

# 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



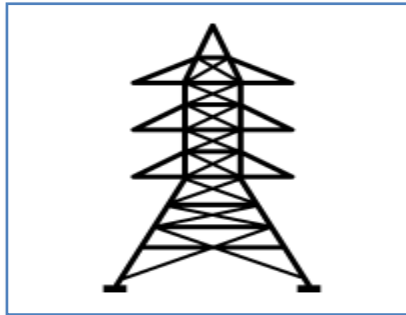
Mr. Bharat  
Kumar Chordia



# 2. OTP Energy Consumption Overview

## Energy Sources of Olympia Technology Park

TNEB GRID



WIND ENERGY



DG – CAPTIVE



**OLYMPIA  
ENERGY  
SOURCES**

ONSITE & OFFSITE SOLAR

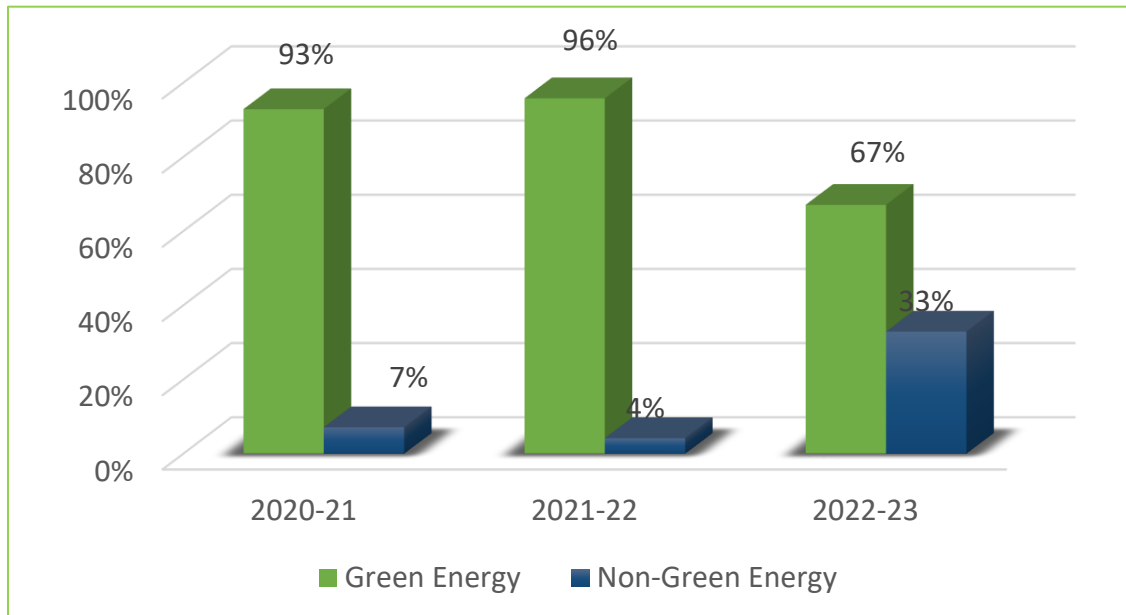


# Energy Consumption Details for Past 3 Years



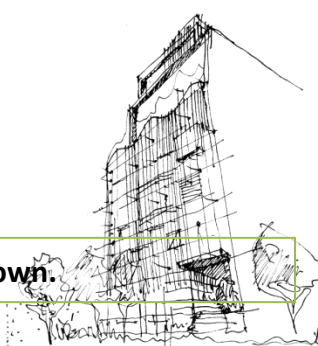
Source of Energy	Units in KWh		
	2020-21	2021-22	2022-23
TNEB	1090435	618329	7431882
Diesel Generators	284610	117490	228900
Solar Energy	1475860	1552610	3351501
Wind Energy	16454976	15260330	12262391
<b>Total</b>	<b>19305881</b>	<b>17548759</b>	<b>23274674</b>

Description	Units in KWh		
	2020-21	2021-22	2022-23
Green Energy	17930836	16812940	15613892
Non-Green Energy	1375045	735819	7660782
<b>Total</b>	<b>19305881</b>	<b>17548759</b>	<b>23274674</b>

