CII 24th National Award for Excellence in Energy Management 2023

Kodathi, Bengaluru

WIPRO TODAY

A trusted, global partner.

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading technology services and consulting firm focused on building innovative solutions that address clients' most complex digital transformation needs.

Leveraging our holistic portfolio of capabilities in consulting, design, engineering, and operations, we help clients realize their boldest ambitions and build future-ready, sustainable businesses. With over 250,000 employees and business partners across 66 countries, we deliver on the promise of helping our customers, colleagues, and communities, to thrive in an ever-changing world.

FY23 IT services revenue

$11.2 Bn

Employees

256,921

Active global clients

1,441

Global presence

65 countries

148 diverse nationalities

Figures based on the Financial Year ended March 31, 2023.

We believe business fuels our purpose, and purpose fuels our business.

Member of

Dow Jones Sustainability Indices

Powered by the S&P Global CSA

Wipro is a proud member of the Dow Jones Sustainability Index (DJSI) – World for the 13th year in a row.

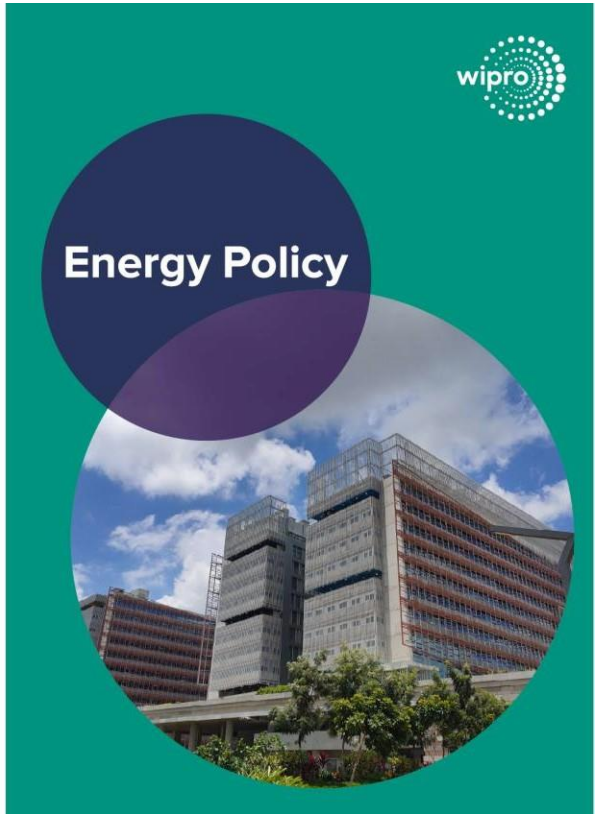
Wipro is the only company in the IT Services industry with an unbroken track record since 2010, reflecting our long-term commitment to sustainability.

Wipro is also a member of the DJSI Emerging Markets Index.

Kodathi Campus overview

- Established in 2018
- Campus Area - 48.25 Acres
- Built up area – 3.48 Million Sq.ft and Seating Capacity > 19,255
- 5 Towers (S4,S1,S3,S5,S2)
- 8 Numbers of 2000 kVA DGs for Raw power backup
- 4 Numbers of 1.8 MW DRUPS System with 4 Numbers of 2000 kVA DGs for Critical power back up

Energy Policy



Wipro is committed to optimize its energy footprint to support a sustainable world. We proudly integrate this commitment into our company culture and corporate values.

Wipro continuously improves its energy performance through a strategic action plan that is regularly reviewed and updated annually. We have defined Energy Performance Indicators and set targets for ourselves in accordance with ISO 50001.

This policy sets the framework for managing our energy consumption and driving various initiatives to support the following goals:

- Reduce CO2 emissions
- Increase our use of renewable energy
- Increase our overall energy efficiency
- Invest in clean, energy-efficient technology

In pursuit of these goals, Wipro is committed to:

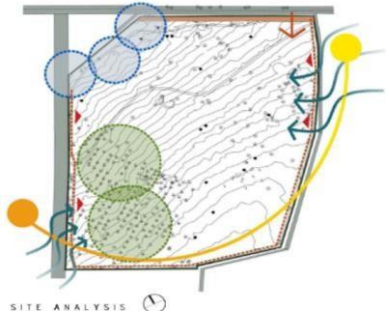
- Responsible energy consumption and improving energy efficiency throughout all our sites
- Net Zero goals by 2040, with a reduction in absolute emissions of 55 percent by 2030 keeping 2017 as the base line
- Investing in new technology that supports renewable energy sources
- Considering life cycle energy costs for future business investments
- Purchasing energy-efficient services for our facilities and equipment needs
- Being legally compliant with applicable regulations and requirements
- Designing our facilities for optimum energy performance

We are addressing energy efficiency in all areas of our business including management, procurement, financial, technical, and more.

