using vehicles, assets owned or operated by third parties, including aircraft, trains, buses, passenger cars and hotels.

Activity data

Greenhouse gas (GHG) emissions from business travel were computed using data sourced from the central logistics department of SAEL, responsible for maintaining records of business travel bookings and corresponding vendor payments from January 1, 2024, to December 31, 2024.

Emission Factor

The emission factors for various transportation modes, hotel stay were obtained from DEFRA - UK Government GHG Conversion Factors for Company Reporting, comprising the full factor set for 2024, Version 1.1.

Calculations

The business travel undertaken by SAEL staff during the calendar year 2024 resulted in cumulative emissions of 280.79 tCO2e, encompassing emissions from multiple transportation modes and hotel accommodations.

Mode of transport	Distance travelled (Km)	Net emissions (tCO₂e)
Air travel (International - premium economy class)	12,000 (passenger.km)	2.59
Air travel (Domestic economy class)	8,28,750 (passenger.km)	151.55
Rental cars- conventional fuel based	15,750.00 (passenger.km)	2.65
Rental cars- electric vehicles	14,383.72 (passenger.km)	0.67
Hotel stay	2,094 (room per night)	123.34



14,383.72

Passenger Km

Travelled



For background calculation of represented results you may download and refer to our toolkit from this link: https://disk.yandex.com/i/zfWFKAikrEGmhQ



3.4. GOODS AND SERVICES

Methodology

Scope & Assumptions

Indirect emissions from "Purchased Goods and Services," and "Capital Goods," are classified under Scope 3 and encompass emissions stemming from the manufacturing, processing, or treatment of goods, services, and water resources utilized by the reporting company.

Activity data

Greenhouse gas (GHG) emissions originating from "Purchased Goods and Services," "Capital Goods," and "Water Supply" were computed using data sourced from the central Procurement department of SAEL. This department maintains records of service and goods procurement, as well as vendor payments. Representatives from SAEL's Environmental and Sustainability (E&S) department provided comprehensive data on all procurements conducted by SAEL from January 1, 2024, to December 31, 2024.

Emission Factor

The emission factor utilized for water supply was sourced from DEFRA – UK Government GHG Conversion Factors for Company Reporting, full factor set 2024, Version 1.1.

The emission factors for "Purchased Goods and Services" and "Capital Goods" were obtained from the US EPA – Supply Chain Greenhouse Gas Emission Factors for Industries and Commodities, with Record ID 349324, Metadata Updated: July 10, 2024.

Calculations

During CY 2024, SAEL Spent **124.02 million** US Dollars on the procurement of "Purchased Goods and Services" and "Capital Goods," leading to a total emission of **14.88 tCO₂e.**





* During the reporting period, SAEL sourced water from various suppliers for use across its offices and projects. The cost of water procurement was embedded within the services provided by suppliers to ensure its availability to SAEL. To prevent double accounting, expenditure on water procurement has been considered in estimations instead of direct consumption data.

For background calculation of represented results you may download and refer to our toolkit from this link: https://disk.yandex.com/i/50qSGomx-HyG2w





3.5. OPERATIONAL WASTE GENERATION AND SUBSEQUENT DISPOSAL Methodology

Scope & Assumptions

Emissions related to "Operational waste generation and subsequent disposal (Hazardous & Non-Hazardous)" fall within Scope 3 (Indirect emissions).

Activity data

The calculation of GHG emissions associated with waste disposal are based on data provided by SAEL's Operations department, encompassing service records and vendor payments for the period from January 1, 2024, to December 31, 2024.

Emission Factor

The corresponding emission factors were sourced from the DEFRA – UK Government GHG Conversion Factors for Company Reporting, Full Factor Set 2024, Version 1.1.

Calculations

In CY 2024, SAEL collectively produced an emission totalling 9.76 tCO₂e through the disposal of both hazardous and non-hazardous waste.

3.6. DOWNSTREAM LEASED ASSETS Methodology

Scope & Assumptions

This category includes emissions associated with assets owned by SAEL but leased to external entities, with emissions from their operation excluded from the company's Scope 1 and Scope 2 inventories.

Activity data

GHG emissions from Baler Units leased to third parties for agricultural produce collection, intended for power generation, are classified under "Upstream Leased Assets." These emissions were quantified using "Vehicle Running Kilometers" data from SAEL's central logistics procurement department for the period January 1 to December 31, 2024.

Emission Factor

The emission factor applied for Downstream leased asset operations was derived from the DEFRA – UK Government GHG Conversion Factors for Company Reporting, Full Factor Set 2024, Version 1.1

Calculations

In CY 2024, SAEL's BigBaler units, leased to third parties, covered a total distance of **93,291.00** kilometers for agricultural produce collection, supporting SAEL's waste-to-energy power generation operations. This activity resulted in an estimated **375.07** tCO₂e emissions.