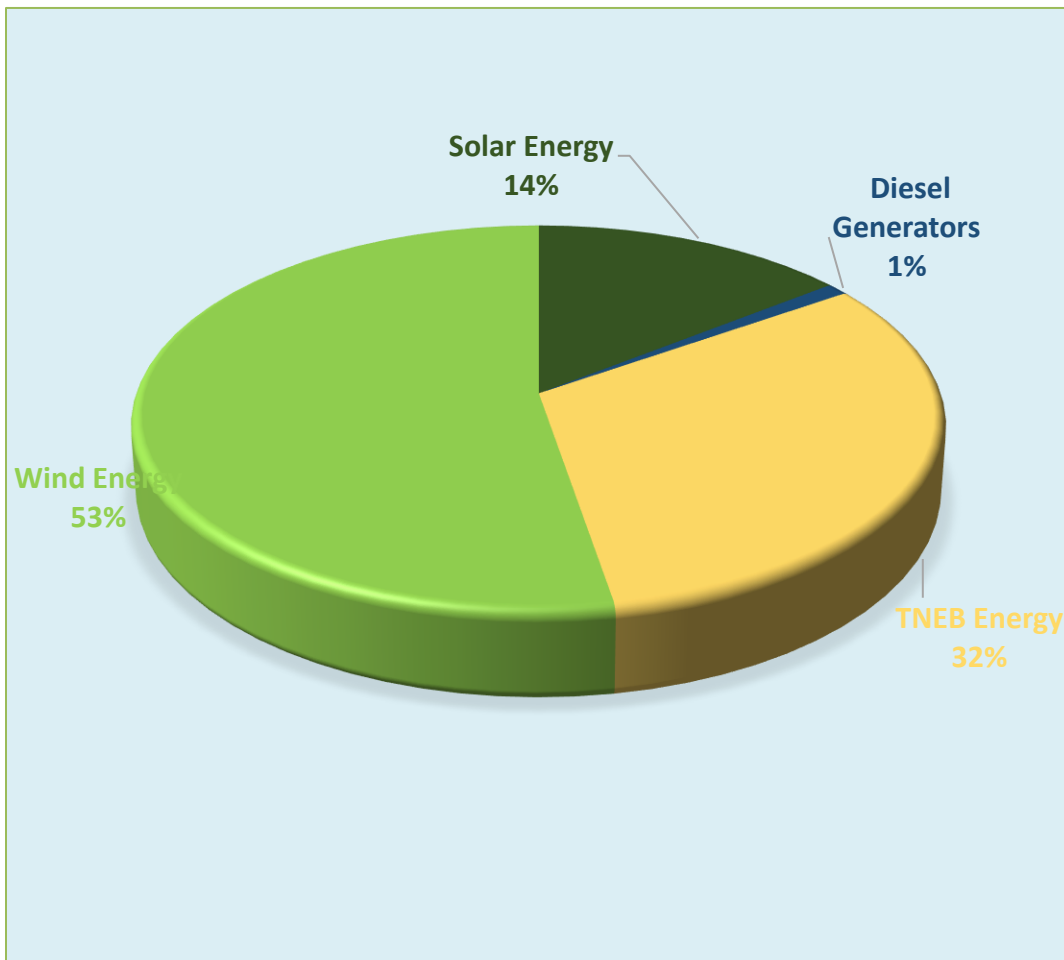


**Note :**  
 One of windmill was under breakdown during 2022-23.  
 Hence wind generation got affected and renewable energy usage was reduced in 2022-23

\* Increase of Energy Consumption FY 2022-23 in the view of employees return back to office after COVID lock down.



