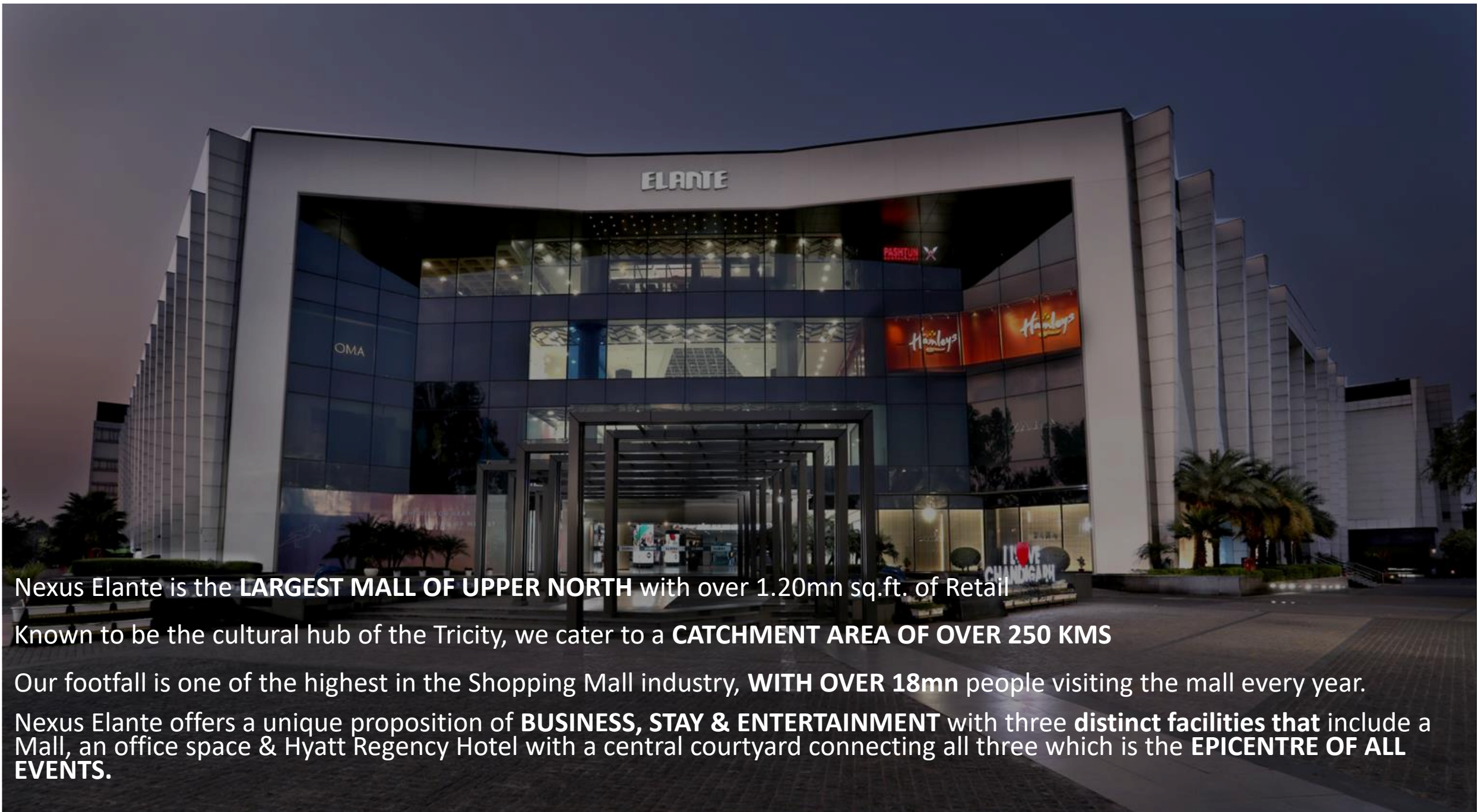




Presenters' Details

Name: Salim Roopani
Designation: Senior Centre Director

Name: Md. Jamil Akhter
Designation: Head Engineering



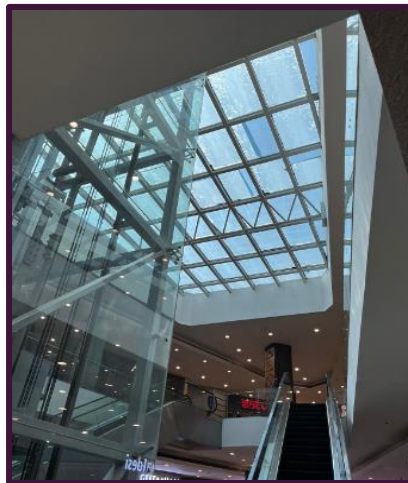
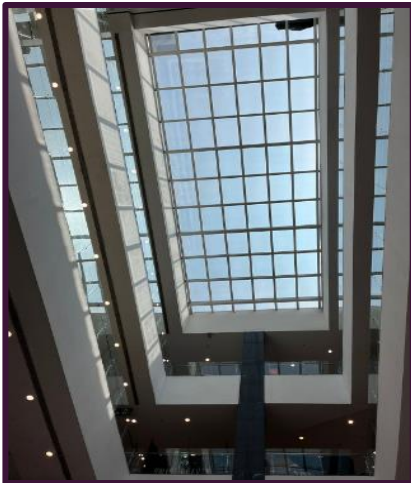
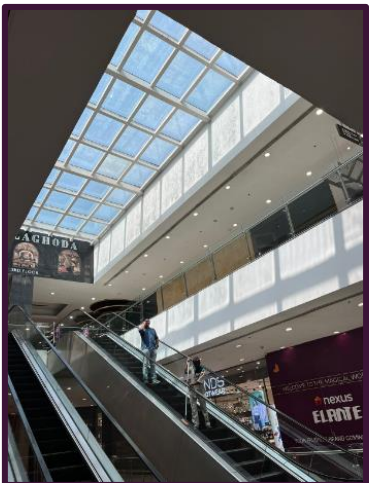
Nexus Elante is the **LARGEST MALL OF UPPER NORTH** with over 1.20mn sq.ft. of Retail

Known to be the cultural hub of the Tricity, we cater to a **CATCHMENT AREA OF OVER 250 KMS**

Our footfall is one of the highest in the Shopping Mall industry, **WITH OVER 18mn** people visiting the mall every year.

Nexus Elante offers a unique proposition of **BUSINESS, STAY & ENTERTAINMENT** with three **distinct facilities** that include a Mall, an office space & Hyatt Regency Hotel with a central courtyard connecting all three which is the **EPICENTRE OF ALL EVENTS.**

INTRODUCTION



OUR UNIQUE FEATURES

Nexus Elante IGBC platinum certified for O&M and was planned and developed mindfully with strategic intent and foresight of an eco-friendly mall, not only making an award-winning mall but a distinguished mix-use development. The building is planned with plush landscaping, efficient daylighting for the floor and basement, ventilation, competent energy & water conservation with zero discharge, and a dual plumbing system, on-site renewable energy generation, and waste management

➤ Energy Efficiency

- **100% SRI Painted Mall Terrace Roof** to reduce heat load and increase cooling efficiency
- Efficient HVAC system with **VFD operations**
- Industry's first **Terra Cotta system** installed for the pre-cooling of fresh air.
- Industry's first **Rainwater Dual Filtration** system helping save on water extraction and filtration energy.
- **Automated Lighting system** operated by motion sensors, photocell sensors, and timers.
- On-site renewable **solar panels** installed with a capacity of 450kWp
- Expansive **skylight glass glazing of 15,000 square feet** with argon gas-filled heat reflection; in mall and basement area.
- **Dissolved Oxygen sensor** installed for STP operations.
- **100% LED Lighting** throughout the mall

➤ Water Management

- **Low-flow plumbing fixtures** resulted in 78.73% reduction in water consumption compared to 2019.
- **Rainwater collection** within the tanks with the help of dual filtration for reuse within the building
- **Dual plumbing line** and 100% utilization of treated water in flushing and irrigation.
- **Utilization of RO Reject** into the system

OVERALL ENERGY CONSUMPTION

Overall Energy Consumption data								
FY	Common area		Tenant	Total KWH	Area sqm	Occupancy %	SEC (KWh/Annum/sqm)	
	Lighting KWH	HVAC KWH	KWH					
20	51,07,274.8	89,96,878.6	1,40,54,748.0	2,81,58,901.5	1,02,857.0	93%	294	
21	32,34,443.0	53,58,555.0	90,05,762.0	1,75,98,760.0	1,02,857.0	93%	183	↓
22	36,13,557.0	73,33,013.0	1,17,75,975.0	2,27,22,545.0	1,02,857.0	94%	235	↓
23	36,37,143.0	95,83,962.0	1,48,00,848.0	2,80,21,953.0	1,02,857.0	99.5%	272	↓