4. Impact Assessment

This chapter showcases the outcomes of the GHG accounting estimation for the CY 2024. The total GHG emissions due to SAEL Industries Limited business operations are calculated 1,02,446.79 tCO₂e, and bifurcation into Scope 1, Scope 2 and Scope 3 emissions is as follows;

Main Figures

The greenhouse gas emissions, avoidance attributable to our business operations

Emissions Scope & Activities		tCO ₂ e
Scope 1		42,562.83
Emissions from Fuel Consumption (Excluding Power Generation, Leased Asset)		3,133.80
Emissions from Biomass Fuel Consumption (For Power Generation)		38,554.23
Fugitive emissions (resulting from SF ₆ release out of electrical equipments)		874.80
Scope 2		57,407.05
Emissions due	e to grid electricity purchase for various purposes	57,407.05
Scope 3		2,476.90
Category 1	Purchased goods and services	13.20
Category 2	Capital goods	1.68
Category 3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	0
Category 4	Upstream transportation and distribution	0
Category 5	Waste generated in operations	9.76
Category 6	Business travel	280.79
Category 7	Employee commuting	1,796.41
Category 8	Upstream leased assets	0
Category 9	Downstream transportation and distribution	0
Category 10	Processing of sold products	0
Category 11	Use of sold products	0
Category 12	End-of-life treatment of sold products	0
Category 13	Downstream leased assets	375.07
Category 14	Franchises	0
Category 15	Investments	0
Total Emission in (tCO2e)		1,02,446.79



IMPACT ASSESSMENT

SAEL: Lighting the way in the global fight for climate and biodiversity

SAEL Industries Limited is dedicated to addressing a critical challenge directly linked to the global issue of climate change. Through our two core business divisions-Electricity Generation via Solar PV Modules and Biomass-to-Energy Generation-we are actively combatting environmental degradation. In the absence of our projects, biomass would be burned in open fields, leading to significant ambient air pollution and the loss of biodiversity, particularly impacting agricultural areas in India. By harnessing solar and biomass resources, we have generated and supplied electricity to the grid, displacing energy that would otherwise be produced by conventional sources such as coal-based thermal plants and nuclear facilities, thereby contributing to India's energy mix with cleaner alternatives.

While we acknowledge that biomass-to-energy production may contribute to air pollution, it presents a vital solution compared to the environmental and economic consequences of open burning. During the reporting period of Calendar Year 2024, SAEL procured 7,49,290 metric tonnes of biomass, generating 5,16,326.82 megawatt-hours of energy, and averting 3,90,859.40 tonnes of CO₂ equivalent emissions. Similarly, our Solar PV projects generated 473230.95 megawatt-hours of energy, leading to an avoidance of 3,58,235.83 metric tonnes of CO₂ emissions by integrating renewable energy into the grid.

Operational Activities	tCO ₂ e	
Emission avoidance due to supply of energy to Grid - Biomass to Energy projects	s 3,90,859.40	
Emission avoidance due to supply of energy to Grid - Solar PV	3,58,235.83	
Total Emission Avoidance (tCO2e)	7,49,095.23	

SAEL GHG emissions avoidance initiatives

The emissions generated from biomass combustion stand at 38,554.23 tCO₂e, while the emissions prevented by supplying waste-to-energy to the grid amount to 3,90,859.40 tCO2e. This highlights a substantial positive contribution by SAEL towards mitigating greenhouse gas emissions.



Solar PV to Energy supply to grid (tCO,e)





waste-to-energy

supply to grid (tCO,e)

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We value your feedback

Your feedback is important for continuously improving our GHG footprint reporting. A few valuable comments could help us align our next year's report with your expectations.

1. Quality of content covered in the report?

- A. Excellent
- B. Good
- C. Low
- D. Poor
- 2. Clarity of information presented in the report?
 - A. Excellent
 - B. Good
 - C. Low
 - D. Poor
- 3. Quality of design of the report
 - A. Excellent
 - B. Good
 - C. Low
 - D. Poor

4. What additional information would you like to see in our future reports?

5. Any other suggestions or areas of improvement?

Kindly provide your contact information for further correspondence:

Name Designation : Organization Contact Address: PLEASE EMAIL YOUR FEEDBACK TO: MR. AMBUJ MISHRA HEAD - ESG

M Email: info@sael.co 🔮 Tel: 011 4021 1111

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Notes

IMPACT ASSESSMENT

APPENDIX

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