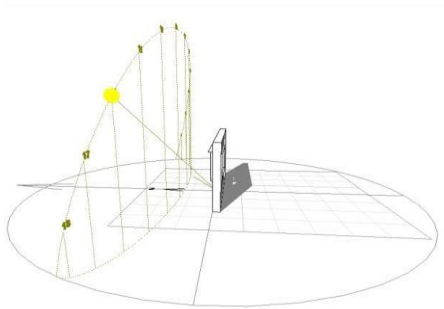
We will ensure that the relevant information and resources are available to achieve our objectives and targets. This policy and our energy performance will be updated as new information becomes available.

Global Head - Operations
Dinesh Wadehra
July 2022

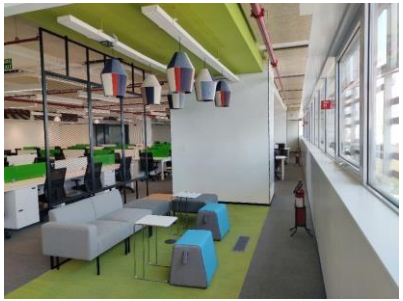
Kodathi Campus key highlights



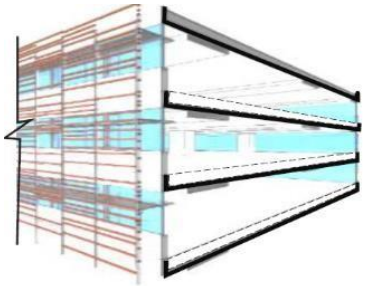
Building design based on Sun path



Double skinned Façade design to reduce heat ingress



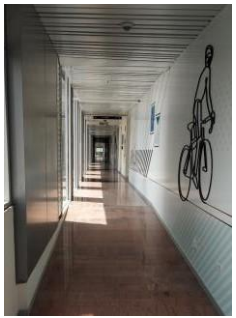
95% Day lit workspaces with day light and movement sensors

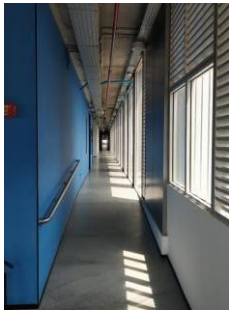


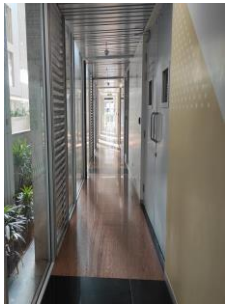
Largest Underfloor Air Distribution System (UFAD) - 2.5 Mn ft²

Kodathi Campus key highlights

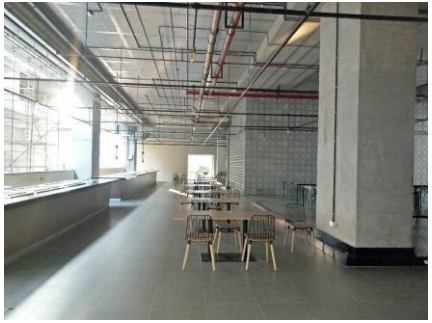
100% LED for Indoor and Outdoor Lighting



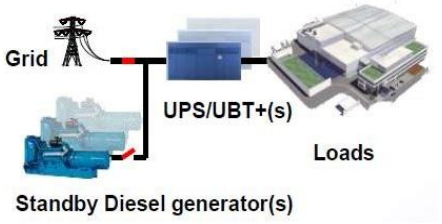




Naturally ventilated corridors in all floors

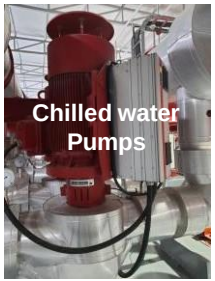


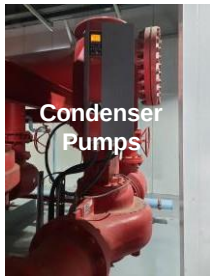
50% Cafeteria space is naturally ventilated