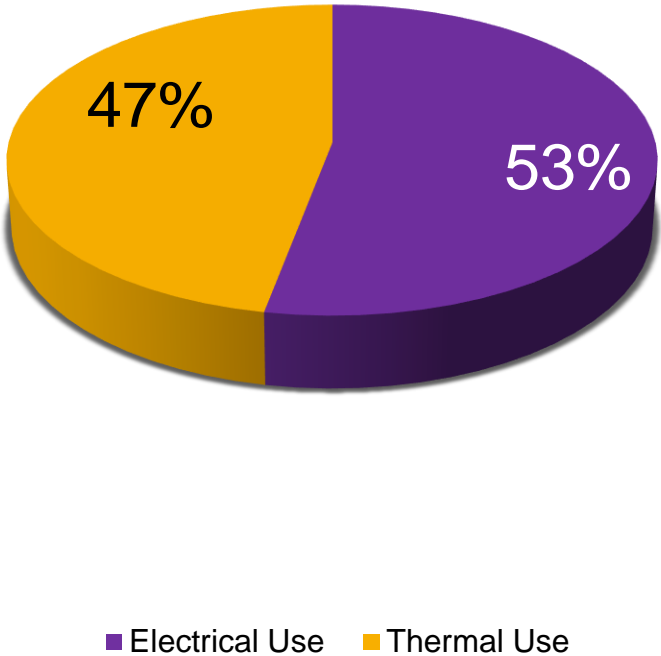
Remarks:

- **Power consumption in common areas has notably decreased by 29%.** This reduction can be attributed to the implementation of several energy-efficient measures:
 - Integration of LED lights
 - Incorporation of photocell sensors
 - Adoption of motion sensors
 - Application of SRI coating (Solar Reflectance Index)
 - Implementation of Variable Frequency Drives (VFD)
 - Integration of CO (Carbon Monoxide) sensors
 - Incorporation of DO (Dissolve oxygen) sensors
 - Optimization of water consumption
- **Tenant power consumption**, however, has witnessed an increase of **5% during the same period**
- **HVAC power demand has risen by 7%,** and this increase is attributed to the **higher tenant heat load due to the incorporation of F&B units.**
- However, **the overall power consumption has shown a decrease of 7.45% when compared to FY 2019-20.**

In summary, the power consumption trends indicate a decrease in overall consumption and a noteworthy increase in tenant and HVAC power usage. Additionally, the significant reduction in common area power consumption can be attributed to the adoption of various energy-efficient strategies.

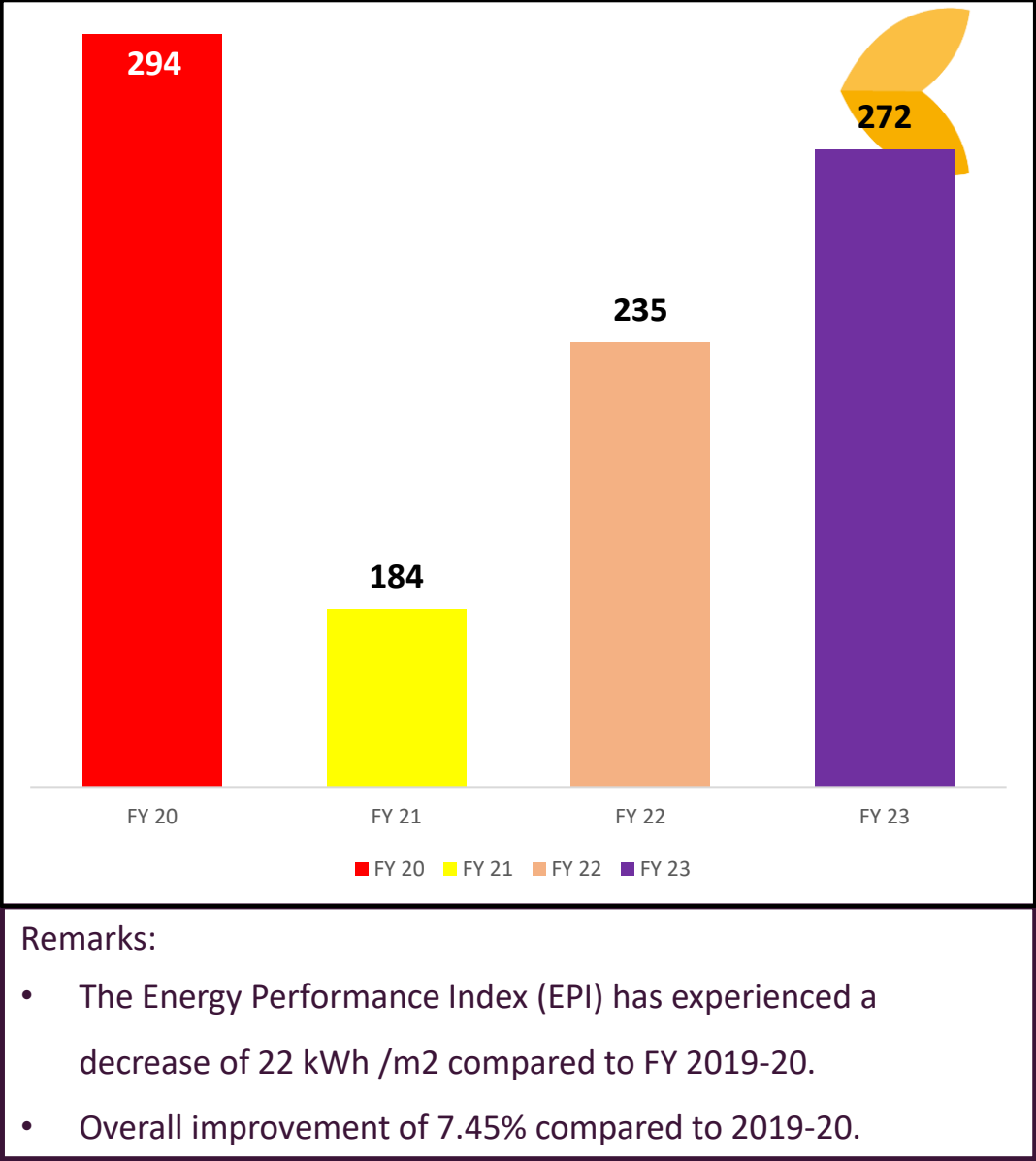
Electrical and Thermal usage FY 2022-23			
FY	Total	Electrical Use	Thermal Use
23	2,80,21,953	1,84,37,991	95,83,962

Energy Chart FY 2022-23



TOTAL ENERGY CONSUMPTION FY 2020 TO FY 2023

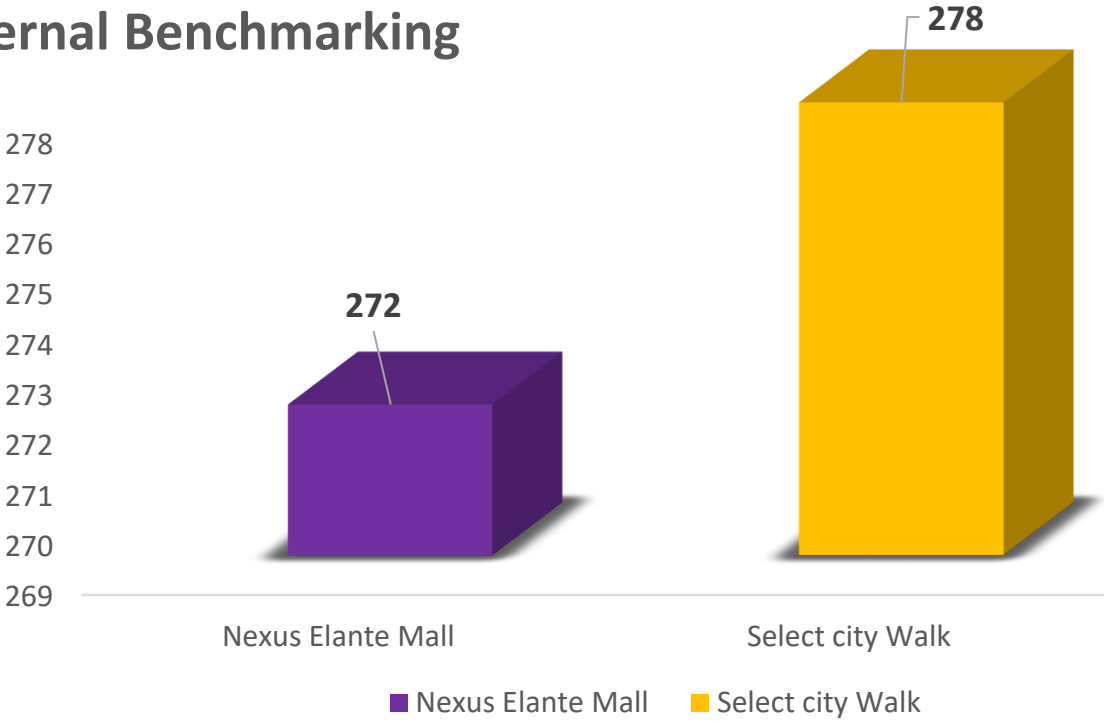
TOTAL ENERGY CONSUMPTION FY 19-20 TO 22-23					
SI NO	Year	FY 20	FY 21	FY 22	FY 23
1	APR	25,45,496	10,94,999	20,77,453	25,07,092
2	MAY	25,29,530	11,44,999	12,62,638	24,89,059
3	JUN	29,67,778	10,07,723	14,48,942	27,32,034
4	JUL	30,30,053	15,24,552	24,33,707	28,72,219
5	AUG	30,55,088	18,65,721	25,89,788	29,30,237
6	SEP	30,08,848	20,77,249	26,36,243	28,29,396
7	OCT	23,68,275	17,52,256	22,71,116	23,80,717
8	NOV	20,87,718	15,04,510	17,93,927	21,48,965
9	DEC	18,05,486	14,15,990	16,82,970	18,72,081
10	JAN	16,77,257	13,52,694	14,47,285	17,13,646
11	FEB	16,62,318	14,74,995	14,73,389	15,63,211
12	MAR	14,21,054	13,83,072	16,05,087	19,83,296
Total Kwh Consumption		2,81,58,902	1,75,98,760	2,27,22,545	2,80,21,953
Built up area in Sqm		1,02,857	1,02,857	1,02,857	1,02,857
Annual Kwh Consumption/m2		294	184	235	272
Low EPI in FY 2020-21 & 22			Mall partially closed due to Covid 19	Mall partially closed due to Covid 19	
%occupanacy		93%	93%	94%	99.5%
%Overall Improvement					7.45%



