

# Presentation - Olympia Technology Park



By  
**N.SENTHIL KUMAR**  
General Manager

# 1. About Olympia Group



## **Background:**

The **Olympia Group** was born out of the alliance of Two strong business houses –  
The **Khivraj Group** & **The MK Group**.

The Chennai-based renowned **Khivraj Group**, has over 5 decades of successful business history spanning various industries such as Real Estate, Automobile, Retail and Wind Power Generation Led by Mr. Ajit Kumar Chordia & Mr Bharat Kumar Chordia.

**Mr Ajit Kumar Chordia, the Managing Director is also an Founding member of IGBC and actively involved in IGBC.**

The MK Group Kolkata have an impressive track record of large-scale property development in several sectors of Real Estate - MSB Residential Apartments, Clubhouses and Shopping Malls among others represented by Mr Chandrakant Kankaria.



Mr. Ajit Kumar  
Chordia



Mr. Chandrakant  
Kankaria

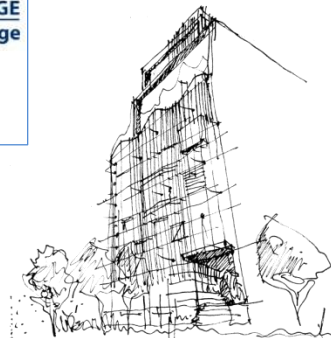
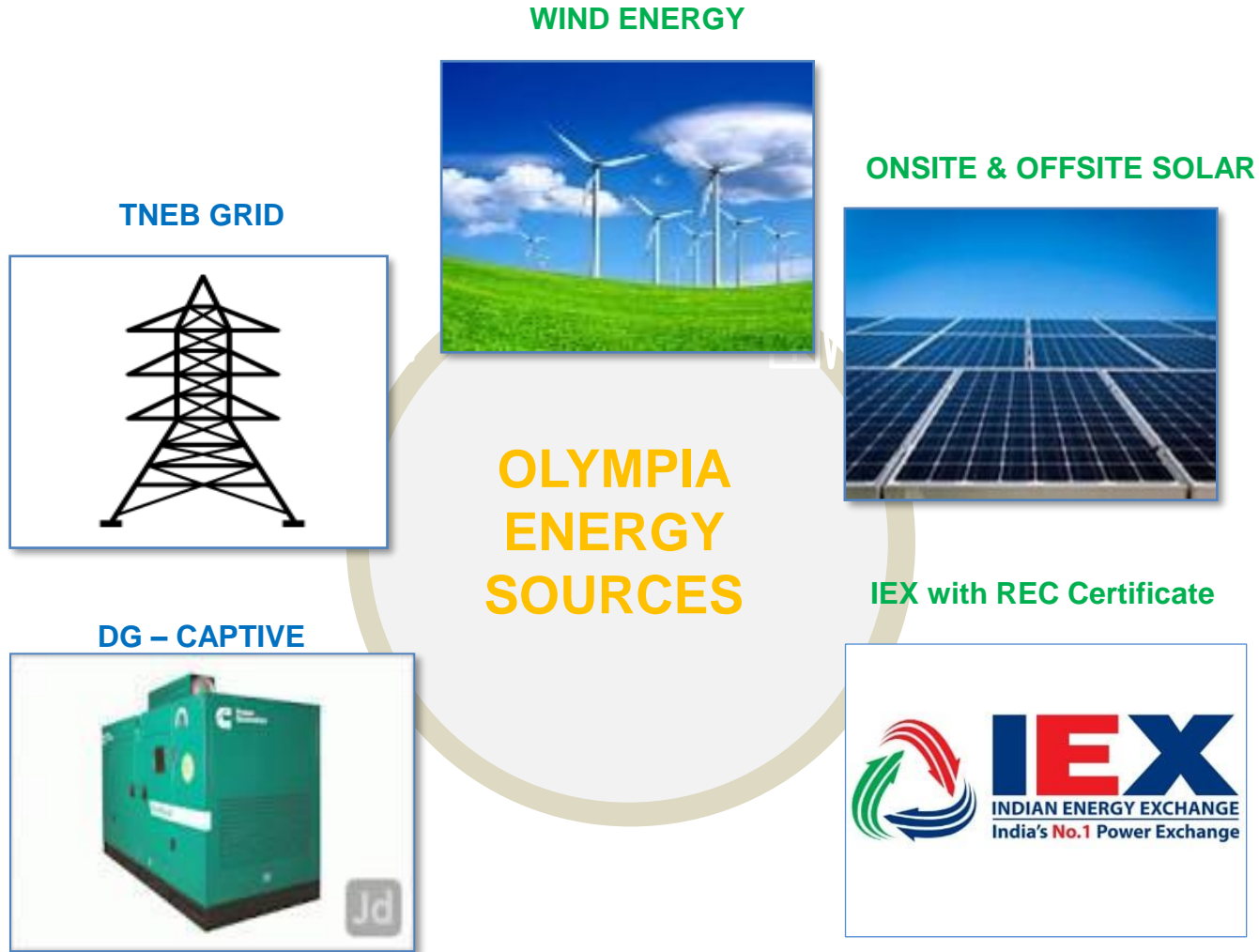