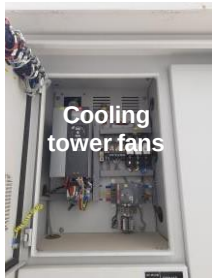


India's first Medium voltage Isolated parallel bus DRUPS system

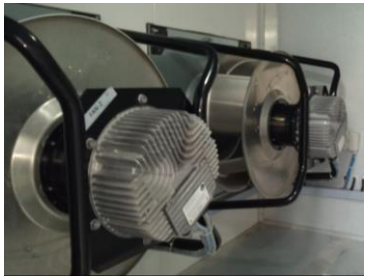
Kodathi Campus key highlights



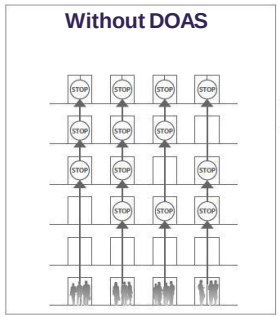


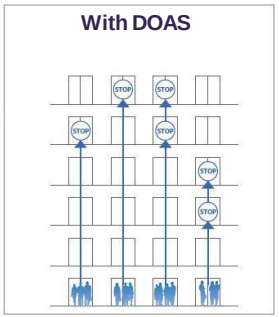


VFD for pumps & fans applications



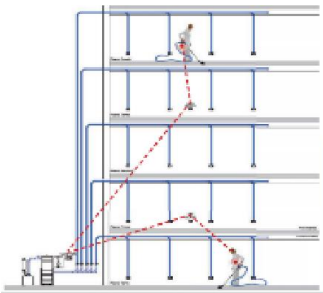
EC fans for AHUs, UFADs, Exhausts, DOAs





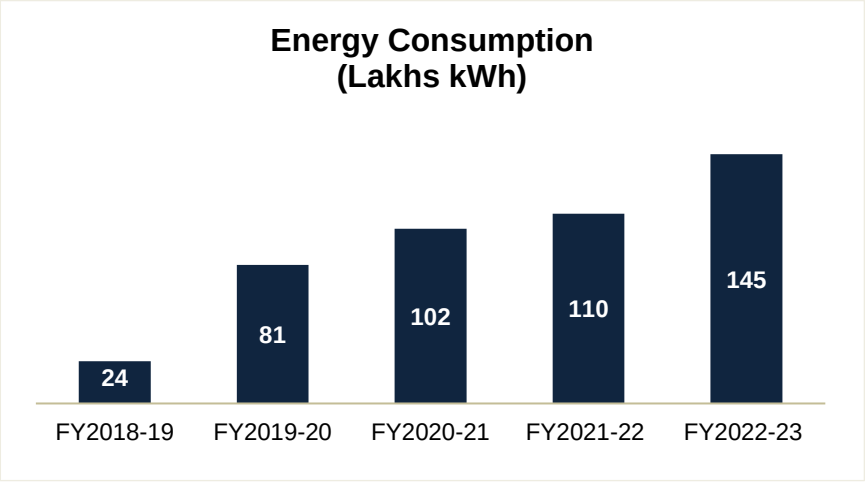
According to each car's location and passenger load, the group control system assigns a call to the elevator that best balances operational efficiency and energy consumption

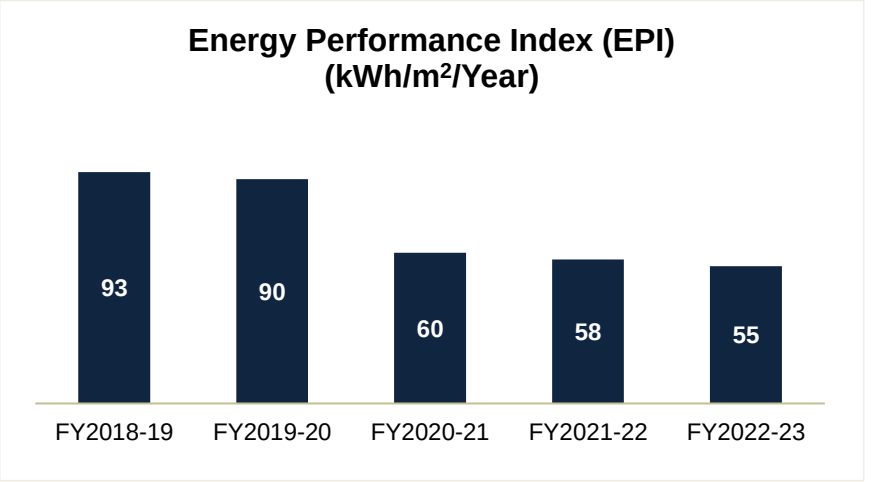
Destination Oriented Allocation System (DOAS) in Lift operation



Centralized Vacuum System

Energy consumption overview





Year	EB (kWh)	DG (kWh)	Solar (kWh)	Total (kWh)	Area (m^2)	EPI (kWh/m^2/Year)	% Reduction	
FY2018-19	1,052,400	1,390,820	-	2,443,220	26,324	**92.81**	Base data	
FY2019-20	3,374,400	438,766	4,250,000	8,063,166	89,664	**89.93**	3%	
FY2020-21	747,600	528,330	8,890,000	10,165,930	168,365	**60.38**	35%	Owing to reduced occupancy
FY2021-22	2,618,400	491,618	7,993,581	11,103,599	191,219	**58.07**	37%	
FY2022-23	3,230,500	521,320	10819879	14,571,699	318,330	**55.05**	41%	

