CII 25th National Award For Excellence in Energy Management 2024

(27) LTIMindtree Limited

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Presentation Outline



Organization & Facility Overview Energy **Benchmarking** & Strategic Path **GHG Emission** & IAQ Awards & Recognitions

Energy Consumption Overview

ECON Projects & Renewable Energy

Net Zero & other best practices



Organization Overview

From Action to Transformation Snapshot for Financial Year (FY) 2023-24

ຶ່ງ People	Planet	₩ Profit
Talent Pool: 81,650	GHG Emissions: 65,264 tCO2e	Revenue: INR 3,55,170 Million (up by 7.04% in constant curren
Women In Talent Pool: 30.69%	Energy Consumption: 1,98,654 GJ	Profit: INR 45,846 Million (Growth by 4%)
New Hires: 15,593	Renewable Energy: 44.34%	EBIT: 15.7%
Learning Hours: 43,66,971	Waste Recycled: 92.14%	Order Book Value: USD 5.6 Billion (15.7% Growth over FY2023)
CSR Spend: INR 807 million	Water: 333.724 ML	Active Clients: 738
CSR Threshold Limit: INR 806 million	Environmental Capex Spend: 0.04%	Customer Satisfaction Rating (On a scale of 1-7): 5.85
CSR Beneficiaries: 598,698	Green Buildings in India: 100% certified and applied for LEED IGBC Platinum	\$5 Million+ Clients: 153
Trees Planted: 3.8 million	Partners and Suppliers: 12.64% of total procurement spend was on diverse suppliers	Global Presence: 38 countries - 117 offices (Headquarters – Mumbai, India

PURPOSE

LTIMindtree's purpose is to 'Solve to unleash possibilities', which corresponds to using our expertise to solve complex problems and helping the clients and communities reach their full potential

VISION

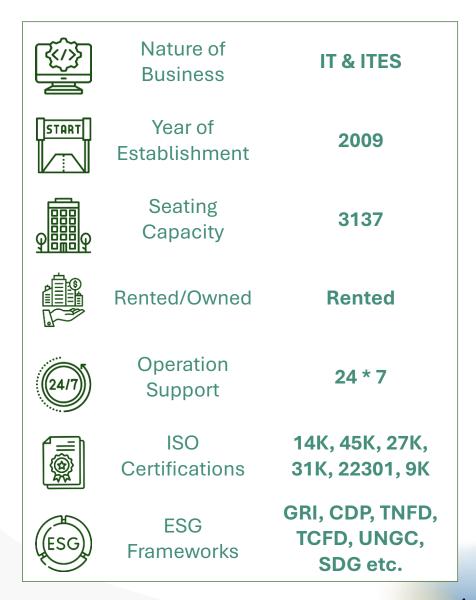
LTIMindtree's vision is to 'Enable businesses and communities to flourish in a hyperconnected world'. This encapsulates that we are determined to help our clients and communities succeed in a world where technology is rapidly advancing and changing the way people connect and do business.

On a transformative mission of a global tech that gives everyone a chance to grow, by creating harmony between nature, humans, and corporate operations, LTIMindtree is a conscientious, futuristic, and sustainable organization, committed to an inclusive vision and positive value creation for stakeholders.



Facility Overview





Passive Design Features of Building





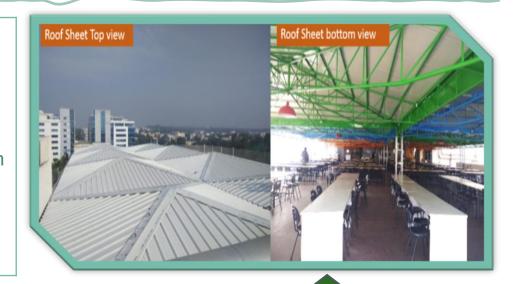


Micro-Climate (According to ECBC)

Building Orientation

Temperate

North-South







Built Up Soft Green Area (m2) Area (m2)

