

Environmental Stewardship (continued)

In FY23, we have implemented focused energy efficiency measures⁵⁰. Some of these are enumerated below:

<p>1</p>	<p>Installation of Hybrid (Wind + Solar) Power Plant This strategic investment is expected to result in an annual GHG reduction potential of 37,530 tCO₂e.</p>	<p>2</p>	<p>Solar Rooftop Installations, contributing to an annual GHG reduction potential of 3,340 tCO₂e.</p>
<p>3</p>	<p>Energy Efficient Chillers and Heat Pumps at sites are anticipated to lead to an annual GHG reduction potential of 1,788 tCO₂e.</p>	<p>4</p>	<p>Other projects, such as VFD and LED, among others, resulted in a cumulative annual GHG reduction potential of ~10,474 tCO₂e.</p>



Emissions Management

Scope 1 GHG Emissions⁵¹

We periodically monitor and report on the emissions of direct fuels consumed (HSD, furnace oil, petrol, CNG, LPG, LDO, and coal) in our operations. Our Scope 1 emissions demonstrate a declining trend over the past four years, both in absolute and intensity terms.



Scope 1 Emissions (tCO₂)

FY23	67,203
FY22	75,970
FY21	76,427
FY20	94,844

Emission Intensity for Scope 1 [tCO₂/revenue (in ₹ Mn)]

FY23	0.23
FY22	0.29
FY21	0.33
FY20	0.42

The emissions from using biomass in our operations have been classified as biogenic emissions, accounting for a total of 57,577 tCO₂e in FY23.

⁵⁰GRI 302-4 and 305-5, ⁵¹GRI 305-1 and 305-4



Scope 2 GHG Emissions⁵²

We monitor and report our emissions of the purchased electricity from the grid. The Scope 2 emissions intensity also demonstrates a steadily declining trend over the past four years.

Scope 2 Emissions (tCO₂)

FY23		352,678
FY22		343,236
FY21		342,522
FY20		356,225

Emission Intensity for Scope 2 [tCO₂/revenue (in ₹ Mn)]

FY23		1.23
FY22		1.31
FY21		1.49
FY20		1.59

Scope 3 GHG Emissions⁵³

We report on the indirect emissions within our business value chain of seven categories of Scope 3 emissions, as specified by the GHG protocol. The categories of emissions that are most material to our operations and with the highest impact within the value

chain are from purchased goods and services. Fuel- and energy-related activities (not included in Scope 1 or Scope 2) business travel, employee commute, upstream transportation and distribution, downstream transportation and distribution, and waste generated during operations.

S. No.	Source	FY22 (tCO ₂)	FY23 (tCO ₂)
1	Purchased goods and services	169,413	182,980
2	Fuel- and energy-related activities (not included in Scope 1 or Scope 2) ⁵⁴	-	99,161
3	Employee commute	16,106	20,115
4	Business travel	513	3,794
5	Upstream	6,138	7,630
6	Downstream	30,030	38,311
7	Waste generated in operations	4,690	5,275
Total		226,890	357,266

Monitoring Scope 3 emissions provides us with strategic opportunities to engage with the business value chain and create awareness of sustainable practices for our business partners. It also provides us with insights into sustainable procurement and logistics. We will continue to track our Scope 3 emissions and eventually take targets for addressing specific categories of Scope 3 emissions. For one of our key products, we have initiated the use of an environment-friendly multi-layered cold storage packaging which can be re-used after refurbishment/re-qualification post every use cycle. This results in the reduction of CO₂ emission as well as improves the overall efficiency.

⁵²GRI 305-2 and 305-4, ⁵³GRI 305-3,

⁵⁴In the reporting year, we have added a new category of Scope 3 emissions, which we did not calculate in the previous years

Environmental Stewardship (continued)

Emission of Ozone-Depleting Substances (ODS)⁵⁵

We are committed to phasing out equipment that uses ozone-depleting substances (ODS).

Following the guidelines set by the Montreal Protocol, we have been progressively transitioning to equipment that utilises gases with no ozone-depleting potential.

Specifically, we have adopted R-134a and R-404a gases as alternatives to R-22, ensuring compliance with international standards and best practices in adopting non-ODS refrigerants in our operations.

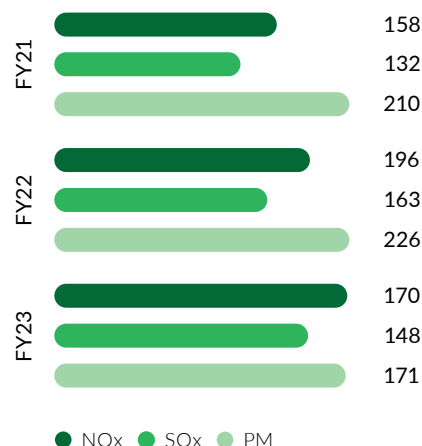
Our sources of emissions of ODS are primarily from the refrigerants

in air-conditioners and chiller plants. For the reporting year, the recharge quantity of CFC 11 equivalent ODS was 0.256 MT.

Other Air Emissions⁵⁶

We monitor the emissions of air pollutants such as sulphur oxides (SOx), nitrogen oxides (NOx), and particulate matter from our operations. We continuously maintain these at levels lower than those prescribed by central and state pollution control boards. We are actively exploring initiatives to reduce the intensity of air pollutant emissions and ensure compliance with relevant environmental standards and regulations.

Emissions (MT)



Waste Management⁵⁷



Our waste management strategy involves monitoring waste at its source, optimising resource utilisation and minimising the generation of waste. We prioritise waste diversion from landfills through recycling and other recovery methods, including co-processing. Our waste management practices align with our commitment to co-processing 30% of hazardous waste by 2025.

Additionally, we have embraced digitalisation to reduce paper consumption within our operations. In FY22, we initiated the Equipment Qualification and Validation Life Cycle Management System (EQVLMS), a software mechanism to replace manual paper-based document archiving with an online repository.

Type of Waste Generated (MT)⁵⁸

	FY20	FY21	FY22	FY23
Hazardous	23,448.83	30,580.94	29,786.86	32,033.46
E-waste	5.43	6.22	9.37	9.51
Non-hazardous	11,734.22	17,027.73	21,471.00	21,431.22

⁵⁵GRI 305-6, ⁵⁶GRI 305-7, ⁵⁷GRI 306-1, 306-2, ⁵⁸GRI 306-3