National and global benchmarking

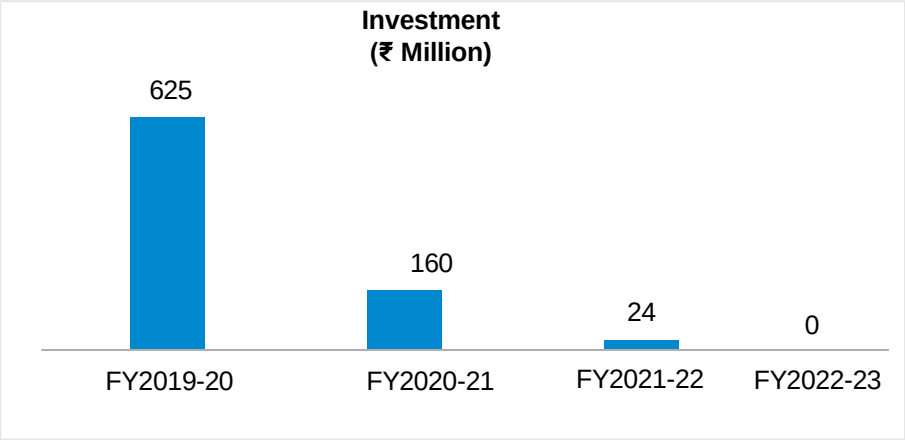
Benchmarking Details	Reference	SEC (kWh/m²/Year)	Wipro Kodathi Campus
Other Wipro Campuses	Wipro Annual Report FY2022-23	181	**90 (FY2019-20)**
Other IT/ITES companies/Group	CII Energy award Programme, Bangalore (2021-22)	70	**60 (FY2020-21)**
National Level	BEE (Bureau of Energy Efficiency)	179	**58 (FY2021-22)** **55 (FY2022-23)**
International Level	Lawrence Berkeley National Laboratory	65 to 90	**Expected to achieve 85-90 once employees are back to work from office**

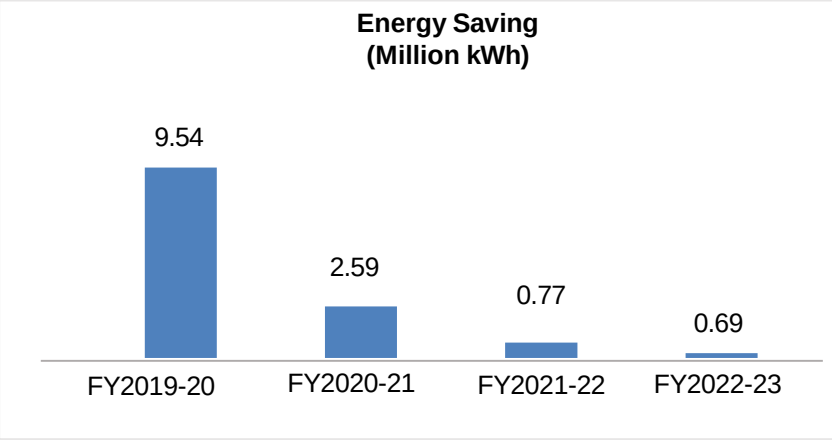
Encon Projects planned in FY2023-24

- BMS Implementation for S1,S3,S5 Towers
- Chiller Plant manager for S5 Tower chillers

Energy Saving projects implemented in last three years

Year	No of energy saving projects	Investment (₹ Million)	Electrical energy Savings (Million kWh)	Cost Savings (₹ Million)
FY2019-20	4	624.84	9.54	70.00
FY2020-21	3	159.54	2.59	19.00
FY2021-22	5	24.25	0.77	7.15
FY2022-23	3	Nil	0.69	6.3





Projects Implemented

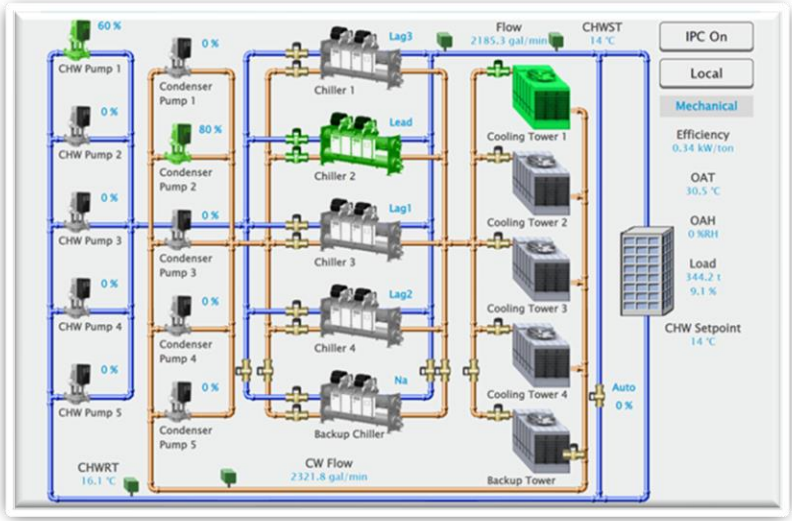
Project-1 Hartman loop – Operational Optimization

Problem Statement

- Chiller and pumps are operated beyond reaching of setpoint leading to increased Equipment run hours and Energy consumption.
- Primary Pump runs always in Constant Frequency (In Auto Mode) During off peak time Which leading to Increased Energy Consumption.

Solution Implemented

- Detailed Setpoints are being Analyzed in the CPO Settings and optimized the cut in, cut off and timing settings.
- Due to the above optimization, Chiller, Condenser pump & Cooling tower run hrs. had reduced and Subsequently leading to Energy Savings.
- On the Primary Pump, Min Speed Setting was changed after analyzing the load requirement (from 40 HZ to 30 Hz) which leads to the variation in the pump speed during the off peak loads.