Mr. Bharat  
Kumar Chordia



# 2. OTP Energy Consumption Overview

## Energy Sources of Olympia Technology Park

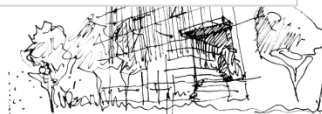
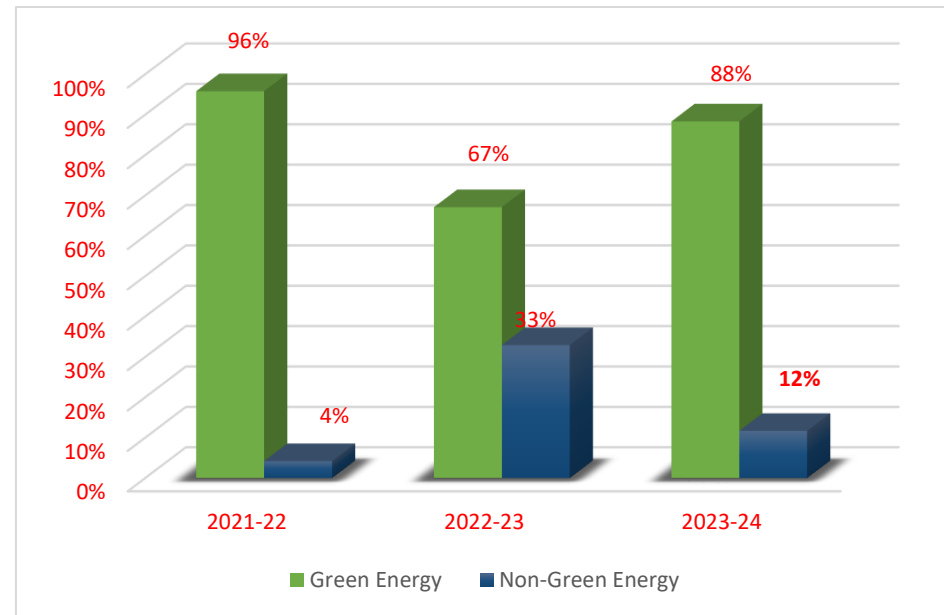
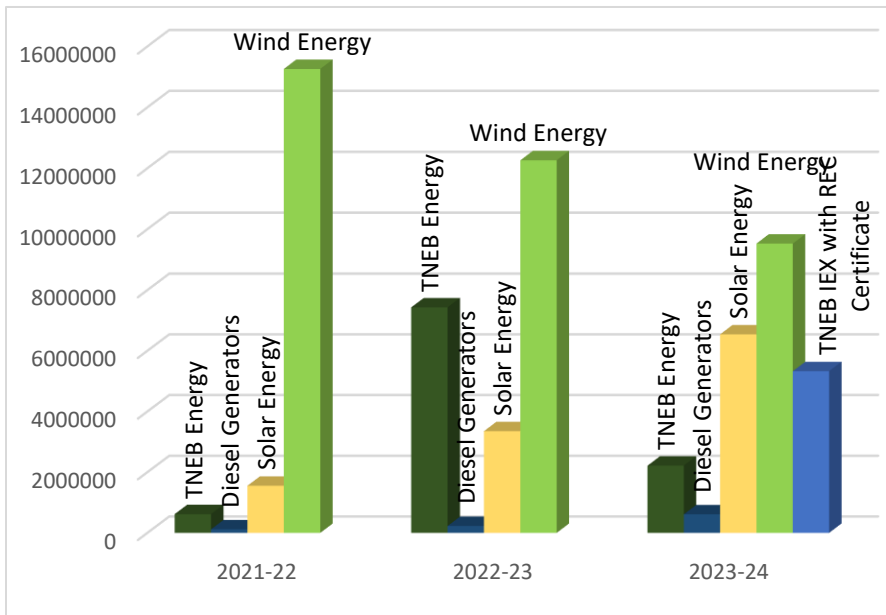