# Energy Consumption FY 2022-23

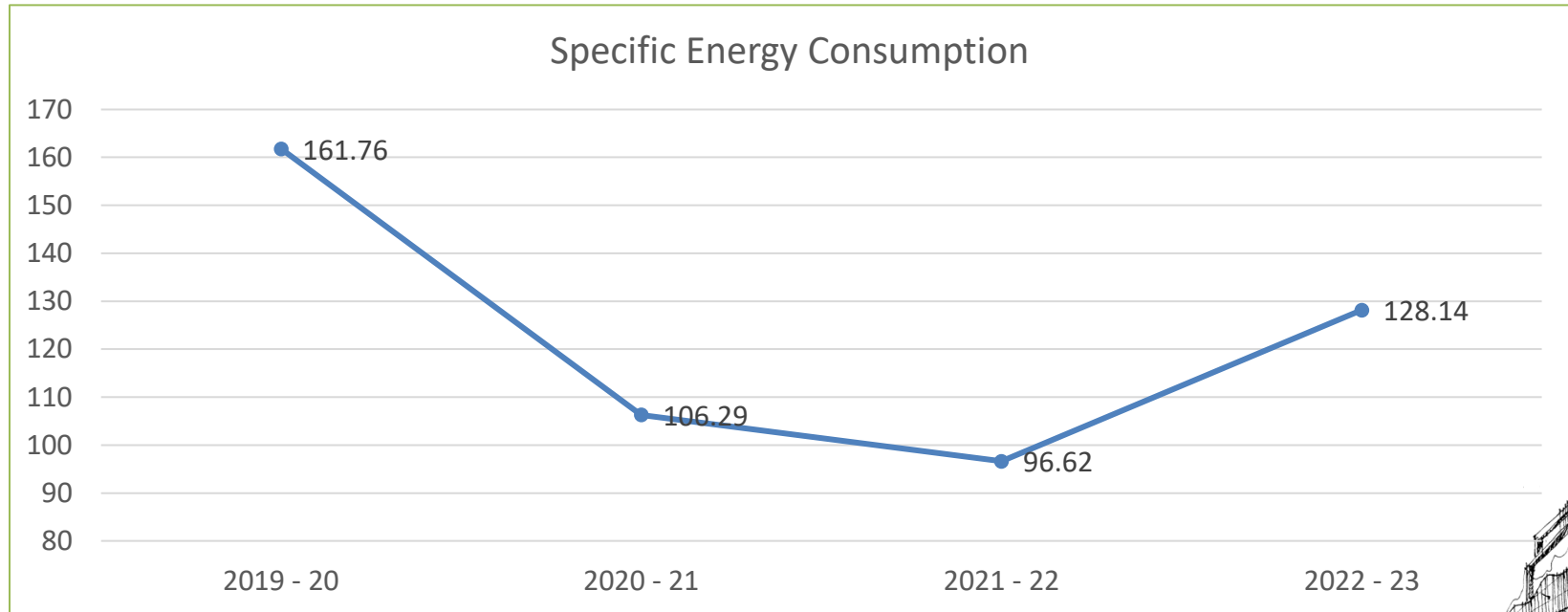


Description of Energy Source	Energy Consumption ( in KWh )
TNEB	7431882
Diesel Generators	228900
Solar Energy	3351501
Wind Energy	12262391
<b>Total</b>	<b>23274674</b>



# 3. OTP Specific Energy Consumption

Description	Units	2019 - 20	2020 - 21	2021 - 22	2022 - 23
Total Annual Energy Consumption	KWh	29379759	19305881	17548759	23274674
Built Up Area	Sq. M	181631	181631	181631	181631
Specific Electrical Energy Consumption	KWh / Sq.M	161.76	106.29	96.62	128.14



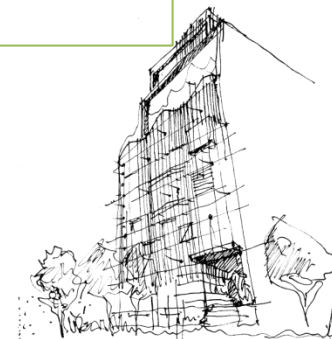


# Year on Year Variation of Specific Energy Consumption

Description	2019 - 20	2020-21	2021-22	2022-23
Specific Energy Consumption	161.76	106.29	96.62	128.14
Variation		- 55.46	- 9.67	+ 31.52
Variation YOY in %		- 52.18%	-10.01%	+ 24.60%

## Reasons for Variation in SEC :

- SEC Increased in 2022-23 due to Employees are returned to Office after COVID lock down. Hence there was a huge variation in Specific Energy Consumption when comparing with 2021-22 and 2020-21



# 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



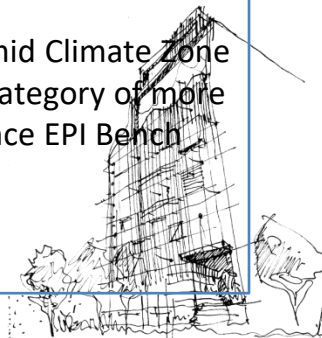
EPI Bench Mark

## 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 2022-23 - **128.14**





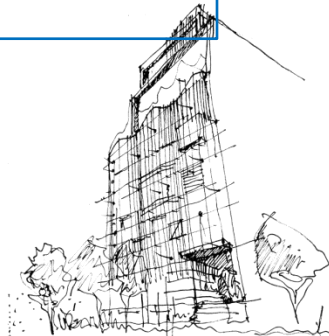
# Road Map for Further Improvement of SEC

- Implementation of EC Fan Systems for all AHU's .
- Automation of Basement Parking Area Lighting Systems.
- Implementation of Motion Sensors in Floor Lift Lobbies.