39670 11331



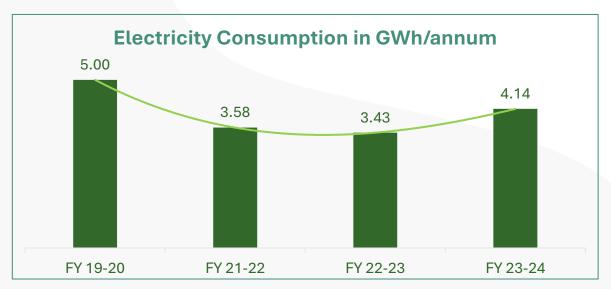


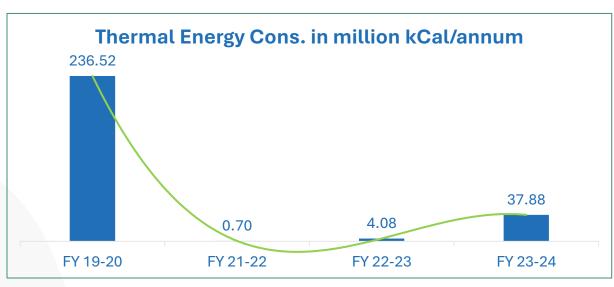
A naturally ventilated cafeteria with PUF panels & weatherproof paints used for the roof which is leading to energy saving.

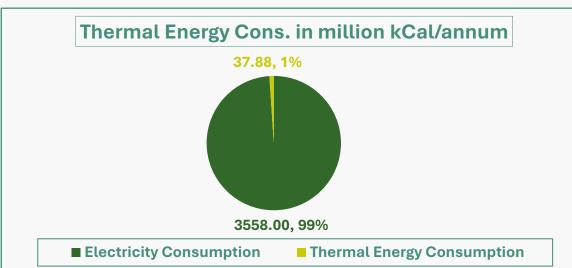
Daylight inside the building



Energy Consumption Overview



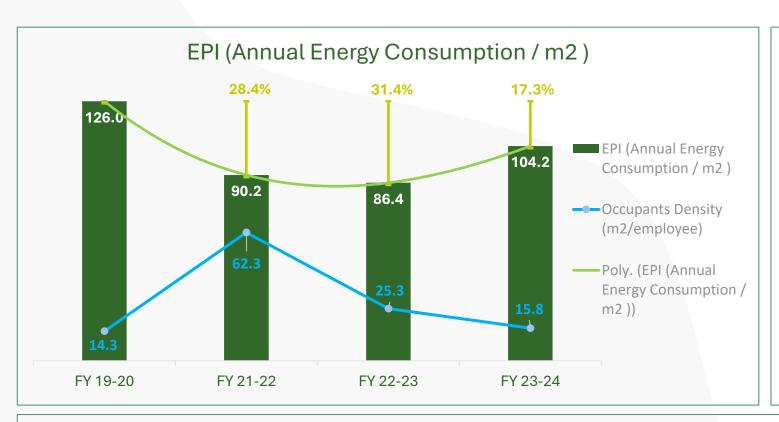


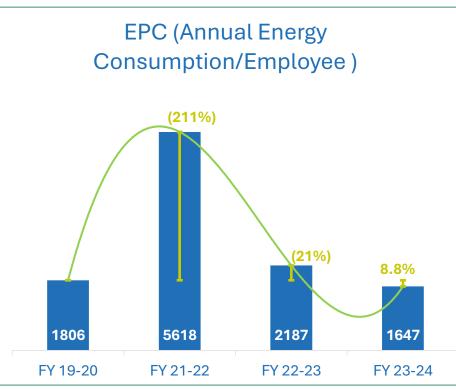


- Thermal energy (LPG) consumption for FY 23-24 has increased compared to FY 21-22 and FY 22-23, primarily due to the re-expansion of cafeteria operations.
- Thermal energy (LPG) consumption for FY 23-24 has decreased compared to FY 19-20, primarily due to the electrification strategy, which involved switching to electrical-based cooking appliances.