# Energy Consumption Details for Past 3 Years

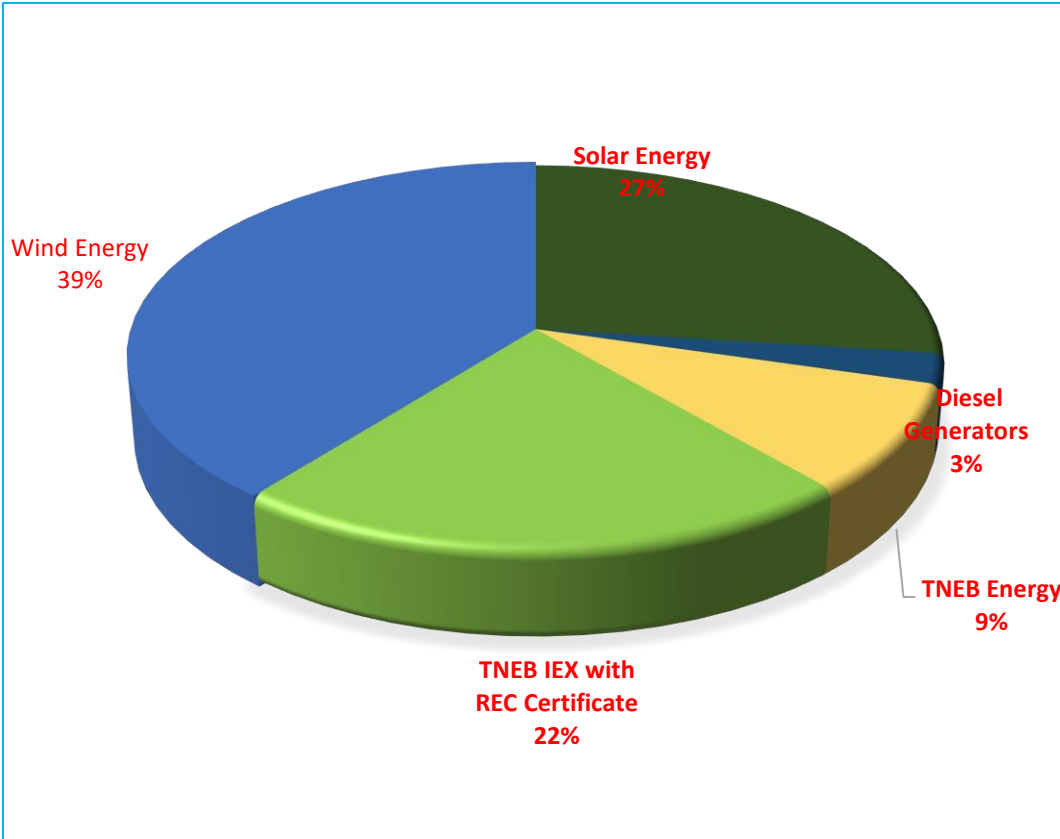


Building Energy Source			
Source of Energy	Units in KWh		
	2021-22	2022-23	2023-24
TNEB Energy	618329	7431882	2215890
TNEB IEX with REC Certificate	0	0	5329000
Diesel Generators	117490	228900	613540
Solar Energy	1552610	3351501	6541862
Wind Energy	15260330	12262391	9527765
<b>Total</b>	<b>17548759</b>	<b>23274674</b>	<b>24228057</b>

Description	Units in KWh		
	2021-22	2022-23	2023-24
<b>Green Energy</b>	16812940	15613892	21398627
<b>Non-Green Energy</b>	735819	7660782	2829430
<b>Total</b>	<b>17548759</b>	<b>23274674</b>	<b>24228057</b>



# Energy Consumption FY 2023-24

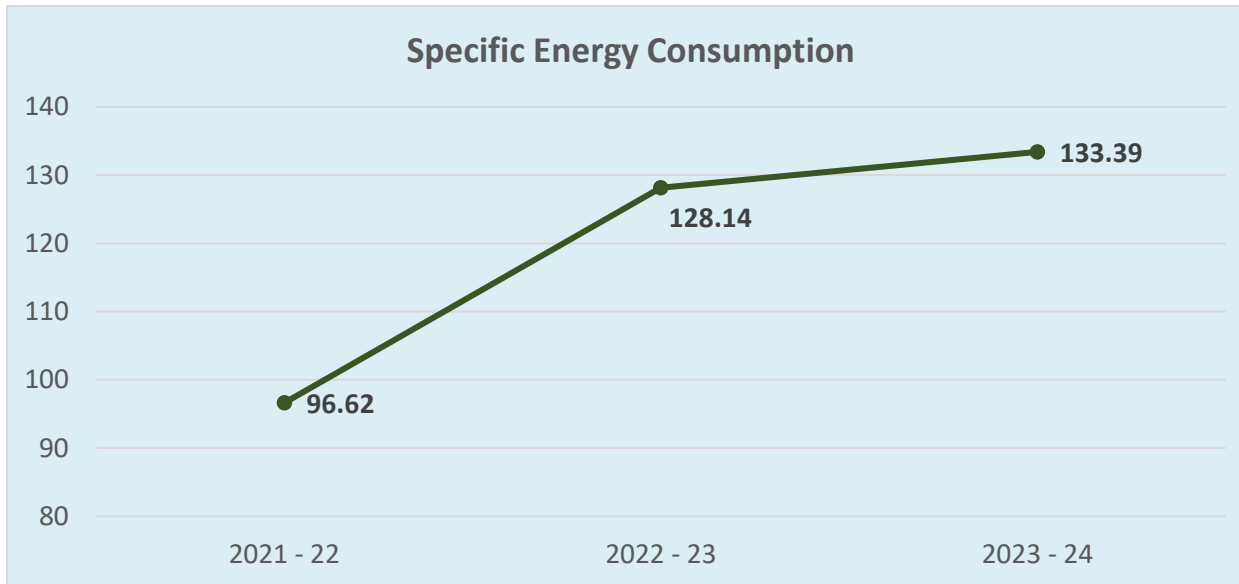


Description	2023-24
Solar Energy	6541862
Diesel Generators	613540
TNEB Energy	2215890
TNEB IEX with REC Certificate	5329000
Wind Energy	9527765
<b>Total</b>	<b>24228057</b>



