Greenhouse Gas Emissions Report 2023-2024

PIYANSHU CHEMICALS PVT.LTD.

[APRIL,2023-MARCH ,2024]

Piyanshu

INDEX

Date Of Issue	Prepared By Ujjwal Das	Checked By Swapan Dutta	Approved By Anshu Kejriwal
22.05.2024			

Piyanshu Chemicals Pvt. Ltd. Kolkata

Introduction

Objectives & Principles

One of the biggest and most lasting risks to the world in the twenty-first century is climate change. It results from a rise in temperature caused by an increase in the atmospheric concentration of greenhouse gases. Understanding greenhouse gases and their emissions, sources, and sinks is the first step towards lowering emissions and the harm they cause on any scale—global, regional, national, organizational, household, and individual. In order to reduce the impact of climate change on the environment, natural resources, and people, the report aims to comprehend greenhouse gas assessments, sometimes referred to as carbon footprint assessments.

The Greenhouse Gas (GHG) Emissions Report describes the emissions of Piyanshu Chemicals Pvt. Ltd. The company publishes this report annually in order to transparently disclose to its stakeholders its GHG emissions in accordance with the commitments made in the Company's environmental policy and strategy.
The information contained in this report discloses of GHGs and associated emissions during fiscal year 2023, April 1, 2023 to March 31, 2024.
The report covers

1. Piyanshu Chemicals Pvt.Ltd Medak, Telangana
2. Piyanshu Chemicals Pvt. Ltd., Pithampur, Madhya Pradesh

This is the Second consecutive year that Piyanshu Chemicals publishes a GHG report that includes the three scopes, This report also includes an overview of the direct actions performed based on internal targets and strategies to manage and reduce GHG emissions.

Headline Figure

Total 2023-2024 GHG Emissions **12778.7 tCO2e**

Scope 1 and 2 emissions contribute 54% and 31% respectively. The value of **Scope 1** emissions is 6891.2 **tCO2e** and **Scope 2** emissions are major emissions with 3987 **tCO2e.**

Scope 3 emissions make 15% of our total carbon footprint with 1900.5 **tCO2e**, mainly due to travel and the upstream & downstream transportation & distribution.

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Organizational description

Piyanshu Chemicals Pvt Ltd is one of the largest manufacturers of alkyd resins, driers and other additives for the paint industry. Piyanshu chemicals is a leading supplier of Resins & Driers to customers all over India . It is committed to providing innovative and effective solutions for the Paint industry challenges of tomorrow. Piyanshu is thus leading the way forward in the resin & Drier sector. The company's scale, proven track record ensures that it will continue to play a central role in shaping the Resin & Drier landscape of the future.

Policies, strategies and goals

Piyanshu Chemicals Pvt. Ltd. strives to create as much value as possible for customers that they have tied their interests with those of the Company.

Piyanshu's sustainability performance is monitored constantly measure the performance of Companies capable of demonstrating strong Environmental, Social and Governance (ESG) practices.

Environmental policies

Preserving the environment is one of our guiding principles.
Piyanshu has established several policies that outline our obligatory and voluntary commitments to protect and enhance the environment.

These policies address different aspects of environmental protection appropriate to the context of our business, including the nature, scale and environmental impacts of our operations, products and services, in addition to the interests of our Stakeholders.
Our policies are regularly reviewed and applicable to our entire operations. They apply to all Piyanshu employees and, furthermore, are relevant to our business partners.

Organizational boundaries

In order to define the boundaries of the organization, the operational control approach is selected, since it best represents the organization's activities with respect to the work centres performing operational control of the activity and it is the approach that allows greater potential for reducing GHG emissions.

Total two Piyanshu Chemicals Pvt. Ltd locations are considered for this GHG emissions report.