Specific Energy Consumption Trend

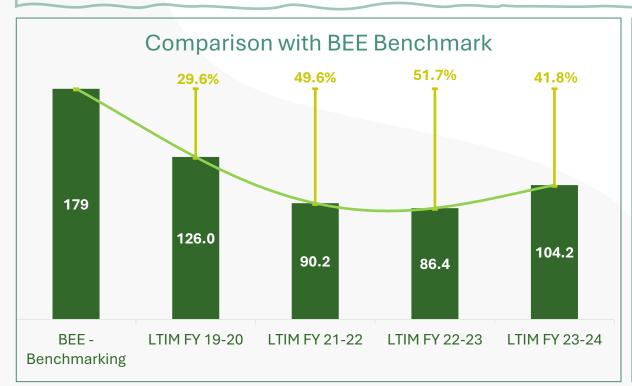


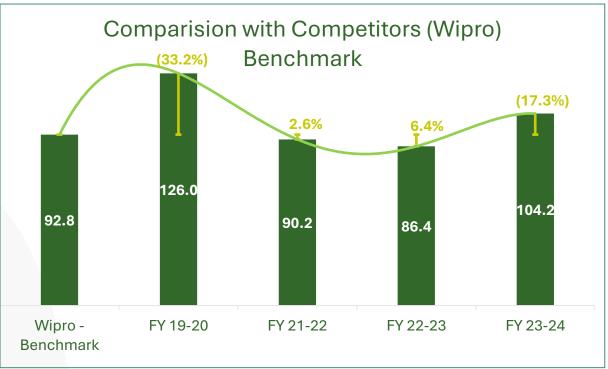


- Electricity consumption for FY 23-24 has increased compared to FY 21-22 and FY 22-23, primarily due to a rise in occupant footfall.
- EPC (Annual Energy Consumption / Employee) for FY 23-24 has decreased compared to FY 19-20, primarily due to effective implementation of various energy efficiency & conservation measures at our facility.



Benchmarking & ECON Projects planned for FY 24-25





	ECON Projects planned for FY 24-25				
	Title of Project	Annual Electrical Saving (Million kWh)	Investment (Rs in Million)	Investment Made (Rs million)	
•	Replacement of Low Side HVAC equipment	0.04	2.47	61	
•	Installation of EC fan to the AHU	0.12	9.16	49	
•	Replacement of Existing LPG based cooking appliance with Electrical Energy star rated cooking appliances	Carbon Emission Reduction Program			



Energy Management Strategic Path



Energy Management Plan(EMP)

- Site-specific Energy Management Plan(EMP) & Energy Benchmarking by setting SMART Objectives & Targets approved by MR & Energy Manager
- Centralized energy management planner & tracker and PowerBI Dashboard



Energy Team

- Energy Team is formed under EHS & ESG lead
- ISO: 14K & 51K certified EHS leads



Accountability of Energy Team

- Tracking activities under EMP
- Identifying improvement opportunities & Implementations as per EMPs
- Periodic Analysis, Evaluation of performance & Review with Leaders
- Completion of Energy Audits ASDM



IFM Certified Energy
Manager to strengthen in
house team instead of
depending on OEM /
AMC vendors in PPM and
evaluation side.
Periodic review and
training for in house
technical team to
sustain further energy
saving



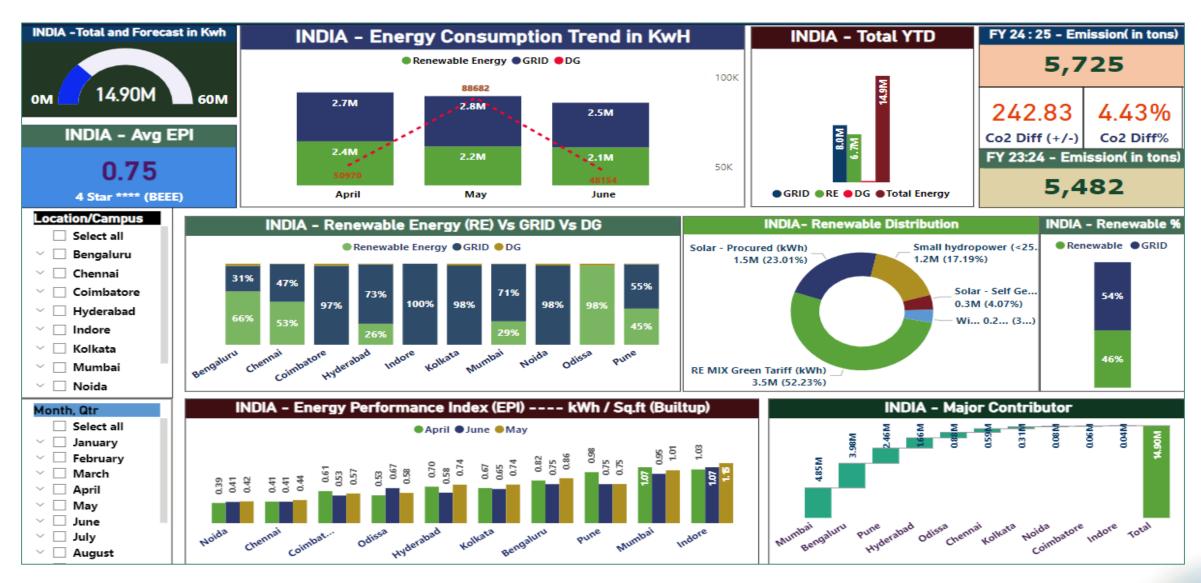
Purchased specialized
instruments
/equipment's and
training given to site
engineers and
Technicians to measure,
analyze / service the
equipment's (IR thermal
imager, Manifold gauge,
Pressure washer, Power
analyzer)