# 3. OTP Specific Energy Consumption

Parameters	Units	2021 - 22	2022 - 23	2023 - 24
Total Annual Energy Consumption	KWh	17548759	23274674	24228057
Built Up Area	Sq. M	181631	181631	181631
Specific Electrical Energy	KWh / Sq.M	96.62	128.14	133.39





# Year on Year Variation of Specific Energy Consumption

Description	2021-22	2022-23	2023-24
Specific Energy Consumption	96.62	128.14	133.39
Variation	-9.67	31.52	5.25
Variation YOY in %	-10.01%	24.60%	3.94%

## Reasons for Variation in SEC :

- SEC slightly Increased in 2023-24 comparing with 2022-23 due to employee strength increased.



# 4. Information on Competitors, National & Global Benchmark

## EPI of Peer IT Parks Near to us :

Sl.No	Competitor Name	SEC
1	RMZ Milenia Business Park, Chennai	198
2	DLF Cyber City , Chennai	130
3	Ramanujam Intellion Park, Chennai	108



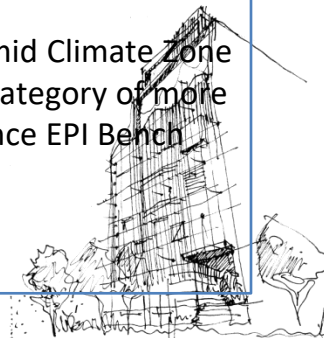
EPI Bench Mark

## National SEC Bench Mark ( BEE ):

### EPI Bench Mark for Office Buildings

Climate Zone	Less than 50% AC	More than 50% AC
Warm & Humid	101	<b>182</b>
Composite	85	179
Hot & Dry	90	173
Moderate	94	179

- Office Building EPI depends upon multiple factors like climate zone, operating hours, occupancy trends etc..
- Olympia Tech Park Campus comes under mixed category. Combination of Office, Data labs, Food court & Amenities, Banks, ATM and GYM etc. with 95% Air conditioned space.
- Chennai comes under Warm & Humid Climate Zone and our campus comes under the category of more than 50 % Airconditioned area. Hence EPI Bench Mark as BEE - **182**
- Our EPI FY 2023-24 - **133.39**





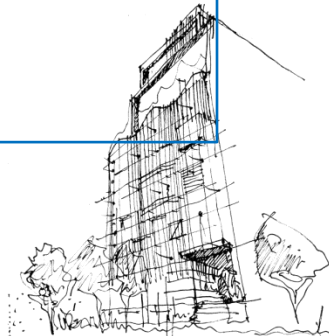
# Road Map for Further Improvement of SEC

- Work station Light fitting PL to LED conversation
- Automation of Parking Area Lights by installing with motion sensor .
- Utility Block Chiller plant manger (CPM) upgradation .

## Major Encon Project Planned FY 2024-25

- Conversion of Existing AHU's into EC Fan Blower with PLC Controller for 117 Nos of AHU's available at site.
- implementation of STP plant Air blower direct coupled motor fixing

Project Cost – INR **55.25** Millions.

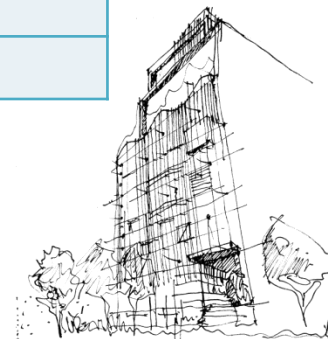


# 5. Energy Savings Projects Implemented in last 3 Years

## Important Projects in 2021-22, 2022-23 & 2023-24

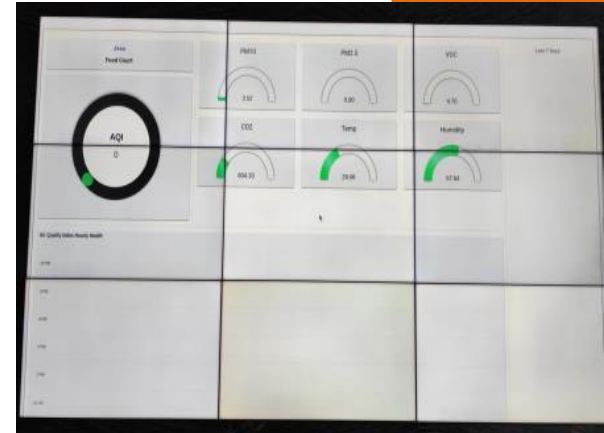
- Conversion of DX AC Units into Chilled water operated CSU units in lobby area.
- Installation of Auto Condenser Coil Cleaning System for 750 TR WCC Chiller -3 Nos.
- Conversion of PL light fittings into LED light fitting in various locations of Office Premises.
- Utility Block Chiller plant manger (CPM) upgradation. Chiller Header temperature based operation.