INTERNAL BENCHMARKING

Internal Benchmarking				
Mall Name	KWH	Area Sq .m	Energy Consumption SEC (kWh/Annum/ Sq M)	kWh/Month/ Sq M
Nexus Elante Mall , Chandigarh	2,80,21,953	1,02,857	272	12
Select city walk Saket Delhi	1,81,23,202	65,140	278	12

Internal Benchmarking



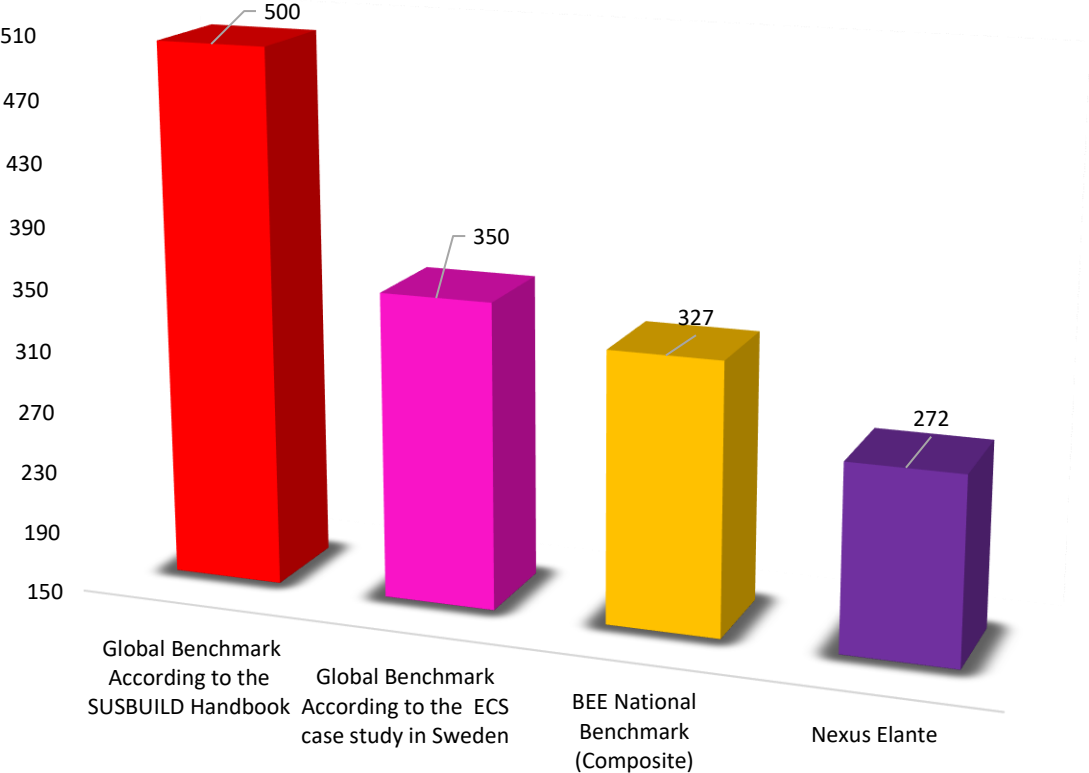
- Nexus Elante Mall has a specific energy consumption of 272 kWh per square meter.
- Nexus Select City Walk exhibits a specific energy consumption of 278 kWh per square meter.

NEXUS ELANTE ENERGY PERFORMANCE VS NATIONAL VS GLOBAL



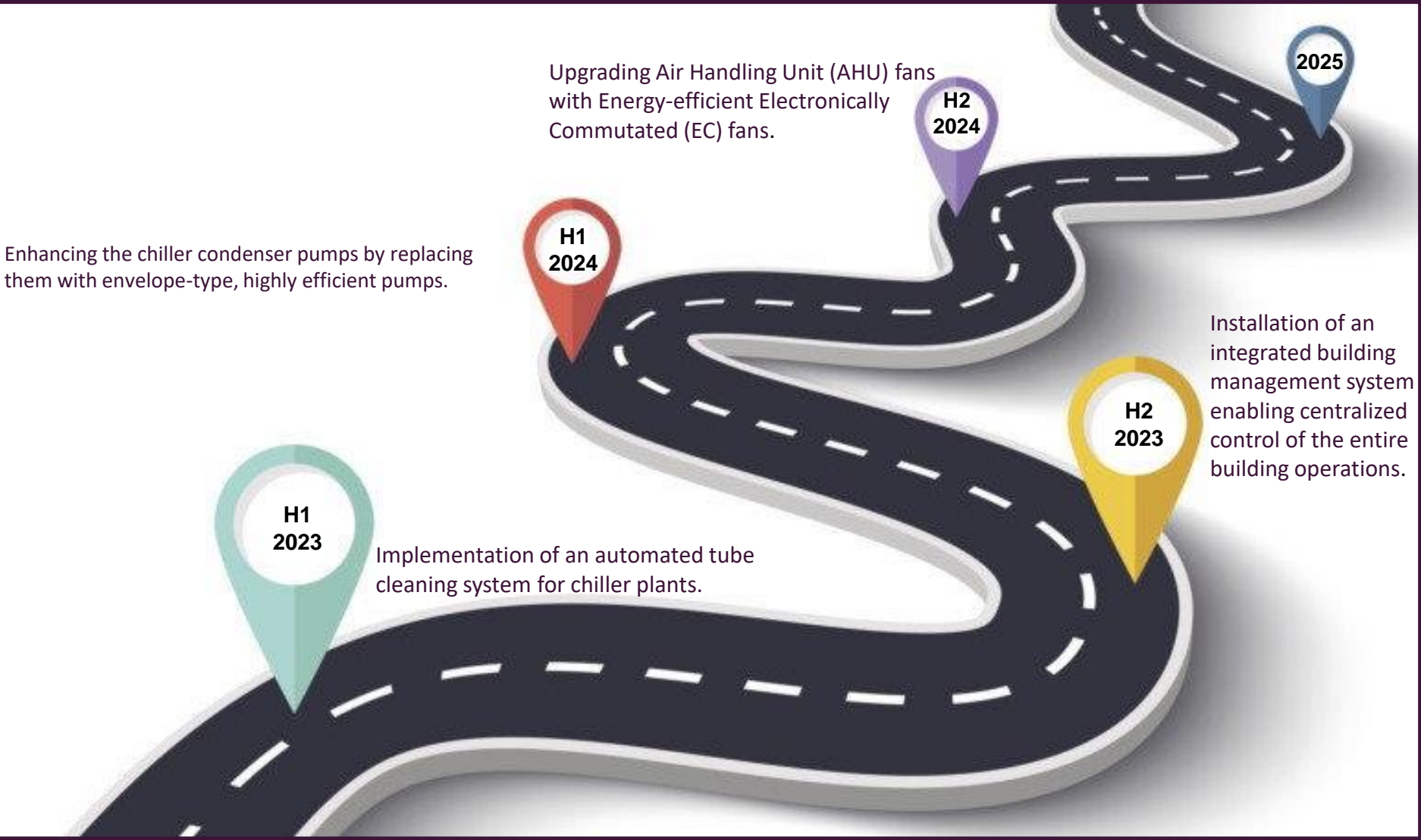
ENERGY PERFORMANCE VS GLOBAL, NATIONAL & COMPETITION BENCHMARK IN KWH			
Global Benchmark According to the SUSBUILD Handbook	Global Benchmark According to the ECS case study in Sweden	BEE National Benchmark (Composite)	Nexus Elante
500	350	327	272