Current report covers

1. Piyanshu Chemicals Pvt.Ltd Medak, Telengana
2. Piyanshu Chemicals Pvt. Ltd., Pithampur, Madhya Pradesh

Reporting boundaries

PCPL has since fiscal year 2022 reported its direct emissions (Scope 1) from sources it owns or controls and indirect emissions (Scope 2) resulting from the generation of purchased electricity,

PCPL is applying bottoms up approach for reporting GHGs emission which calculates emissions at the individual source level (such as a facility) and then all the way up to the corporate level (HQ)

Scope 3 categories upstream & downstream
1.Transportation & Distribution
2. Business Air Travel

GHG Scopes:

- GHG direct emissions (Scope 1) – Direct emissions that occur from sources that are owned or controlled by the Company.
- GHG indirect emissions (Scope 2) – Indirect emissions from the generation of purchased electricity consumed by the Company.
- Other GHG indirect emissions (Scope 3) – Indirect emissions that are a consequence of the activities of the Company but occur from sources not owned or controlled by the Company.

. The following Scope 3 emissions from both upstream and downstream sources were accounted for and included in this report: Scope 3 emissions categories such as "Business travel",

Together the three emissions scopes provide a comprehensive accounting framework for managing and reducing direct and indirect emissions.

Direct and indirect emissions sources reported

GHG direct emissions sources (Scope 1)

Energy Direct Emission

Point Details	Activity /Category	
1.1	Combustion of Coal	Thermic Fluid Heater
1.2	Briquette	Thermic Fluid Heater
1.3	Diesel Combustion	DG
1.4	Combustion of diesel for automotive	Company owned Vehicles

GHG indirect emissions sources (Scope 2)

Energy indirect

Point Details	Activity /Category	
2.1	Electricity Consumption	Power & Lighting

Other GHG indirect emissions (Scope 3)

Other Indirect

Point Details	Activity /Category	
3.1	Transportation & Distribution	Diesel
3.2	Business Travel	Air Travel

Reporting period and general methodology

Base year
The base year is PCPL fiscal year 2022, or the period between April 1, 2022 and March, 2023.

Reporting period
This GHG emissions report reflects the situation of PCPL's fiscal year 2023, or the period between April 1, 2023 and 31, March, 2024.

Methodology
Quantifying GHG emissions includes the data collection process and the application of documented emission factors. The quantification is based on two calculation-based methodologies, depending on the type of emission source: Emission sources in which there is a chemical transformation process (combustion, fixed or mobile) and indirect Emissions from electricity consumption
Emissions of CO2 (t CO2e) = Activity data x Emission factor

EMISSION FACTORS

**CO2 emission from Coal for generation of 1MWH power is Equal to 340Kg/0.340mt
*** 1 litre diesel generates Equivalent to 2.7 Kg of CO_2
** To generate 1MWH of Power Thermal power plant emits 0.91mt of CO_2
** To produce 1KWH power from briquette it generates .01053 kg of CO_2

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Performance tracking & reductions project

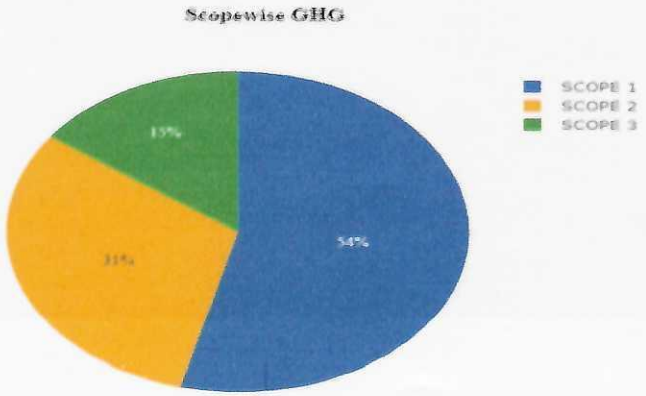
Since fiscal year 2022, PCPL committed to report its companywide GHG emissions. The GHG emissions report of FY22 represents the baseline year for GHG emissions reporting. The next section will present trends and a comparative analysis between FY22 baseline and current fiscal year data.