Annual Savings Achieved
2,55,924 kWh

Project-2 Automation of corridor lights through BMS

Problem Statement

- No Control on Corridor Lights Operations
- Lights are controlled through Switch and MCB Manually
- Energy Loss

Solution Implemented

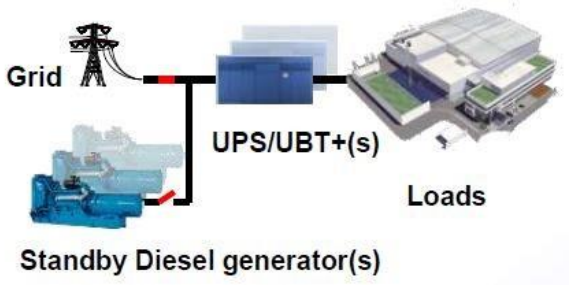
- All Corridors lights MCB’s are connected to relays and integrated with the BMS system.
- Schedule had been created to Switch ON & Switch Off Automatically.
- Lights are Switched off centrally when there is no occupancy in the floors.
- This initiate lead to Energy Savings & Man hours Savings.

Annual Savings Achieved
10,044 kWh

Project-3 Optimization of DRUPS Operation

Problem Statement

- All 4 no's of DRUPS was running Continuously with Minimal Load
- MV Choke & Transformer efficiency is reduced due to lesser load.
- All the DRUPS DG also will get start during power failure.
- Fuel Loss

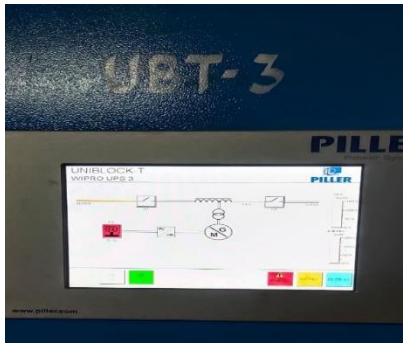


Solution Implemented

- One of DRUPS operation is completely Switched OFF
- Loads are transferred to other Operational DRUPS which had increased the loading percentage.
- Operating efficiency had improved in the DRUPS.
- Flywheel Self generation loss had been eliminated for the Non operational DRUPS.

Annual Savings Achieved
4,35,000 kWh

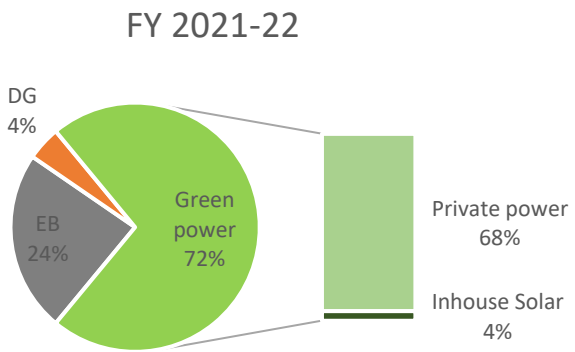
Before



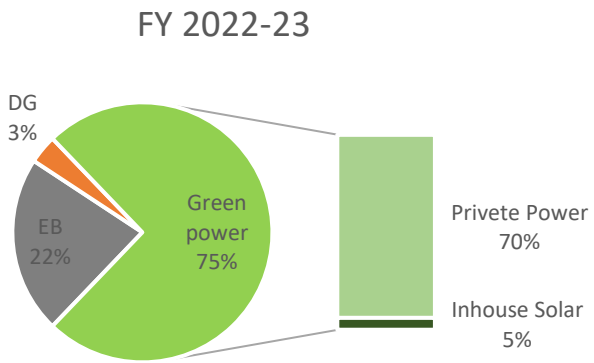
After

Utilization of Renewable Energy sources

FY2021-22



FY2022-23



- We have installed 462 kW_p onsite Solar PV Plants at Utility block, S1 and S3 tower roof areas in the year 2021-22.

Roof Location	Plant Capacity	Investment (₹ Million)	Date of commissioning
Utility Block	65.52 kW_p	2.675	April 2021
S3 Tower	162.24 kW_p	6.156	July 2021
S1 Tower	234 kW_p	7.996	August 2021
Total	**462 kW_p**	16.8	

On Site Solar

Year	Source (Solar, wind, etc.,)	Installed capacity (in MW)	Generation (in Million kWh)	Consumption from On-site RE (in Million kWh)	Share % w.r.t to overall energy consumption
FY 2020-21	NA	NA	NA	NA	NA
FY 2021-22	Solar	0.462	0.670	0.670	4.04
FY 2022-23	Solar	0.462	0.674	0.674	4.99

Off Site Solar

Year	Source (Solar, wind, etc.,)	Installed capacity (in MW)	Generation (in Million kWh)	Consumption from On-site RE (in Million kWh)	Share % w.r.t to overall energy consumption
FY 2020-21	Solar	NA	NA	NA	NA
FY 2021-22	Solar	30 MW (Group)	7.58	7.58	74.2
FY 2022-23	Solar	30 MW (Group)	10.193	10.193	75.9