Evaluate efficiency

User Friendly Templates prepared and trained to site engineers and Technicians to measure the Parameters (Suction & discharge pressure , CFM. Temperature Energy reading etc.) to enter the measured in values in the template automatically evaluate of efficiency.



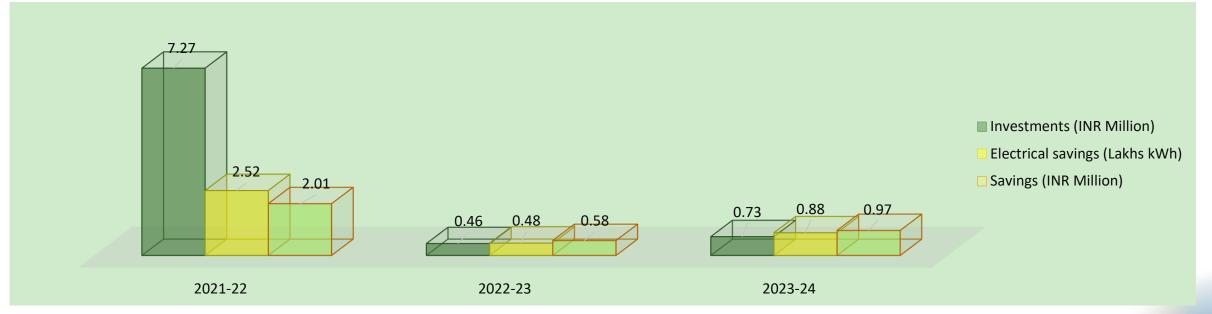
Snapshot of Energy Dashboard (PowerBI)





Energy Saving Projects – Summary

Year	No of Energy saving projects	Investments (INR Million)	Electrical savings (Lakhs kWh)	Savings (INR Million)	Impact on SEC (Electrical)
2021-22	3	7.27	2.52	2.01	9%
2022-23	1	0.46	0.48	0.58	3%
2023-24	2	0.73	0.88	0.97	5%
Total	6	8.46	3.88	3.56	17%





Innovative Project FY 2023-24: Installation of TVSS filters



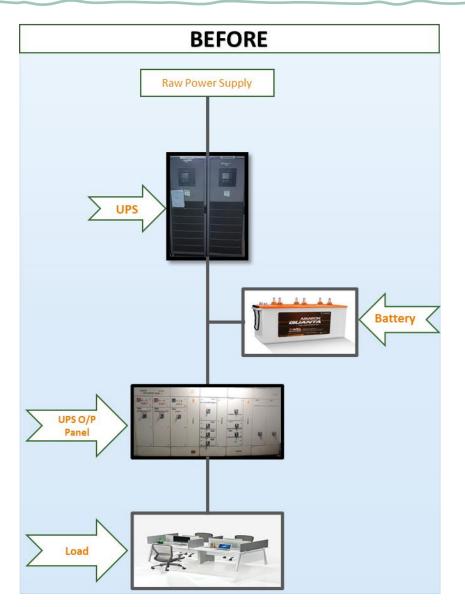
50A/Ph,100A/neutral TVSS filter
 Installed to mitigate voltage
 transients, triplen harmonics add high neutral current.

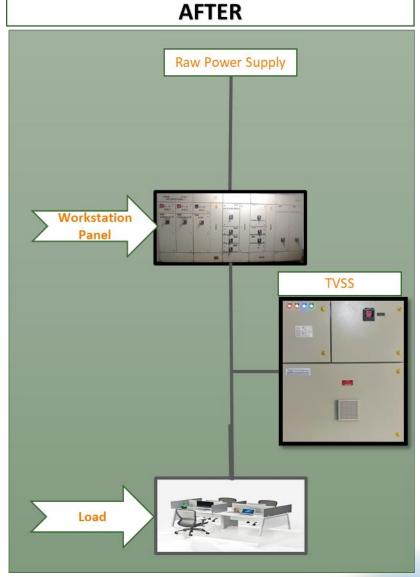


 TVSS filter capability on handling voltage transients are limited to milli second transients.