Year	No of Energy Saving Projects	Investments ( in Million INR)	Energy Saving ( in MWh )	Cost Savings ( in Million INR)
2021 -22	4	4.39	362.24	2.89
2022 -23	3	2.52	204.25	1.79
2023 -24	3	1.36	372.7	3.2



# 6. Innovative Projects Implemented

## IAQ Sensor Installed in all three Lobby's for improving the air Quality



Source Of Idea	Myidea / Initiative / Solution	Advantage
<ul style="list-style-type: none"> <li>To maintain indoor and outdoor environment air measurement for Human healthiness in main lobbies.</li> </ul>	<ul style="list-style-type: none"> <li>In-case of any deviation in the parameters the device will trigger to aware the environment air quality ranges / measurements.</li> <li>Programmed to send the report Email to Key Persons of site in case of fire alarm happened at any point of time.</li> <li>Provided the Display in all three lobbies .</li> <li>Investment Cost – INR – 4.0Laksh</li> <li>Monthly Operation Cost - INR - 300 ( Sim Card Monthly Rental Charges )</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Health and Safety.</li> <li>Improved Employee Productivity and Comfort. ...</li> <li>Reputation and Customer Satisfaction.</li> <li>Reduce transmission of airborne viruses</li> <li>Helps to give the updates on time to Client / Occupant.</li> </ul>



# 7. Indias Largest Building on Net Zero Energy (Provisional Certificate - 2023)



**Net Zero Energy Provision –  
Complied the 96% of power consumption  
requirement through Renewable Energy**

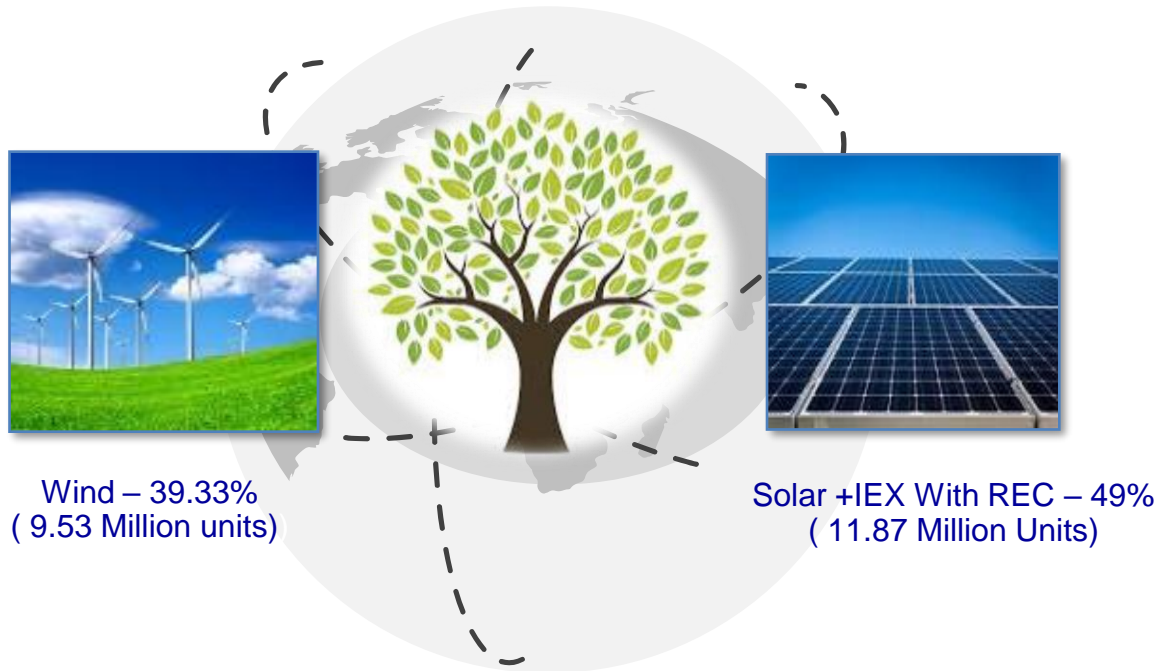


Microsoft Excel  
Worksheet



# 8.Utilisation of Renewable Energy Sources FY 23-24

Type of RE	Type of Energy	Onsite/Of f site	Installed Capacity (MW)	Generation (Million Units)	% of Overall Electrical Energy
Solar PV	Electrical	Onsite	1.1	1.62	6.69%
Solar PV +IEX REC	Electrical	Offsite	5	10.25	42.31%
Wind	Electrical	Off site	13.85	9.53	39.33%



# RPO Obligation

## RPO Target fixed for Tamil Nadu

Year	Solar	Non – Solar	Total
2021-22	6.75 %	10.25%	17 %
2022-23	10.5 %	10.5%	21 %
2023-24	24.61 %		24.61 %

## RPO Achieved at site

Year	Wind	Solar	Total
2021-22	86.96%	8.85%	95.81%
2022-23	52.69%	14.40%	67.09%
2023-24	39.33%	49.00%	88.32%