GHG Emissions

ENVIRONMENTAL METRICS

1.1 ABSOLUTE EMISSION PROFILE (TONS OF CO2 EQ)

Table 1.1.1

Scope 1	FY 2020-21	FY 2021-22	FY 2023-23
Fuel & Refrigerant – India offices	10,885	9,571	9,640

Table 1.1.2

Scope 2	FY 2020-21	FY 2021-22	FY 2022-23
Purchased Electricity – India offices and DCs	86,463	72,973	59,120

Table 1.1.3

Scope 3	FY 2020-21	FY 2021-22	FY 2022-23
Employee commute	18,055	16,969	28,193
Business travel	13,538	20,456	57,934
Waste	140	153	101
Upstream Fuel + energy	53,937	71,650	67,017
Purchased goods/services	2,15,830	88,104	87,287
Upstream leased assets	12,606	10,381	7,293
Work from home emissions	36,230	36,639	23,968
Total Scope 3 emission	**3,50,336**	**244,352**	**2,71,793**

Table 1.1.4

Scope 1 & scope 2 split	FY 2020-21	FY 2021-22	FY 2022-23
Offices	84,140	72,884	61,467
Data centers	13,207	9,660	7,293

Table 1.1.5

Emission Intensity Scope 1 & 2	FY 2020-21	FY 2021-22	FY 2022-23
India office owned (kg CO2 per sq. Mt. per annum)	108	87	59

For further details, Please refer Wipro Annual Report

https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2022-2023/integrated-annual-report-2022-23.pdf

https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2022-2023/esg-dashboard-fy-2022-23.pdf

Wipro is a founding member of 'Transform to Net Zero': A global alliance to accelerate the transition to a net-zero global economy. **Our Net Zero Commitment**: ***We're committed to contribute to planetary Net-Zero Greenhouse Gas emissions targets by reducing our emissions to zero by 2040 and Near Term Target of 59% reduction (Scope 1&2) by 2030 & 100% RE by 2030.***

Read more at **wipro.com/sustainability**

Online Indoor Air Quality(IAQ) monitoring at workplace

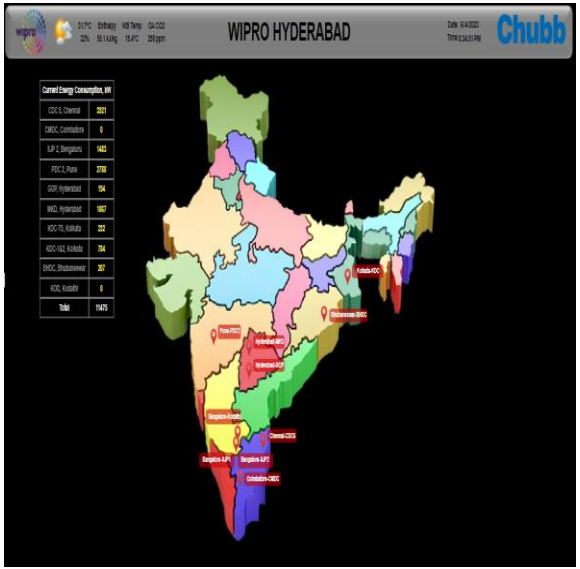
Air handling units provided for DOAs are Eurovent certified units with 2 stage filtration system with UV lamps and refrigerant heat pipes. Fresh air VAV's provided in the DOA unit distribution ensures supply of fresh air based on space CO_2 demand. All the fans in DOA units are of EC fans for better energy efficiency.

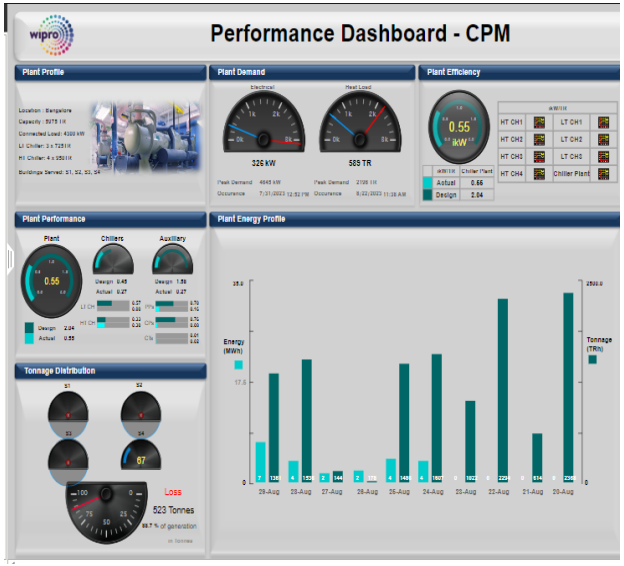
We have installed IAQ sensors at work places which monitors Temperature, RH, CO_2, $PM_{2.5}$ and TVOC parameters on continuous basis. IAQ sensor is tested and certified by the RESET standard for accuracy, and fully compliant with the WELL v2 building standard for performance.