Relevant trend to monitor is:
Emissions per MT of Production: 0.434 MT

INFORMATION ON EMISSIONS

EMISSIONS	TOTAL ($mtCO_2e$) MEDAK	TOTAL ($mtCO_2e$) PITAMPUR	TOTAL ($mtCO_2e$)
Scope 1	3952.9	2938.3	6891.2
Scope 2	2164	1823	3987
Scope 3	1307.5	593	1900.5

2023-24 GHG Emissions by Scope



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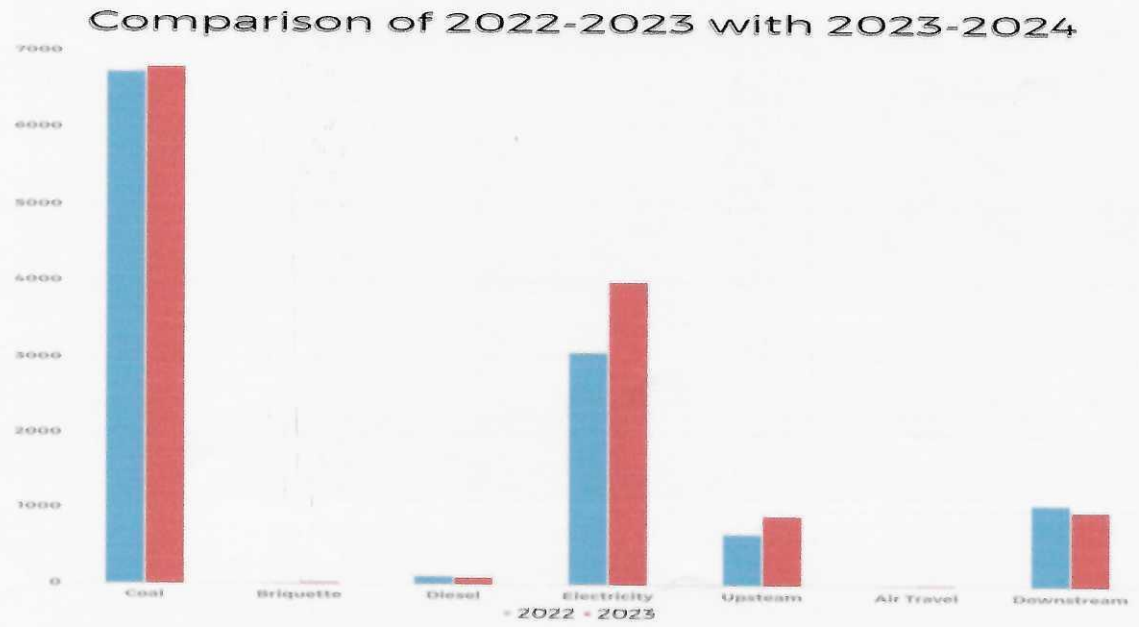
Emissions disaggregated by source types		
Scope 1: Direct Emissions from Owned/Controlled Operations	2023-2024	2022-2023
a. Direct Emissions from Stationary Combustion		
1. Coal	6788.2MT	6917.9 MT
2. Biocoal	18.1 MT	8.9 MT
3. Diesel	84.9 MT	96.68 MT
Scope 2: Indirect Emissions from the Use of Purchased Electricity, Steam, Heating and Cooling		
a. Indirect Emissions from Purchased/Acquired Electricity	3987 MT	3075 MT
Scope 3: Indirect Emission upstream & downstream Transportation & distribution ,business travel		
1. Upstream Transportation & distribution	907.8 MT	669 MT
2. Downstream Transportation & distribution	981 MT	1070 MT
3. Business Air Travel	11.7 MT	8 MT



GHG Emissions (tCO2e)

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Reduction Projects

PCPL continues to make reductions and implement energy efficiency and waste reduction measures related to their operations across production facilities to fulfil its emissions targets.

An outline of any GHG management/reduction programs or strategies
• Scope 1 by 25% by implementing coal replacement by biomass briquette 2024-2025. • Scope 2 by 2% by implementing solar energy by 2026-2027. • Scope 3 by 5% by implementing electric vehicle in operation by 2025-2026

Conclusion

PCPL recognizes that climate change is a global issue requiring urgent and collective action and is committed to contributing to the global economy's decarbonisation. We believe that companies can play a pioneering role in the fight against climate change.

Piyanshu Chemicals Pvt. Ltd. will work continuously to reduce its emission through the following emission reduction levers:

- Energy reductions and energy efficiency measures
- Electricity supply from renewable energy-based sources
- Employee awareness campaigns and idea management as a way to capture and implement employee ideas related to sustainability
- Supplier engagement across the value chain
- Offset of non-avoided emissions through compensation projects

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