## Reference Source

<https://www.iexindia.com/>



Adobe Acrobat  
Document

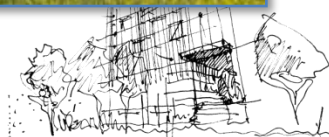




# Renewable Energy Sources

## Windmill Details – OFF Site

S.No	WEG HT SC NO	Capacity in MW	Location
1	79204721737	0.8	Theni, Tirunelveli, Udumalaipet.
2	59224760079	0.85	
3	59224760083	0.85	
4	79204720779	0.60	
5	79204720737	0.60	
6	79204720772	0.75	
7	79204720683	0.75	
8	79204720684	0.75	
9	39224340917	1.650	
10	79224723414	0.600	
11	79244700344	2.0	
12	79244700338	2.0	
13	79204721545	1.65	
Total Capacity ( in MW )		<b>13.85</b>	



# Renewable Energy Sources

## Solar – Onsite

S.No	Description	Capacity in MW	Location
1	Roof Top Solar	1.1	Olympia Tech Park, Guindy, Chennai – 32



## Solar – Offsite

### Total Capacity – 17MW

S.No	Description	Capacity in MW	Location
1	Ground Mounted Solar Plant	7	Kamudhi, Pasumpon District
2	Ground Mounted Solar Plant	10	kayathar - Tirunelveli

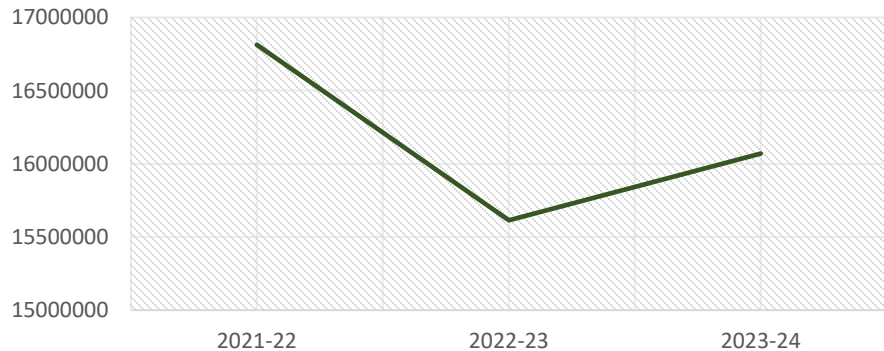


# 8.GHG Emission and Indoor Air Quality

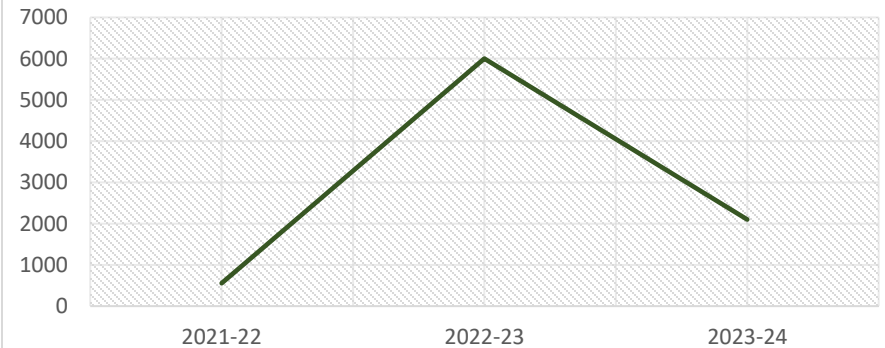
## GHG Inventorisation

Year	Energy Cosumption Details ( in Kwh )						Co 2 Emission Factor		Ton of CO 2 Emmission		
	TNEB	IEX	Wind	Solar	DG	Total	TNEB	DG	TNEB	DG	Total
2021-22	618329	0	15260330	1552610	117490	17548759	0.79	0.57	488.5	67.0	555.4
2022-23	7431882	0	12262391	3351501	228900	23274674	0.79	0.57	5871.2	130.5	6001.7
2023-24	2215890	5329000	9527765	6541862	613540	24228057	0.79	0.57	1750.6	349.7	2100.3