We have used best practices of ISHRAE and IGBC and incorporated continuous monitoring of RH,CO_2, $PM_{2.5}$ and TVOC through IAQ sensor and other parameters are measured through external agency in all ODCs at regular interval.

Building Management System

- We have Robust Building Management System with Web Control 6.5 Devolved by ALC integrated with the help of Chubb system
- Centralized Command Center also Established to Monitor the Pan India facilities.
- Various insights on the buildings are monitored like EPI, Comfort Index, Chiller Performance, Weather Station, Energy Profiles, etc.

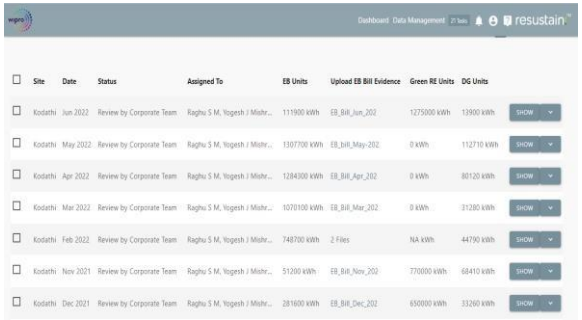


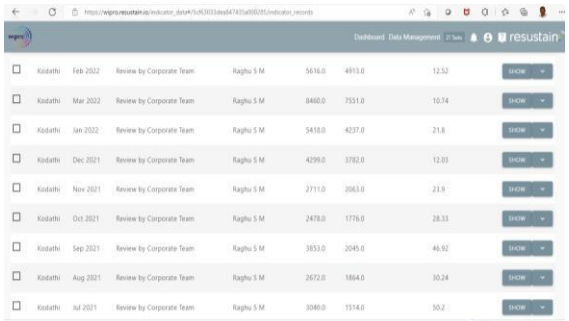


Teamwork, Employee involvement and Monitoring

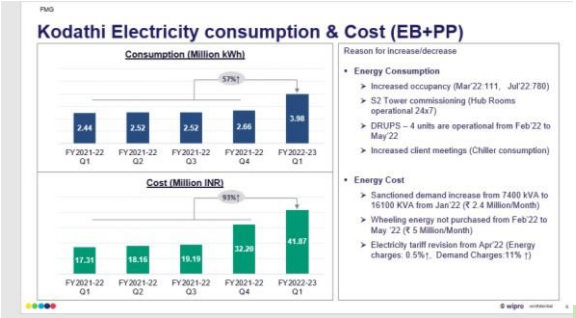
BMS System to monitor energy consumption

Internal Portal to update energy, water and waste data

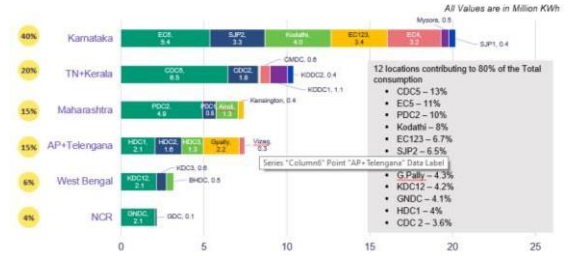




Quarterly review of energy performance



Energy Performance is reviewed on monthly basis by FMG Head – PAN INDIA



ISO 50001 - EnMS

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: CS50026 | Initial certification date: 10 August 2022 | Valid: 10 August 2022 – 09 August 2025

This is to certify that the management system of

Wipro Limited

SJP2- SEZ BLR Special Economic Zone (SR) Sy. No. 69(P), 71/4(P), 78/8A(P), 134(P), 76(P), 77, 135(P), 79/1A,70,71(P), Doddakannelli Village, Varthur Hobli, Sarjapur Road, Bangalore - 560035, Karnataka, India

and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Energy Management System standard:

ISO 50001:2018

This certificate is valid for the following scope:

Delivery of software solutions, software application services, customer support with ITES management, mechanical and electronic testing services, and support of IT infrastructure services.

Place and date: Barendrecht, 10 August 2022

For the issuing office: DNV - Business Assurance, Zwolseweg 1, 2994 LB Barendrecht, Netherlands

Erle Kaak, Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance

Wipro Kodathi Campus is Certified for ISO 50001:2018 from FY 2022-23 Onwards & recently We had Successfully completed the PA1.