## Major Encon Project Planned FY 2023-24

- Conversion of Existing AHU's into EC Fan Blower with PLC Controller for 117 Nos of AHU's available at site.

Project Cost – INR **48.75** Millions.

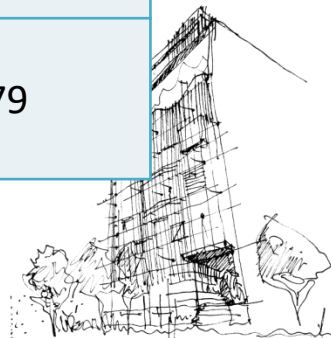


# 5. Energy Savings Projects Implemented in last 3 Years

## Important Projects in 2020-21, 2021-22 & 2022-23

- 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.

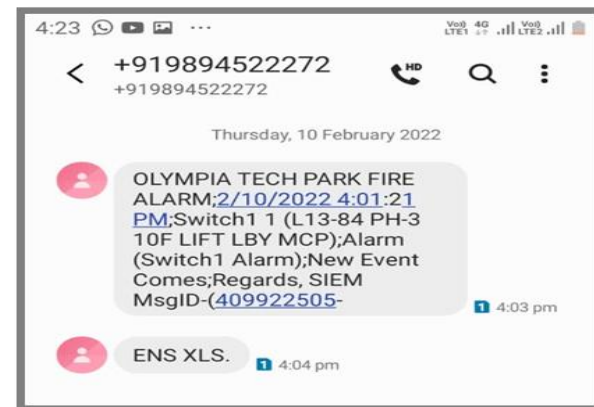
Year	No of Energy Saving Projects	Investments ( in Million INR)	Energy Saving ( in MWh )	Cost Savings ( in Million INR )
2020 -21	3	1.63	135.49	1.22
2021 -22	4	4.39	362.24	2.89
2022 -23	3	2.52	204.25	1.79