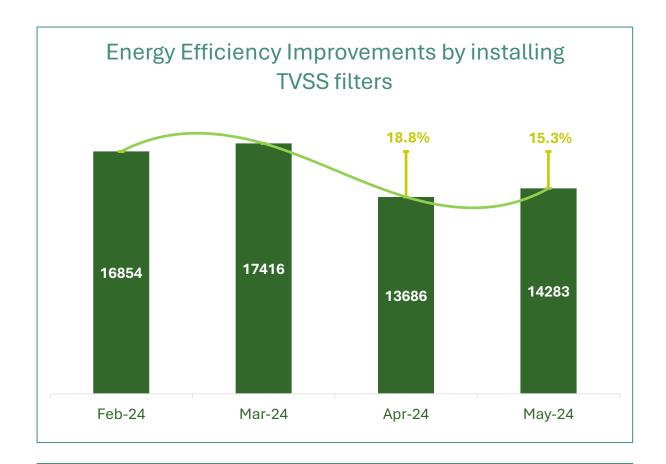
 TVSS filters removes and absorbs triple harmonics, thus relieving the laptops and sensitive electronics from aging factors.



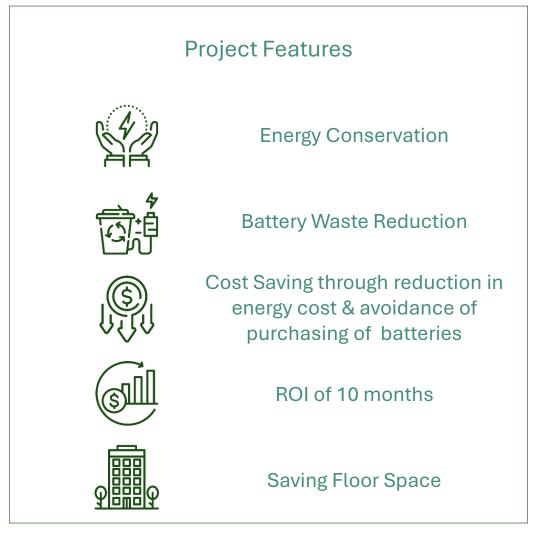




Innovative Project FY 2023-24: Installation of TVSS filters



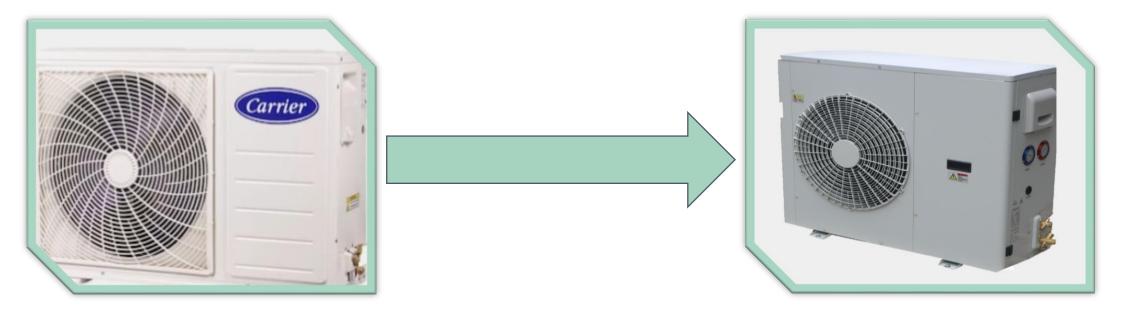
- Average units saved per month 3963 KWH
- Energy reduction through HVAC / Month: 58.22 KWH





ENCON 2023-24

Title of Project	Annual Electrical Saving (KWH) *	Annual Electrical Cost Saving (Rs million)	Total Annual Savings (Rs million)	Investment Made (Rs million)
Low side HVAC unit replacement	40176	0.442	0.4419	0.23347



		Project Features		
Energy Saving	Cost Saving	Compliant with R22- phase out requirement	Reduction in Carbon Emission	ROI of 45 Months