ENERGY PERFORMANCE VS GLOBAL, NATIONAL & COMPETITION BENCHMARK IN KWH



- The Global Benchmark According to the SUSBUILD Handbook sets the energy consumption at 500 kWh per square meter. [wp_2_2_1_energy_management-1.pdf \(switch-asia.eu\)](#)
- The global benchmark, as defined by the ECS case study in Sweden (ECS 244th Meeting report), sets the energy consumption at 350 kWh per square meter. [Microsoft Word - articletemplate ICRMBEE2021 \(iop.org\)](#)
- The BEE National benchmark for Malls in composite weather conditions is established at 327 kWh per square meter. [Slide 1 \(beeindia.gov.in\)](#)
- Nexus Elante Mall's specific Energy Consumption is measured at 272 kWh per square meter.
- Nexus Elante's **Specific Energy Consumption of 272 kWh** per square meter is **notably 45% below the global benchmark and 19% below the BEE National benchmark.**

ROADMAP FOR BEING A GLOBAL LEADER IN ENERGY EFFICIENCY



- Enhancing the cooling tower fans by replacing them with EC fans
- Installation of UF (Ultrafiltration) system in STP.
- Create Real-Time emission monitoring dashboard

SUMMARY OF PROJECTS IMPLEMENTED IN LAST THREE YEARS

Summary Of Projects Implemented In Last Three Years					
FY	No. of Energy Saving Projects	Investments (INR Million)	Electrical Savings (Million kWh)	Thermal Savings Million Kcal/MTOE)	Savings (INR Million)
21	2	26.18	1.34	0.046	6.55
22	3	0.65	0.18	0	5.83
23	4	1.70	0.31	0.026	4.6

Project details implemented.

FY 2020-21:

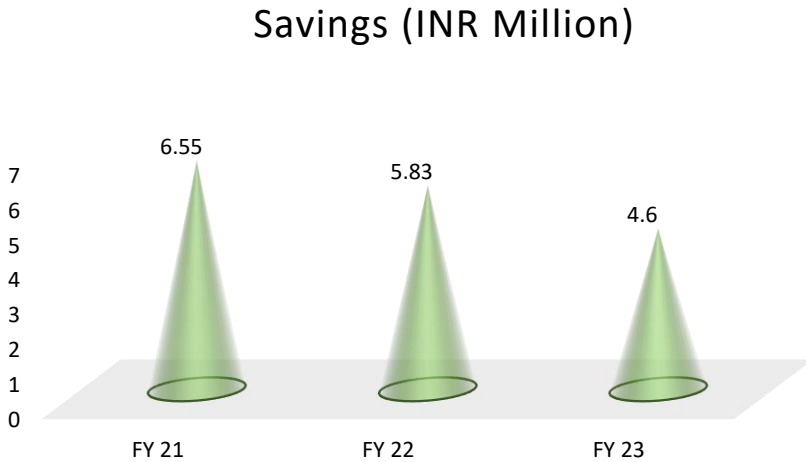
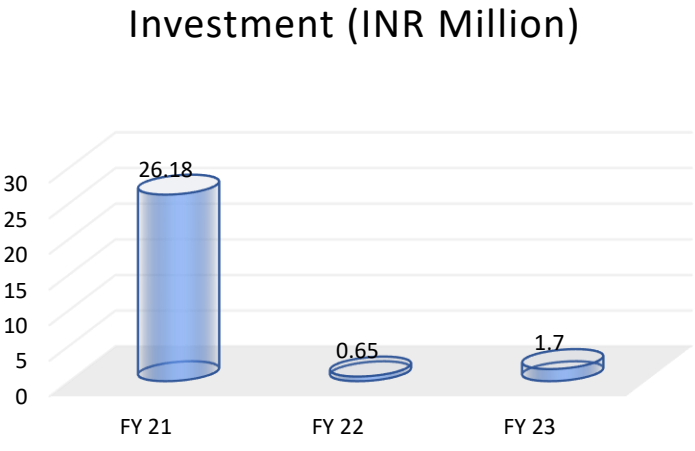
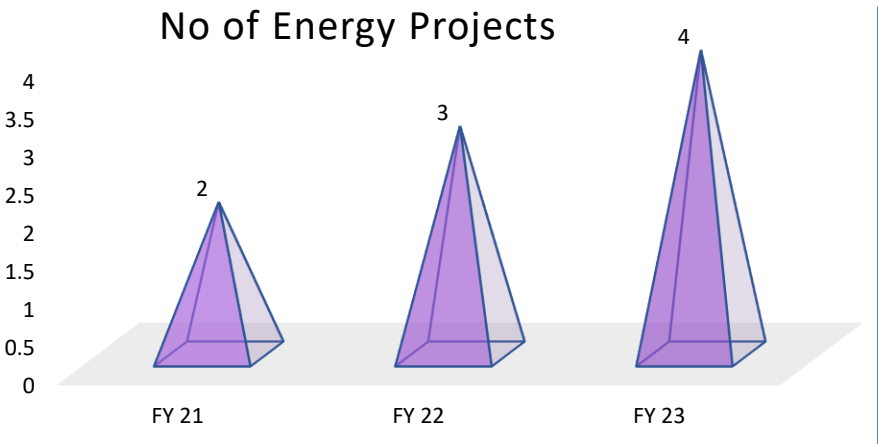
- Implementation of Solar Reflectance Index (SRI) coating.
- Replacement of conventional lights with LED lights.

FY 2021-22:

- Installation of motion sensors.
- Incorporation of photocell sensors.
- Installation of chiller Uninterruptible Power Supplies (UPS).

FY 2022-23:

- Deployment of DG synchronization panel.
- Integration of Reverse Osmosis (RO) reject system.
- Introduction of a Terracotta pre-cooling system.
- Rainwater Collection and utilization



INNOVATION AND SUSTAINABLE INITIATIVES



LIST OF INNOVATIVE AND SUSTAINABLE INITIATIVES.

Terra-cotta System

Industry's first improvisation & implementation of terra cotta system

Rainwater Filtration and Collection

Industry's first rainwater filtration and collection in tanks for reuse.

SRI

Implementation of Solar Reflectance Index (SRI) coating

In House Solutions

In-house designing of obsolete parts such DG NIC Magnetic Coil, adaptors for signages, escalator belt safety cover, etc

Sensor Implementation

Installation of motion sensors and Incorporation of photocell sensors with outer periphery lights

Engineering Studio and R&D Centre

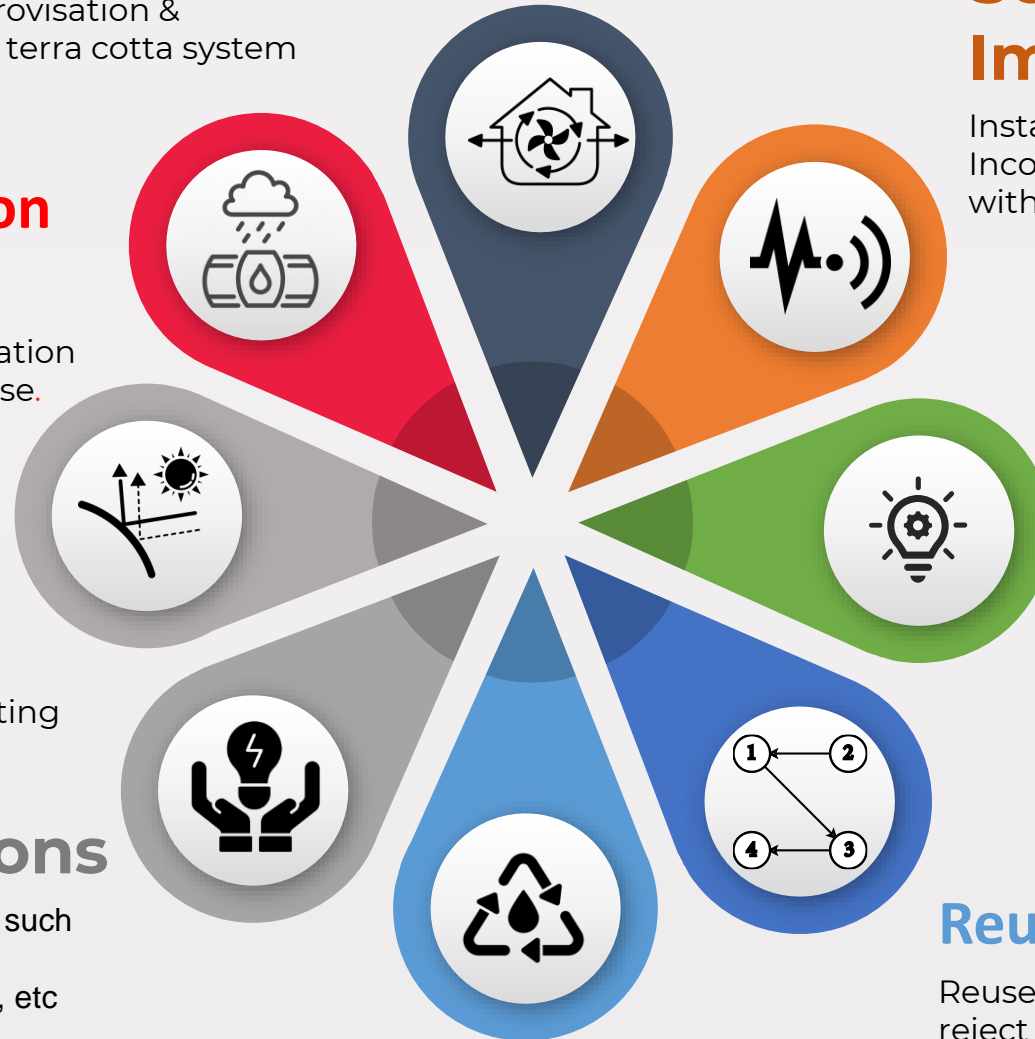
In-house Engineering Studio and R&D Centre to encourage innovation and create out of the box solutions