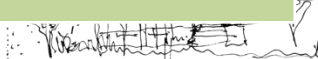
# 6. Innovative Projects Implemented



## SMS Alert for Fire Alarm System

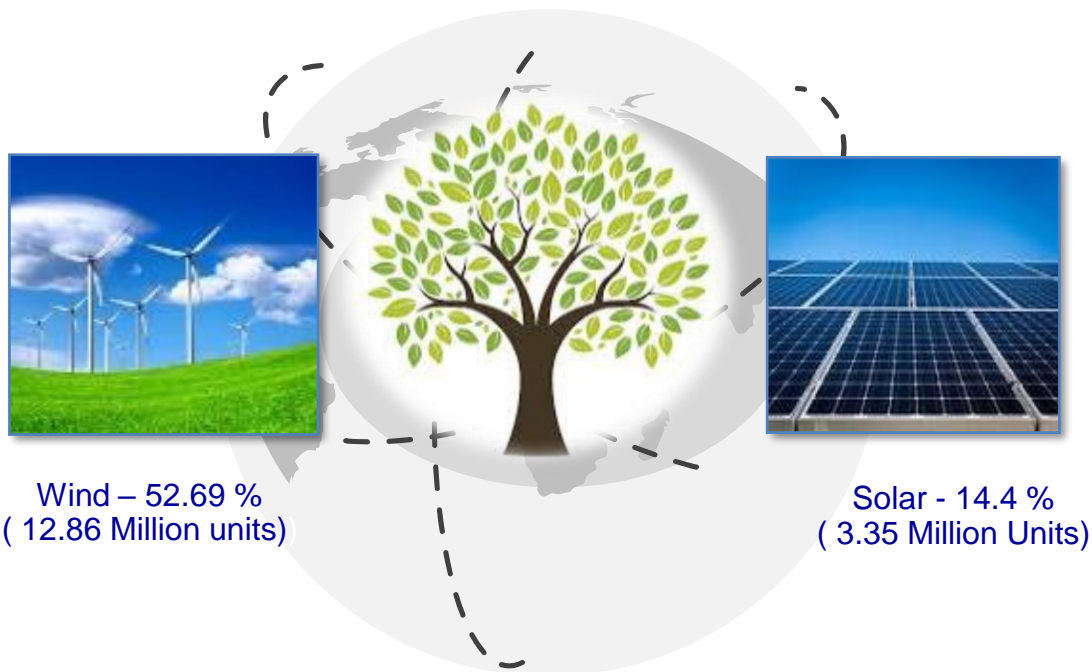


Source Of Idea	Myidea / Initiative / Solution	Advantage
<ul style="list-style-type: none"> <li>Getting delayed information from site team in case of any Fire Alarm Activated at site during Holidays and Night Hours</li> </ul>	<ul style="list-style-type: none"> <li>Reviewing this challenges, worked out the option to get the SMS Alert from FAS Panel by integrating the FAS Panel with GPS Router.</li> <li>Programmed to send the SMS Alert to Key Persons of site in case of fire alarm happened at any point of time.</li> <li>Provided the SIM Card in GPS Router.</li> <li>One Time Investment Cost – INR – 20 K</li> <li>Monthly Operation Cost - INR - 300 ( Sim Card Monthly Rental Charges )</li> </ul>	<ul style="list-style-type: none"> <li>Getting on time alert always without others dependency.</li> <li>Helping us to follow with site team to take the action and get the closure immediately.</li> <li>Helps to give the updates on time to Client / Occupant.</li> <li>Minimum One Time Investment Cost &amp; Monthly Operation Cost.</li> </ul>



# 7.Utilisation of Renewable Energy Sources FY 22-23

Type of RE	Type of Energy	Onsite/Off site	Installed Capacity (MW)	Generation (Million Units)	% of Overall Electrical Energy
Solar PV	Electrical	Onsite	1.1	1.529	6.57 %
Solar PV	Electrical	Offsite	5	1.82	7.83 %
Wind	Electrical	Off site	13.85	12.86	52.69 %



# RPO Obligation

## RPO Target fixed for Tamil Nadu

Year	Solar	Non – Solar	Total
2020-21	6.75 %	10.25%	17 %
2021-22	10.5 %	10.5%	21 %
2022-23	24.61 %		24.61 %

## RPO Achieved at site

Year	Solar	Non – Solar	Total
2020-21	7.64 %	85.23 %	92.9%
2021-22	8.85 %	86.96 %	95.8%
2022-23	14.4 %	52.6 %	67.1 %

## Reference Source

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



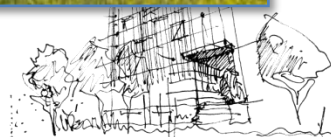
Adobe Acrobat  
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# Renewable Energy Sources

## 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

S.No	Description	Capacity in MW	Location
1	Ground Mounted Solar Plant	5	Kamudhi, Pasumpon District