ENCON 2022-23

Title of Project	Annual Electrical Saving (KWH) *	Annual Electrical Cost Saving (Rs million)	Total Annual Savings (Rs million)	Investment Made (Rs million)
Energy efficient & High- speed Hand Dryers	48768	0.585216	0.585216	0.4648







		Project Features		
Reduction in noise level & drying time	Reduction in Waste Generation	Reduction in Carbon Emission	ROI of 10 Months	Reduction in Health Risk



ENCON 2021-22

Title of Project	Annual Electrical Saving (KWH) *	Annual Electrical Cost Saving (Rs million)	Total Annual Savings (Rs million)	Investment Made (Rs million)	ROI in Months
Installation of energy efficient UPS (P2)	158385	1.26	1.27	3.8	36
Installation of energy efficient PAC (P2)	74321	0.59	0.59	3.4	69
Installation of Variable Frequency Drives (VFD)	19710	0.16	0.16	0.12	10









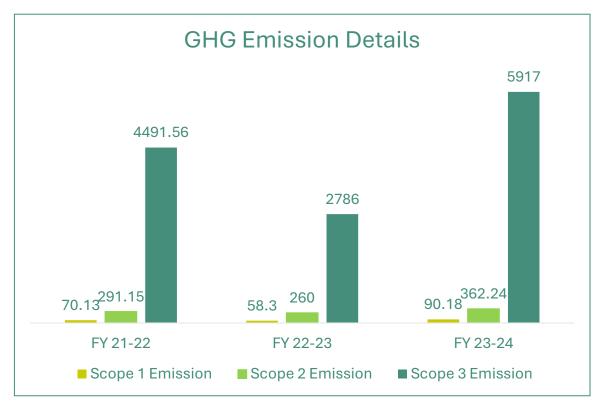
Utilization of Renewable Energy Sources-2021-22 to 2023-24

Year	Generated / Procured	Low Carbon Technology type	Sourcing Method	Utilization Units In Lakh kWh	% of Overall Electrical Energy
2021-22	Procured	Hydro Power	Physical PPA	33.6	94%
2022-23	Procured	Hydro Power	Physical PPA	32.6	95%
2023-24	Procured	Hydro Power	Physical PPA	37.5	91%

- we are committed to optimize energy usage throughout our business by conserving energy, increasing our energy efficiency, energy conservation, increasing use of renewable energy and reduction in carbon emissions
- We are striding on our clean energy approach with renewable energy component in the total energy mix stands healthy and robust at 91% for FY 2023-24
- Installation of Rooftop solar power plant is planned in FY 2024-25.



GHG Emissions



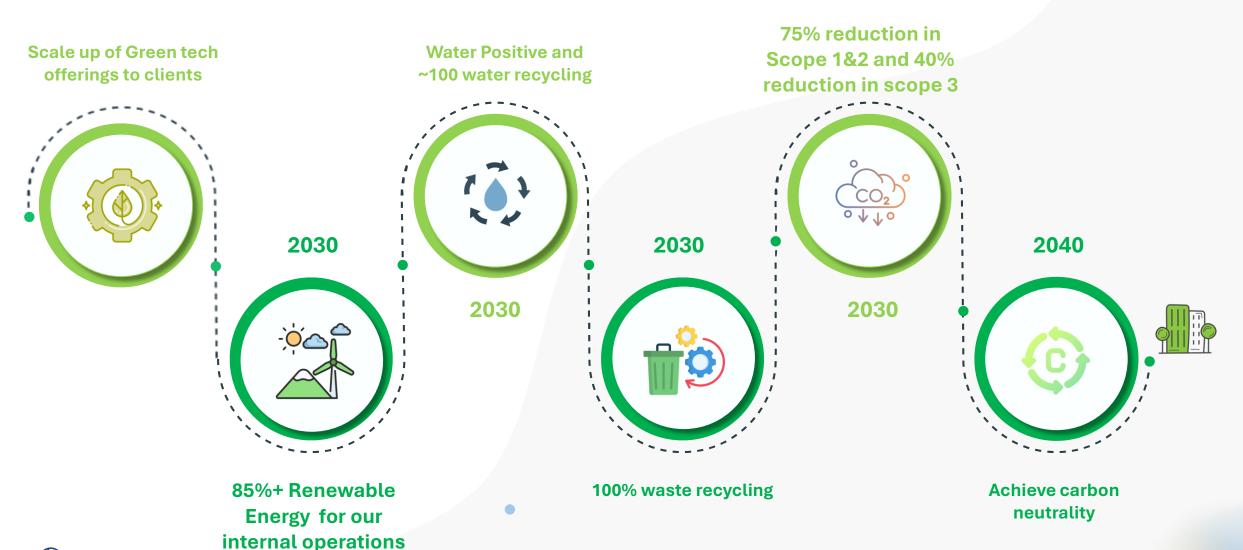
	Scope Of Emissions
Scope 1	 GHS emission, Direct emission from absolute Fossil Fuel (LPG) Consumption from organization's owned- or controlled sources (Cafeteria) GHG emissions, Fugitive emissions related to operation of HVAC, Fire Extinguishers
Scope 2	GHS Emission, Indirect Emission from Consumption of Purchased Electricity
Scope 3	GHG Emission, Other Indirect emissions covers Fuel and Energy related activities, Waste generated in operations, Employee commuting, Freight and Business travel for the reporting year.