DG Synchronisation

Installation of DG synchronization panel to sync the load.

Reutilisation of RO Reject

Reuse of Reverse Osmosis (RO) reject system



INDUSTRY'S FIRST IMPLEMENTATION OF TERRACOTTA SYSTEM



Atmospheric air Temperature was 36.2°C at the time of the temperature reading.



Air temperature post-TC wind tunnel 22.5 °C at the time of temperature reading

Innovation: Terracotta Wind Tunnel at Nexus Elante:

- Introduction of an innovative Terracotta Wind Tunnel at Nexus Elante.
- The project addresses cooling challenges in an efficient and unique manner.

Functional Overview:

- Implementation of 10 Nos. Treated Fresh Air (TFA) units, each with a capacity of 2.5 lakhs CFM.
- TFAs are responsible for cooling atmospheric air using chilled water, providing cool air within the mall.
- High atmospheric temperatures during peak summer, reaching up to 48°C, lead to excessive cooling energy consumption.

Innovative Solution: Pre-Cooling with Terracotta:

- Initiative to pre-cool atmospheric air to alleviate heat load on chilled water supply and enhance TFA performance.
- Creation of a terracotta wind tunnel designed for pre-cooling purposes.
- Rigorous on-site testing of multiple terracotta pipe samples for optimal performance.
- After a month-long design refinement, the final terracotta wind tunnel design was established.

Positive Outcome: Effective Temperature Reduction:

- Application of the terracotta wind tunnel resulted in a significant reduction of up to 14°C in atmospheric air temperature.
- Thermal temperature meter photos (before and after pre-cooling) provide visual evidence of the success.

Enhanced Comfort and Efficiency:

- The innovation not only curbs cooling energy consumption but also contributes to maintaining mall and retailer store temperatures.
- Ultimately enhances customer comfort while improving overall energy efficiency.

Documentation and Progress:

- Sharing design details and raw terracotta images to provide insight into the development process.

RAW TERRACOTTA DESIGN FINALISATION AT POTTERY



Drying & Firing of terracotta pipes at pottery



Terracotta pipe length is 300 MM



Front 100 MM



Front 50MM



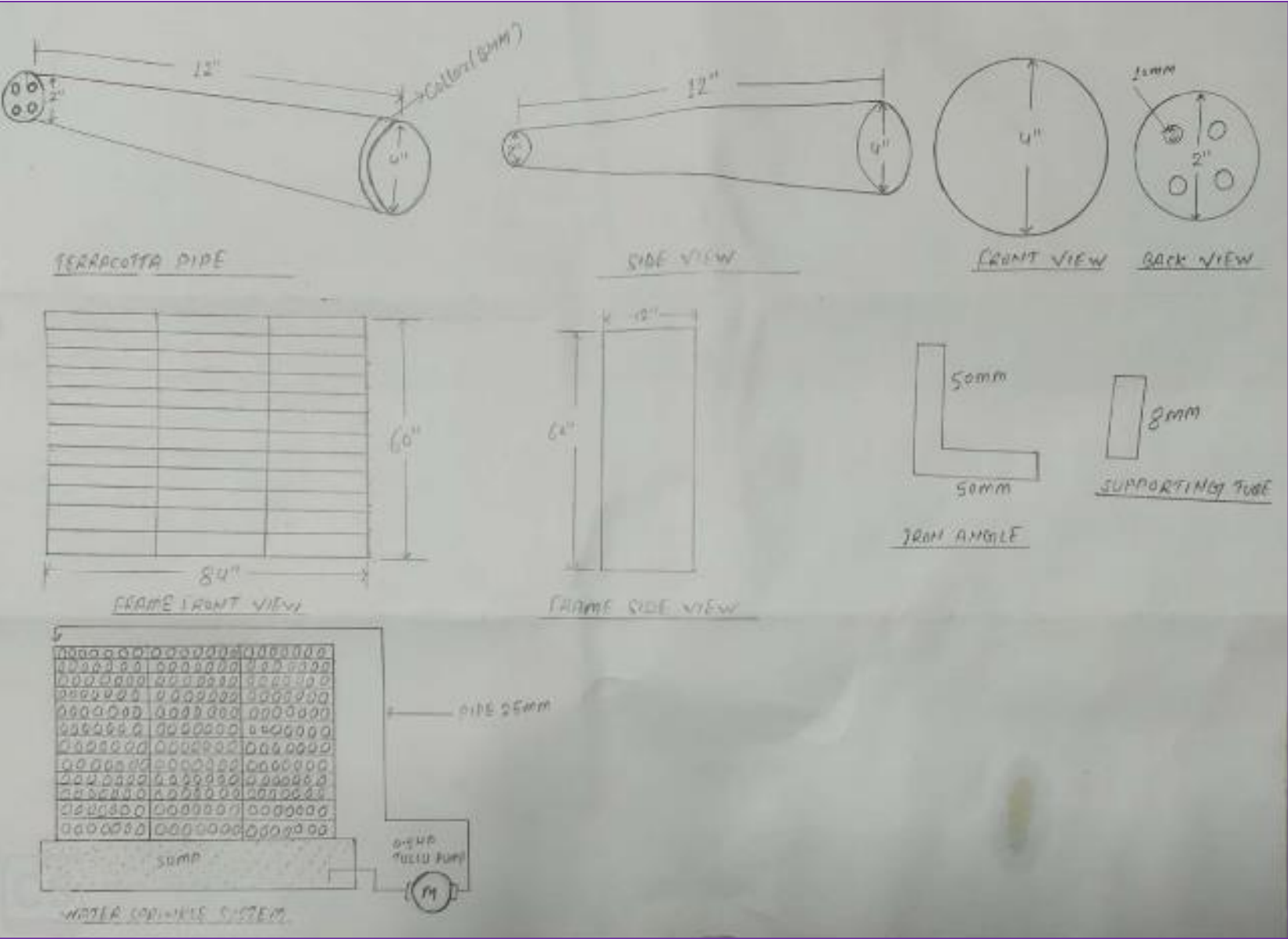
Collar 8 MM



Remarks :

We have carefully conducted experiments and meticulously refined the design. We have created four openings at the end of the terracotta pipe to facilitate the passage of narrow streams of air, thereby aiding in the reduction of air temperature. Additionally, there is a collar at the front to securely fasten the terracotta pipes to the iron frame.

WHITE PAPER ON TERRACOTTA WIND TUNNEL



INDUSTRY'S FIRST RAINWATER FILTRATION & COLLECTION IN TANKS

Innovative Dual Filtration for Rainwater Collection:

- Introducing our pioneering solution involving dual filtration for collecting rainwater in the RAW water tank.
- Our innovation focuses on securing and reusing rainwater within our building.
- Successful testing of the dual filtration system has been accomplished.

System Implementation and Testing:

- The system has been implemented for rainwater collection from our office block's 6038 sq. meter roof area.
- Utilizes two 8" diameter stormwater lines for effective collection.
- Installation of the filtration system has been completed, and it has undergone successful testing.

Quantifiable Conservation Impact:

- Our annual water conservation efforts are projected to save 4,981,350 liters.
- Calculation based on the formula: Annual rainfall (mm) x Area (m²) x Runoff factor = Collected rainwater (liters).
- The calculation yields 4,981,350 liters of rainwater collected annually: (1100.7 mm x 6038 x 0.75) = 4,981,350 liters.