Renewable Energy Usage in KWh



Reduction of CO -2 Emission



Microsoft Excel  
Worksheet



# GHG Emission and Indoor Air Quality

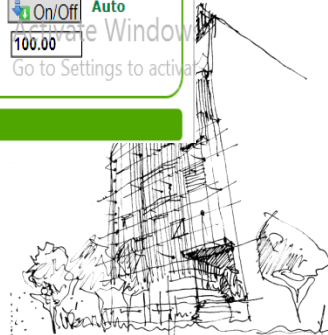
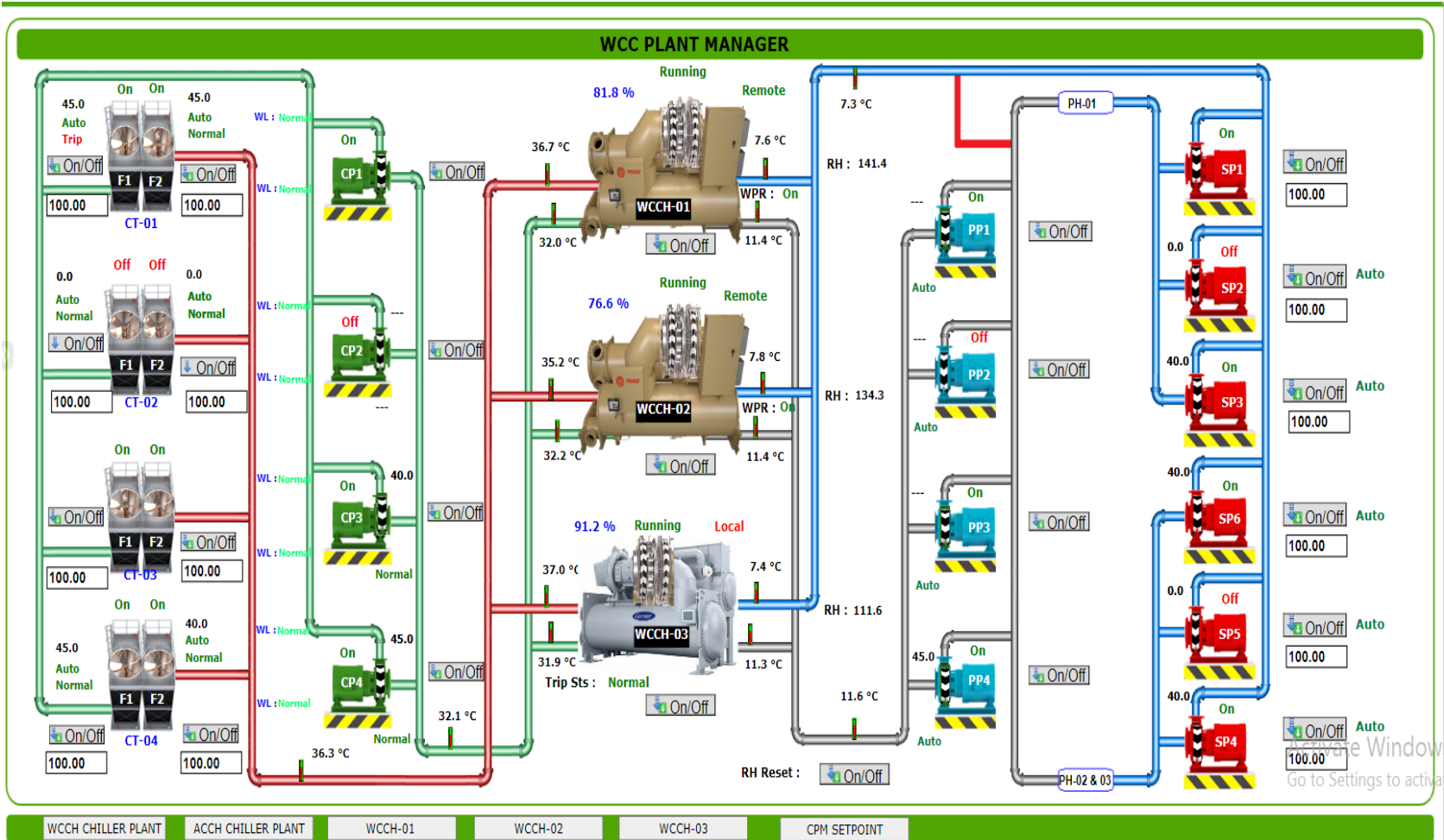
## Action Taken for Control of Scope III Emission

EV Charger of 4 wheeler has been installed in our Tech Park at various locations to limit the CO2 Emission and encourage the Electric Vehicle Usage by employees.