GHG Emissions Intensity tons CO2e/ annum/employee				
FY 21-22	6.543			
FY 22-23	1.489			
FY 23-24	0.839			



Our Vision - Net Zero Road Map

Organization's Commitment for Resource Conservation & Achieving Carbon Neutrality





Actions that Protect our Planet

Emission Reduction Strategy



- LTIMindtree has publicly disclosed its ESG vision, commitments, and targets through annual reports, sustainability reports, and other channels.
- LTIMindtree has aligned it is ESG commitments and goals to India's NDC and the Paris Climate Treaty, as a transitionary approach to a 1.5°C, nature positive world.
- We are committed to integrating sustainability into all aspects of our operations, with our ESG vision integral to its success.
- Our policies and initiatives are aimed at reducing environmental risks and are part of our core sustainability approach that adheres to global standards and frameworks, including the UNGC, the SDGs, the GRI, the CDP, the NGBRC, and TNFD.

Indoor Air Quality Monitoring & Control

- The fresh air supply within our offices has been designed to meet ASHRAE's requirement.
- We are monitoring the quality of indoor air by checking various parameters such as PM10, PM2.5, Nox, Sox, O2, CO2, CO, VOC, TVC, NH3, O3, Yeast and mold count, CH2O, Ozone, H2S etc.
- The frequency of Indoor Air Quality Monitoring through external authorized partner is once in a month.
- We are implementing the following strategy to control and enhance indoor air quality in the workplace
 - Installation of Oxygen emitting indoor plants.
 - Smoking inside the Campus is strictly Prohibited
 - Restriction on use of Hazardous substances.
 - Installed the MERV13 filters & UV film for Workstation AHUs.
 - Printers are installed in closed & separate rooms.
 - Use of low Volatile Organic Compound (VOC) paints.
 - Using a vacuum with a HEPA filters.





Waste Management

Year*	Waste generated (tons/annum) *	Recycle in %
2021-22	61.1198	90.5%
2022-23	54.0003	92.5%
2023-24	58.6405	99.5%

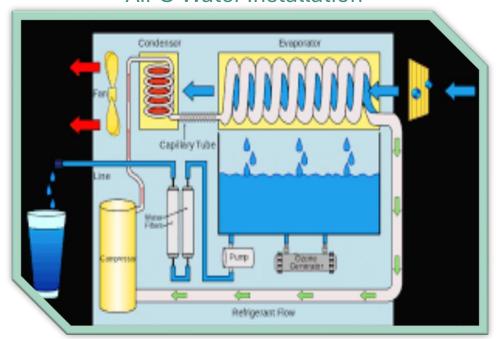




Water Management

Year*	Water Per Capita (KL/Employee/Annum)
2021-22	9.6
2022-23	7.2
2023-24	6.2

Air O Water Installation







Employee Engagement



Candle Distribution on Earth Hour



Pencil Sketching Competition on WED



Energy Conservation Ladder Game



Employee Awareness through Posters & Screensavers



Saplings Distribution from Inhouse Nursery



Live Webinars



Seedball Distribution on **WED**



Tree Plantation Drives



Awards & Recognitions











CII National Award for Excellence in Energy Management 2022



iNFHRA Award for Excellence in EHS innovations, Bengaluru 2024



iNFHRA Award for Excellence in Energy Management, Bengaluru 2024



NSCI Safety Awards 2022





Thank You!

Pradip Pawar

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