Regarding the issue of ground table charging, it's worth noting that we have a significant amount of open surface area available for collecting rainwater within the harvesting pits

Rainwater Filtration System With Two Layers



Primary Filter With Size Of 1500 Microns



A visual representation of the system is depicted in the graphic below



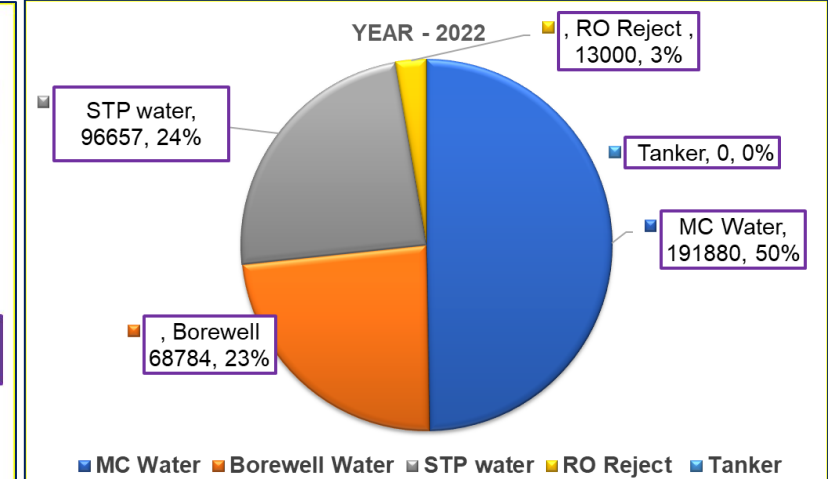
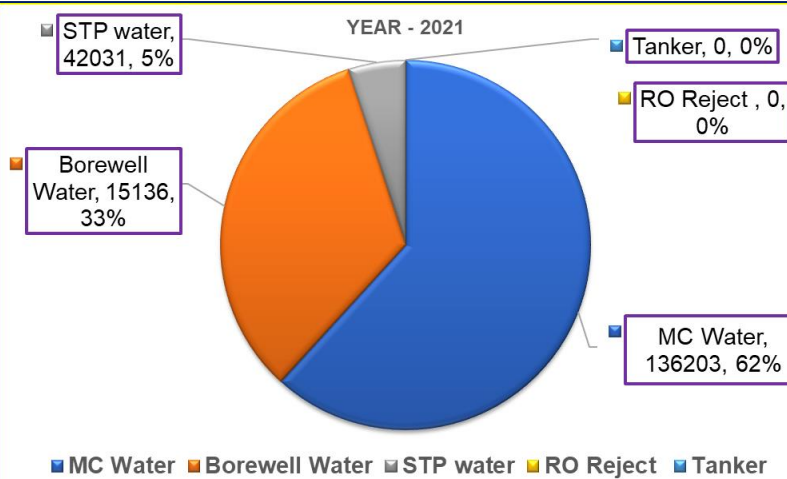
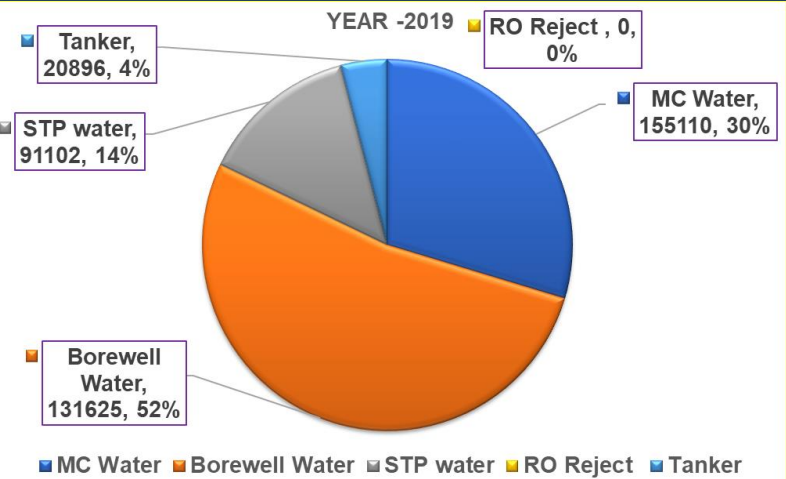
Secondary Filter With Size of 500 Microns



INDUSTRY’S FIRST UTILIZATION OF RO REJECT WATER

Nexus Elante Water Consumptions/Generation Analysis in KL "FY 2019, 2021 vs 2022"

NEXUS ELANTE WATER CONSUMPTIONS/GENERATION ANALYSIS IN KL "FY 2019, 2021 vs 2022"							
FY	MC Water	Borewell Water	STP water	RO Reject	Tanker	Total in KL	Occupancy in %
2019-20	1,55,110	1,31,625	91,102	-	20,896	3,98,733	93%
2021-22	1,36,230	15,137	42,031	-	-	1,93,398	94%
2022-23	1,91,880	68,784	96,657	13,000	-	3,70,321	100%



INITIATIVES FOR WATER CONSERVATION

1. Utilization of RO reject water - 13000 KL.
2. Conserved 28,412 KL compared to the year 2019 – overall conservation
3. Use 100% recycled water in flushing, horticulture and HVAC cooling towers.
4. Improve treated water quality and keep close monitoring resulting in zero breakdown in STP Since January 2022
5. We have optimized outsourced water tankers. Which was used in the year 2019. In the year 2019, 20,896 KL water was ordered to maintain the Mall operations requirement in terms of costing 22,98,560/- rupees.
As water per litter cost was 0.11 paisa. Hence, in the year 2022, we have not ordered any tanker water and saved 22.98 Lakhs.

UTILIZATION OF RO REJECT WATER

RO Reject Water Spillage At Terrace



Before



After

- We noticed that RO reject water was causing damage to the terrace and roof structure.
- To address this issue, we installed a PVC pipeline on the terrace and connected the RO drainpipe to it. We began collecting tenant's RO reject water, AHUs condensation water, and tank overflow water. This collected water is then blended with our underground raw water tanks.
- The volume of collected water represents 4%-5% of our total municipal corporation water usage and is replenished daily.
- We conducted tests for TDS, pH, and total hardness, and all three parameters meet Indian Standards and WHO guidelines.
- Our daily water consumption, which includes both the office block and hotel block, ranges from 1000 to 1200 KL. Approximately 70% of this water comes from the municipal corporation, while the remaining water needs are met through the STP for gardening and flushing.
- The municipal corporation sources its water from the Bhakra dam, ensuring well-balanced water parameters, which makes it feasible for us to reuse the RO reject water.
- We diligently record daily readings of the rejected water's TDS, pH, and total hardness parameters.

NABL Lab test report



pH Value	7.9
----------	-----

TDS 335

Total Hardness	174.9
----------------	-------

E. Coli	Absent
---------	--------

Total Coliform Bacteria	Absent
-------------------------	--------

1. Reject water parameters were tested by a NABL-certified lab, and the results are completely within control.
2. Tangible benefits realized through the collection of tenant's RO reject, AHUs condensation water, and tank overflow.
 - In 2022, we collected 13,000 KL of reject water, resulting in a cost savings of 14.30 Lakhs, we used to purchase water from the supplier at 0.11 paise per liter.
 - We achieved cost savings on our water bill.
 - Energy conservation was achieved by reducing borewell operations.
3. The continuous flow of reject water into the harvesting pits throughout the year had previously hindered effective pit maintenance. With this issue resolved, we can now improve harvesting pit efficiency and carry out proper maintenance.

DG SYNCHRONIZATION PANEL INSTALLED



Remarks :

- We own a total of 9 DG sets: 4 for Malls and 5 for HVAC, Office Building, and Hyatt operations.
- In the event of power failure, separate DG sets were previously run for Malls and HVAC + OB + Hyatt operations, leading to increased diesel consumption.
- After synchronization, a maximum of 6 DG sets can now be run collectively from 2 SG sets, resulting in reduced diesel consumption, approximately 1,000 Liters per hour at a cost of Rs. 114 per liter.
- With all gen-sets synchronized, up to 6 engines can run, and during peak loads, 7 engines can operate. This change saves around 1000 liters of fuel per hour, amounting to approximately INR 1,14,000.
- The installation of synchronization panels led to significant savings, notably 20,000 liters of High-Speed Diesel (HSD), equating to INR 22,80,000.