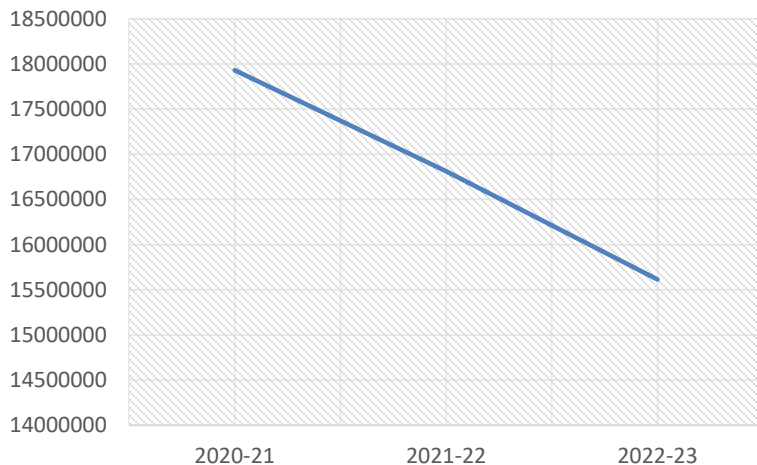


# 8.GHG Emission and Indoor Air Quality

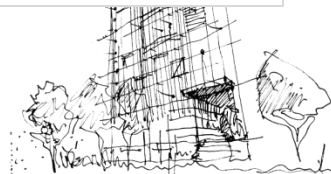
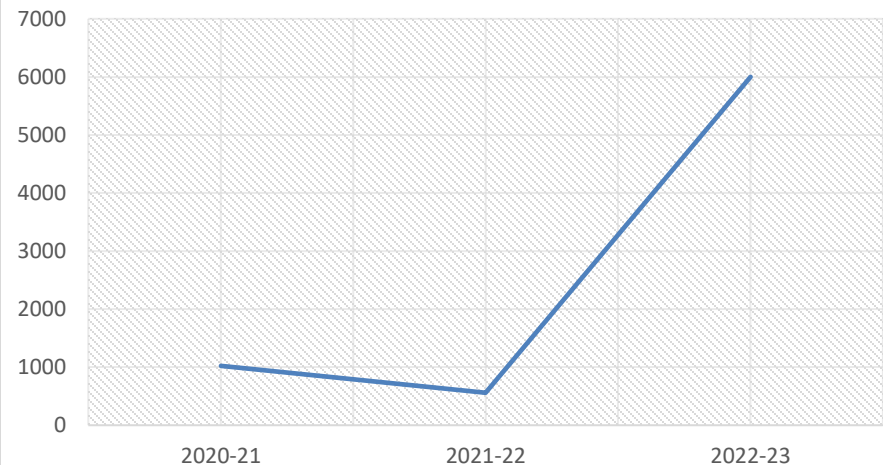
## GHG Inventorisation

Year	Energy Consumption Details ( in Kwh )					Ton of CO 2 Emission		
	TNEB	Wind	Solar	DG	Total	TNEB	DG	Total
2020-21	1090435	16454976	1475860	284610	19305881	861.4	162.2	1023.7
2021-22	618329	15260330	1552610	117490	17548759	488.5	67.0	555.4
2022-23	7431882	12262391	3351501	228900	23274674	5871.2	130.5	6001.7

### Renewable Energy Usage in KWh



### Reduction of CO -2 Emission



# 8.GHG Emission and Indoor Air Quality

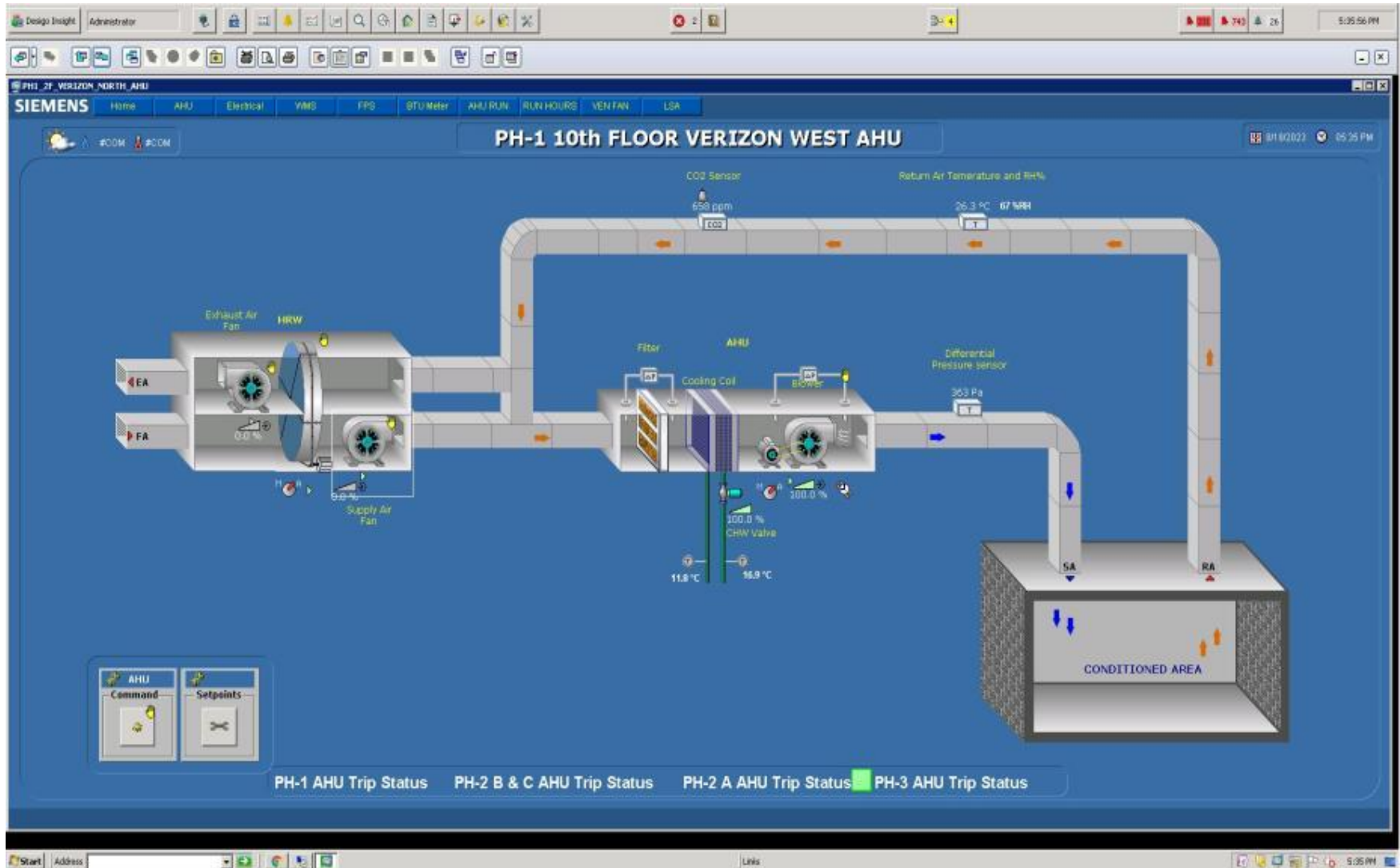
## Action Taken for Control of Scope III Emission