# 9. CPM OPERATIONAL

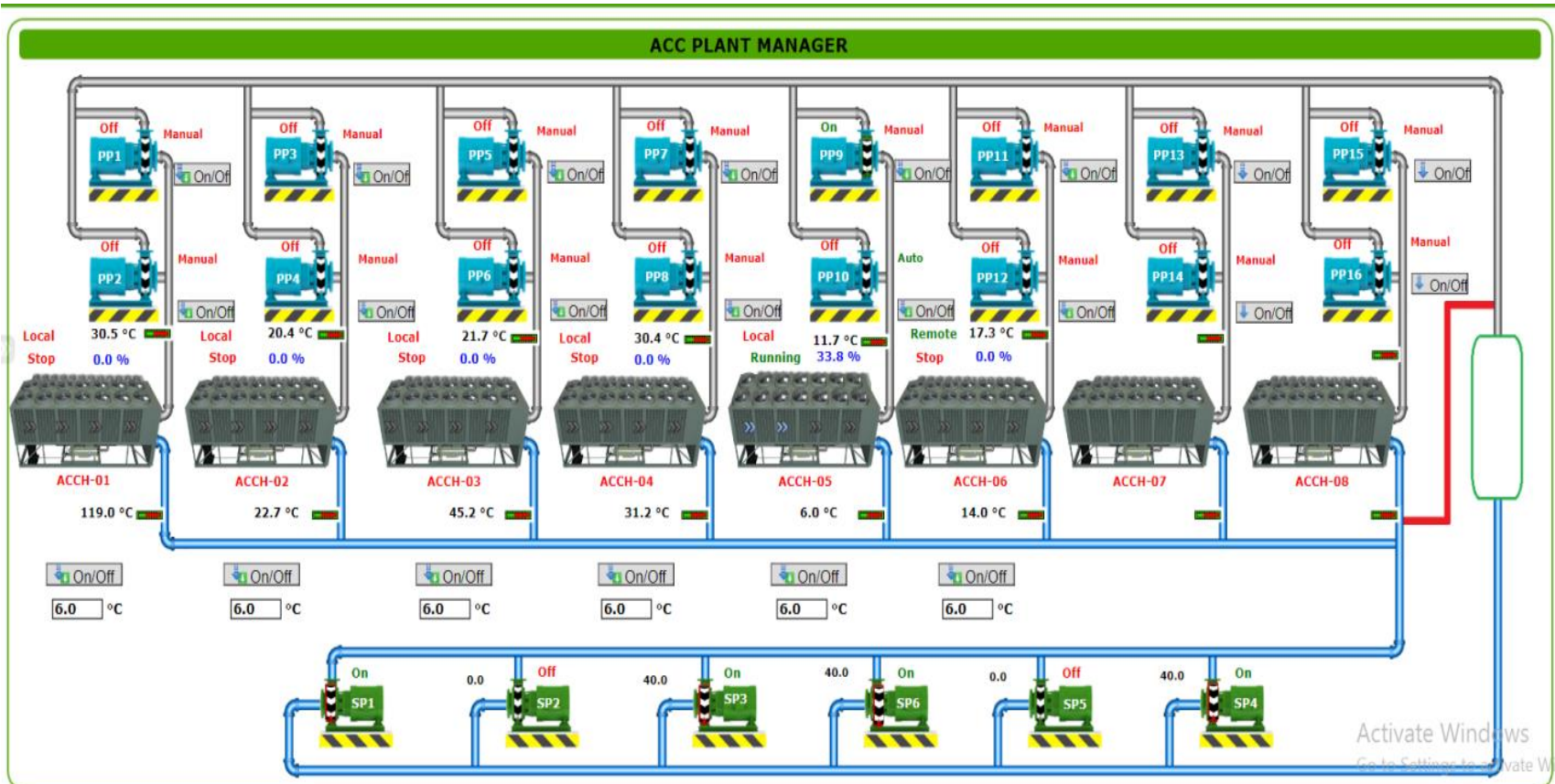
## Water Cooled Chiller Plant Manager for Monitoring and Control.





# 9. CPM OPERATIONAL

## Water Cooled Chiller Plant Manager for Monitoring and Control.



Activate Windows  
Go to Settings to activate Windows





# Implementation of IGBC Rating

## IGBC Rating

Olympia Technology Park has obtained Platinum Certification in June -2020 from IGBC for existing building category. Now we applied for IGBC NetZero Rating System



# 10. NET ZERO Commitment



## Net Zero Target

Olympia Tech Park has Registered with IGBC for NetZero Rating System - Energy , Water & Waste.

We have submitted the documents to IGBC for further review.

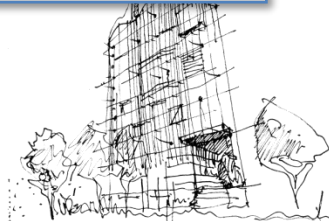
We expect to receive the IGBC NetZero Certification by end of Sep 2024

Project ID	Name	Rating System
IGBCNZ230051	Olympia Technology Park	Energy
IGBCNZWA2300016	Olympia Technology Park	Waste
IGBCNZWTR230013	Olympia Technology Park	Water



# 11. Other Relevant Information

## USGBC LEED Certification for GOLD



# Other Relevant Information

Excellent Energy Efficient Unit Award-2019



Excellent Energy Efficient Unit Award-2020



National Energy Leader - 2021



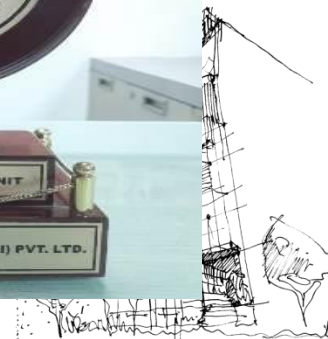
Excellent Energy Efficient Unit Award-2021



Energy Efficient Unit Award-2022



Energy Efficient Unit Award-2023





# Other Relevant Information

Postal Dept. has released the special cover with Olympia Tech Park image on 29.12.2006



Best Green Building Award



Best HVAC Design Award



Giream Award was conferred upon Olympia Technology Park for the best green building in India - 2009.

Olympia Technology Park was awarded "The BRY AIR AWARDS 2008" for the "Best HVAC Design" and this award is in its 3rd year and considered as prestigious for it certifies excellence in Energy conservation & Innovative design in HVAC.



# Thank you

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