MOTION & PHOTOCELL SENSOR INSTALLATION COST & ROI CALCULATION

Installation of Motion Sensor in Basements and Staircases					
Sl. No	Descriptions	UOM	Qty	Each Sensor Cost In INR	Amount
1	Installation of Photocell sensor	Nos	500	275	1,37,500
2	ROI Calculations				
2.1	Total LED batten Lights installed In basement & ST	Nos	4,500		
2.2	LED batten lights wattage	Watt	20		
2.3	No of Hours operational	Hours	18		
2.4	Per day Cons in KWH	KWH	1,620		
2.5	Year Cons in KWH	KWH	5,91,300		
2.6	60% Lights will be operational on Motion sensor including staircases.		3,54,780		
2.7	Considering 50% diversity on sensor-based lights on operations of 60% lights. As these lights will operations while any movement occurred.	50%	1,77,390	486	27
2.8	Unit Rate @5.08/ per Unit				9,01,141
2.9	Yearly cost saving				9,01,141
2.1.1	ROI in days				56
3	Reducing yearly Co2 w.r.t Coal Fire power generation (ton CO2e)				177

Installation of Photocell Sensor for Terrace and outer Periphery					
Sl. No	Descriptions	UOM	Qty	Each Sensor Cost In INR	Amount
1	Installation of Photocell sensor	Nos	10	150	1,500
2	ROI Calculations				
2.1	Total External Lighting DB	Nos	10		
2.2	No of Manhours required for Switching on the lighting (2 electricians for approx. 1 hours)	Hours	2	203	203
2.3	Monthly Saving of Manhours 60 Hours	Hours	60	203	12,180
2.4	Yearly saving on Manhours	Hours	720	203	1,46,160
2.5	ROI in days				7



Motion Sensors



Photocell Sensors

- 100% LED lights throughout the property operated via motion sensors, photocell sensors, and timers
- Saving of ~720 hours of manpower and 6Lac units annually

IN-HOUSE REPAIRING OF OBSOLETE SIGNAGE ADAPTOR



Conclusion :

Adaptor Availability and Operational Issues:

- Adaptors' scarcity highlighted by PAN MEDIA; took over 6 weeks for delivery from Mumbai.
- Operational complaints due to signage issues arose during the waiting period.

Identifying Adaptor Damage: Examination of a malfunctioning adaptor revealed a burnt 16V 2200 MFD capacitor.

- Efforts made to source locally resulted in locating identical capacitors.
- Replacement of the damaged capacitors, each costing INR 10/-, led to full functionality.

Cost-effective Solution:

- Instead of purchasing new adaptors (INR 3000/- each), repairing with capacitors proved highly economical.
- A total of 31 capacitors were replaced, resulting in substantial savings.

Intangible Benefits:

•Skill Enhancement:

- In-house team trained for repair work.

•**Self-Confidence:** Team empowered to optimize and reduce future costs.

•**Resource Optimization:** Efficient utilization of available human resources.

These initiatives not only resolved operational issues promptly but also provided intangible advantages by improving team skills, confidence, and resource management.

IN-HOUSE REPAIRING OF OBSOLETE SIGNAGE ADAPTOR

05 Nos DG Sets coolant hosepipes were leaking due to ageing effect



Explored local market and got same specifications hose pipes at a very economical price



Conclusion :

DG Sets Coolant Hose Pipe Replacement:

- Deterioration of 05 DG sets' coolant hose pipes due to aging, leading to leaks.
- OEM inspection advised hosepipe replacement, quoting 1.05 lakhs per DG set.

Cost-effective Solution:

Exploring alternatives, we identified a hosepipe manufacturer in Chandigarh. Shared detailed specifications, resulting in the fabrication of matching hosepipes at INR 6500/- per DG set.

In-house Installation:

- The in-house team managed hosepipe installation, ensuring satisfactory functioning.

Intangible Gains:

Skill Enhancement: In-house team trained for hosepipe replacement.

Self-Confidence: Increased confidence to optimize and save costs in future tasks.

Resource Utilization: Efficient utilization of available human resources.

This approach not only led to significant cost savings but also provided intangible benefits, including skill development, enhanced confidence, and optimal resource management.

Supply of Intake Hoses & Indicator Offer required for 2000 KVA MTU DG set. (DG No-1)										
Sterling Generators Pvt. Ltd.										
Batra House, Plot No. 52, Sec-32, Gurgaon-122001 Landmark : Near Medanta Hospital GSTIN: 06AACCS2107H125 Mail ID -inderjeet.kaur@sterlingwilson.com Contact No.+91 8527971115										
Ref. No. SGPL/SP/13198/22-23										
To, M/S: CSJ INFRASTRUCTURE PVT.LTD PLOT NO- 178-178/A, INDUSTRIAL AREA, CHANDIGARH-160002 GSTIN-06AACCC8031G125										
Kind Attn. : Mr. Jamil Akhtar										
Date: 19/07/2022										
S No.	Part No.	Description	HSN/SAC Code	Unit Price	Qty	Unit	Sub Total	IGST (%)	IGST Amount	Total Amount
SPARE PARTS										
1	X52701800011	Intake Hose	40169320	22,070.50	1	No.	22,070.50	18	3,972.69	26,043.19
2	X52701800010	Intake Hose	40169320	23,356.80	1	No.	23,356.80	18	4,204.22	27,561.02
3	3849977152	Intake Hose (384970682)	40169320	13,671.00	1	No.	13,671.00	18	2,460.78	16,131.78
4	X00001523	Intake Hose	40169320	14,212.80	1	No.	14,212.80	18	2,558.30	16,771.10
5	0000943268	Indicator Air Filter Restrictor	84099990	11,623.25	1	No.	11,623.25	28	3,254.51	14,877.76
Sub Total							84,934.35		16,450.51	1,01,384.86
Packing Charges @2%							1,698.69	18	305.76	2,004.45
Freight Charges							1,500.00	18	270.00	1,770.00
Total Amount of Parts							88,133.04		17,026.27	1,05,159.31
Rounded Off										0.31
Grand Total										1,05,159.00

IN-HOUSE CREATION OF BELT SAFETY COVER GLASS BRACKET FOR ESCALATORS



Utilized Metal Sheet & Fabricated Belt Safety Cover Glass Bracket By In House Team



Conclusion :

Challenging Timeline and Innovative Solution:

OEM ("Otis") indicated a delivery timeline of more than 4 weeks for brackets needed for the Uniqlo escalators.

Due to impending escalator handover deadlines, internal discussions were initiated.

•In-house Initiative:

- Internal collaboration led to motivating the team to find an alternative approach.
- Utilizing on-site scrap materials, the team undertook the task with only 2 members.

Skill Development and Resource Efficiency:

Skill Enhancement: In-house team underwent training for this specific task.

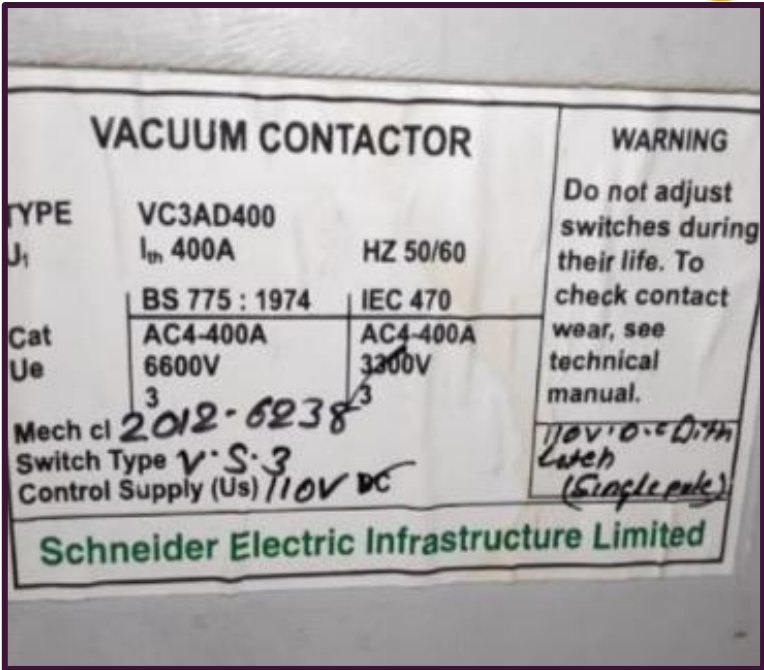
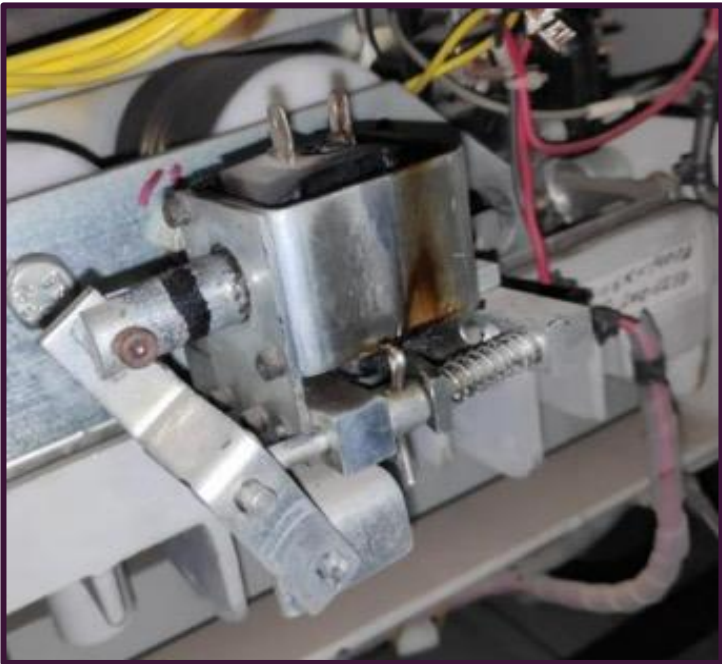
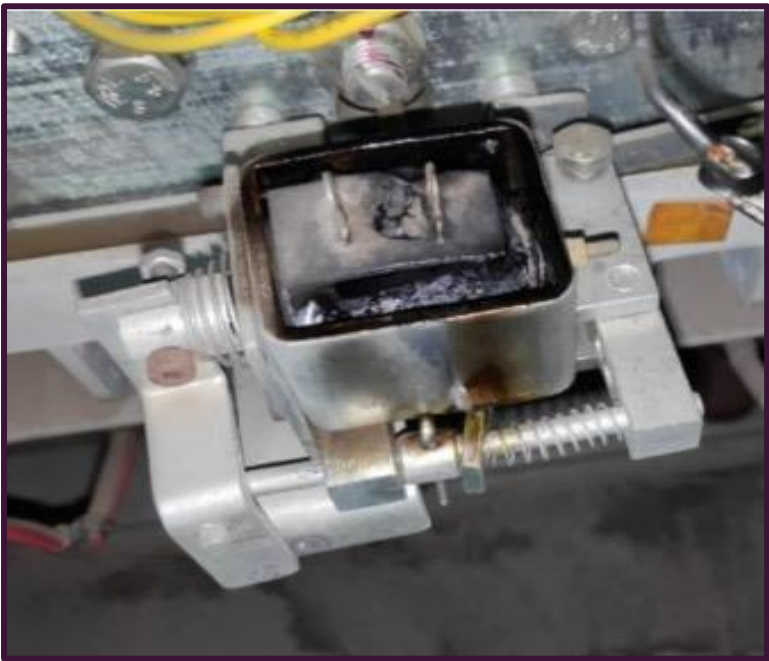
Self-Confidence: Enhanced confidence for future cost-saving endeavors.