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. BMS & Certification

## Integrated Building Management System for Monitoring and Control.





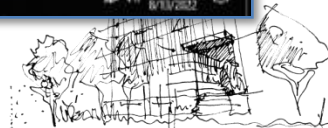
# 9. BMS & Certification

## Integrated Building Management System for Monitoring and Control.

The screenshot displays the SIEMENS OLYMPIA BMS interface for monitoring and controlling ventilation fans. The main window is titled "UB VENTILATION FAN SUMMARY" and shows a table of CO sensor readings for four zones. The table includes columns for Zone No, CO Sensor-1, CO Sensor-2, CO Sensor-3, CO Sensor-4, High Speed Command, and Low Speed Command. Below the table, there are controls for Jet Fan Low Speed Command Set Point (5.00) and Jet Fan High Speed Command Set Point (10.00). At the bottom, there is a table for Exhaust Fan Commands (EXH FAN-1 to EXH FAN-6) and an Exhaust Fan Command Set Point (15.00). A green button labeled "LB VENTILATION FANS" is visible on the right side of the interface.

ZONE NO	CO SENSOR-1	CO SENSOR-2	CO SENSOR-3	CO SENSOR-4	HIGH SPEED COMMAND	LOW SPEED COMMAND
ZONE-1	0.8 ppm	1.0 ppm	0.3 ppm	0.6 ppm	OFF	OFF
ZONE-2	0.5 ppm	1.0 ppm	1.8 ppm	0.5 ppm	OFF	OFF
ZONE-3	0.8 ppm	0.6 ppm	1.1 ppm	0.6 ppm	OFF	OFF
ZONE-4	0.5 ppm	0.4 ppm	0.0 ppm	4.2 ppm	OFF	OFF

DISCRPTION	EXH FAN-1	EXH FAN-2	EXH FAN-3	EXH FAN-4	EXH FAN-5	EXH FAN-6
EXHUST FAN CMD	OFF	OFF	OFF	OFF	OFF	OFF



# 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.

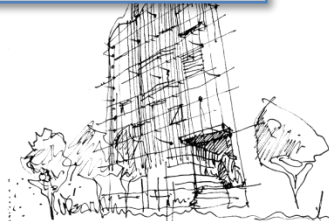
We expect to receive the IGBC NetZero Certification by end of OCT 2023

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





# 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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