IGBC Certification

Kodathi campus achieved "Platinum" rating under IGBC Green New Building Rating system

IGBC

CII
Confederation of Indian Industry

Indian Green Building Council (IGBC)

hereby certifies that

Kodathi IT/ITES SEZ Campus – Blocks S1 to S5
Wipro Limited, Kodathi, Bengaluru

(IGBC Registration No. NBO 18 0246)

has successfully achieved the Green Building Standards required for the following level of certification under the

IGBC Green New Buildings Rating System

(Owner-Occupied Building)

Platinum

17 March 2023

(This certification is valid for next 3 years)

C N Raghavendran
Chair, IGBC Green New Buildings

Gurmit Singh Arora
Chairman, IGBC

K S Venkatagiri
Executive Director, CII-Godrej GBC

Awards in 2020 - 2023

CII – Green Building Congress

Kodathi campus awarded in CII – Green Building Congress 2018 India's Annual Flagship Event on Green Buildings

CII - Excellent Energy Efficient Unit

Kodathi campus awarded as "Excellent Energy Efficient Unit" in Buildings sector during CII National Award for Excellence in Energy Management 2021

CII - Excellent Energy Efficient Unit

Kodathi campus awarded as "Excellent Energy Efficient Unit" in Buildings sector during CII National Award for Excellence in Energy Management 2022

Golden Peacock - Energy efficiency

Kodathi campus won "Golden Peacock Award for Energy Efficiency" for the year 2021 in IT Sector

Environment Excellence award

Kodathi campus awarded "Winner" for Services Sector in Environment Excellence Awards 2022

Awards in 2020 - 2023

Operational Excellent Award

Kodathi campus awarded three awards Q1 Bronze, Q3 Bronze & Q4 Gold for "Operational Excellent Award" 2021 - 2022

Office Innovation award

Kodathi campus won two awards for "Digital checklist" and "IAQ monitoring" in CII National Office Innovation Competition 2022

Operational Excellent Award

Kodathi campus awarded 2nd Runner up Award Q3 "Operational Excellent Award" 2021 - 2022

CII-SR EHS Excellence Award

Kodathi campus awarded "5 Star Rating" for Excellence in EHS Practices in the CII-SR EHS Excellence Award for the year 2020

Awards in 2020 - 2023

CII-SR EHS Excellence Award

Kodathi campus grabbed Bronze award for their Commitment in EHS Practices 2022

ICC National Occupational Health & Safety

Kodathi campus awarded as “Gold Runner Up Services” in 4th ICC National Occupational Health & Safety Award 2022

CII-SR EHS Excellence Award

Kodathi campus awarded “5 Star Rating” for Excellence in EHS Practices in the CII-SR EHS Excellence Award for the year 2020

CII-SR EHS Excellence Award

Kodathi campus achieved “3rd Place” for EHS Excellence in the CII-SR EHS Excellence Award for the year 2020

Waste reduction – Innovative technology

Kodathi campus awarded for “Innovative Technology for reduction in waste” during CII - Southern Region Waste Management -2021


CII
NATIONAL ENERGY MANAGEMENT AWARD 2021
CII
NATIONAL AWARD FOR EXCELLENCE IN ENERGY MANAGEMENT 2022
Certificate
2nd Runner Up
GOLD WINNER
ACCELERATE TO ZERO

Certifications

ISO Certification **IGBC Certification**

Standard	Details of Management System	Validity
ISO 9001:2015	Quality Management System	02 Jan' 21 – 01 Jan' 24
ISO 14001:2015	Environmental Management System	07 Feb' 21 – 06 Feb' 24
ISO 45001:2018	Occupational Health and Safety Management System	07 Feb' 21 – 06 Feb' 24
ISO 22301:2012	Business Continuity Management System	22 Dec' 20 – 30 Dec' 23
ISO/IEC 27001:2013	Information Security Management System	19 Sep' 20 – 18 Sep' 23
IGBC	India Green Building council	17 Mar' 23 – 17 Mar' 26
ISO/IEC 20000-1:2018	IT Service Management System	04 Dec' 20 – 04 Dec' 23
ISO50001:2018	**Energy Management System**	**01st Aug 22 – 01st Aug' 25**

Net Zero Action Plan

Wipro’s commitment to Net Zero:

Wipro is one of the first 7 companies globally to have Net Zero goals validated against the Net Zero standard from SBTI (Science Based Targets Initiative). Our focus is on direct decarbonization approaches.

Near-Term Targets

Wipro commits to reduce absolute scope 1 and 2 GHG emissions 59% by FY2030 from a FY2017 base year, * and absolute scope 3 GHG emissions 55% by FY2030 from a FY2020 base year. We are also committed to reach 100% RE by 2030.

Action Plan

Our newer buildings in Bengaluru and Hyderabad are benchmarked against the global best – These new buildings also avoid use Internal to Wipro of UPS batteries and eliminates the environmental impact pertaining to battery manufacturing and disposal.

For existing campuses, measures include new retrofit technologies to improve Chiller and Air Handling Units (AHUs), UPS optimization, integrated design, and monitoring platforms.

The Global Energy command center aggregates Building Management System (BMS) inputs on a common platform to optimize operational control and improve energy efficiency. Around 15 million square feet across India are connected to the BMS. The operations platform comes with ability to address every element of the system at the equipment level and provides advanced algorithms for analytics to monitor performance. Any deviation is tracked and rectified with in-house / OEM support. We have started a program for adoption of ISO50001 Energy management system across our campuses.

Thank You