Resource Optimization: Efficient utilization of available manpower resources.

This solution not only ensured the timely completion of the escalator project but also yielded intangible benefits, including skill enhancement, increased confidence, and better utilization of human resources.

IN-HOUSE REPAIRING OF OBSOLETE MAGNETIC COIL OF NIC

BURNT 'TRIPPING & CLOSING' MAGNETIC COIL



NIC (Neutral Isolating Contractor) units, were experiencing issues with their magnetic coils, rendering them unable to operate independently. This posed a significant challenge as it restricted our ability to utilize these DG sets during periods of low demand, and it also impeded our ability to synchronize them for joint operation.

In response to this problem, we contacted the OEM (Original Equipment Manufacturer), "Sterling," to assess and rectify the situation. Their report indicated that the release coils in question were obsolete and no longer available in the market due to their aging and outdated model.

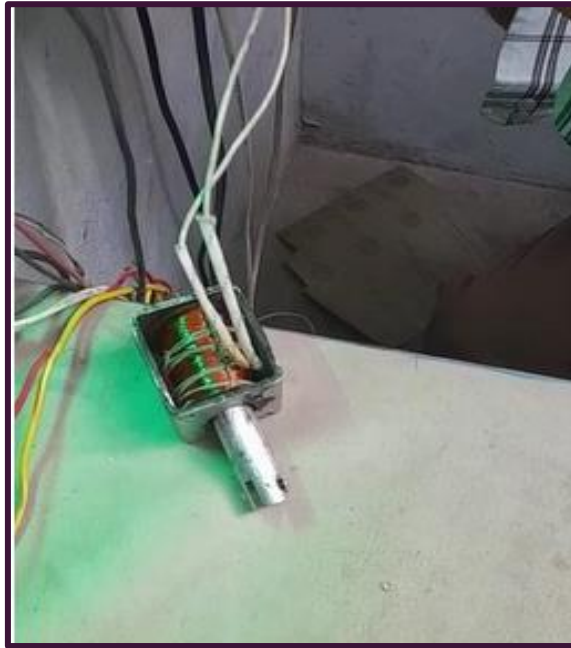
IDENTIFICATION & RECTIFICATION PLAN

Upon closer examination by our in-house team, we found that both release magnetic coils were severely damaged, with their coils sealed with epoxy. After discussing the issue internally during our weekly review meeting, we decided to undertake the repair and rewinding of the magnetic coils using our in-house resources.

We carefully removed the releases from the breakers and transported them to our workshop. There, we heated up the coils and safely dismantled them from their assemblies. After the rewinding process was completed, we reassembled the releases and conducted thorough testing. We confirmed that the releases were functioning as expected and were satisfactory.

Subsequently, we reinstalled the releases in both NIC breakers and conducted individual tests on the DG sets to ensure their proper operation.

REPAIRED TRIPPING / CLOSING MAGNETIC COIL



ON-SITE RENEWAL ENERGY AND CARBON EMISSION DETAILS

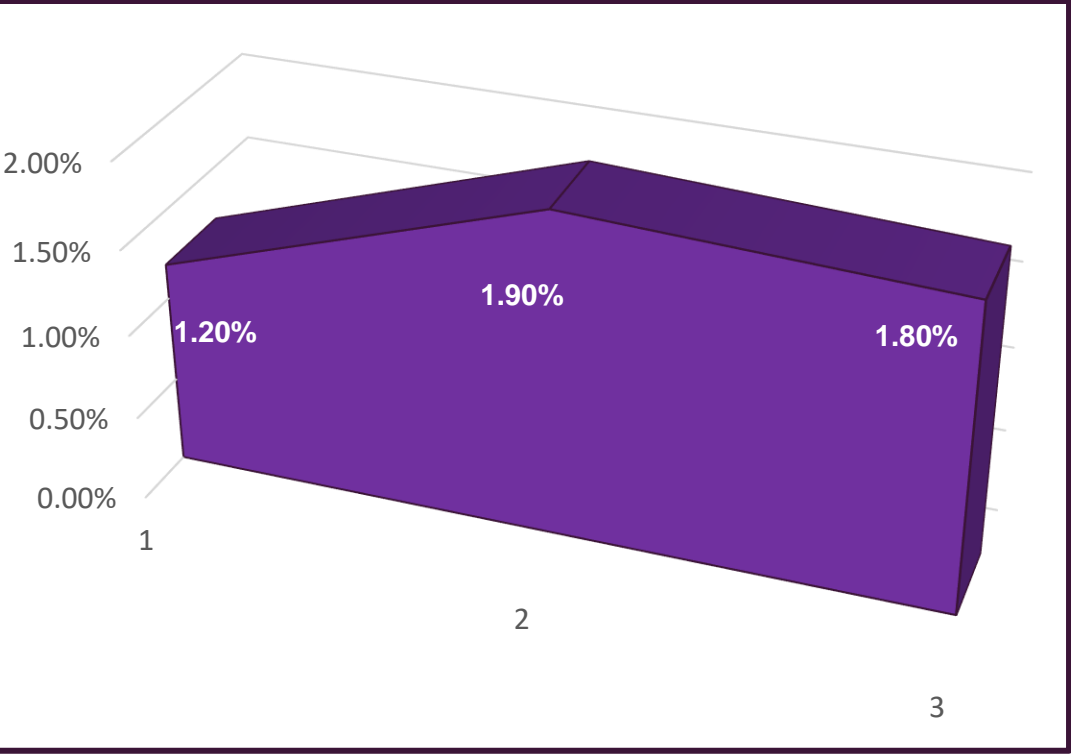


ON-SITE RENEWABLE ENERGY

Year	Technology (Electrical)	Type of Energy	Onsite/Offsite	Installed Capacity (MW)	Generation (Million KWh)	% of overall Electrical Energy
FY 2020-21	Mono PERC	Renewable	On-site	0.450	0.255	1.2%
FY 2021-22					0.242	1.9%
FY 2022-23					0.507	1.8%



UTILIZATION OF RENEWABLE ENERGY SOURCES



GREENHOUSE GAS EMISSION



Scope 1 : Diesel, CO2 fire extinguishers refilling & LPG

Scope 2: Energy Consumption

S. No.	Particulars	Units	FY 20	FY 21	FY 22	FY 23
1	Scope 1 Emissions	TCO2e	31.99	35.53	326.25	89.01
2	Scope 2 Emissions	TCO2e	11565	6760	5875	10367
Total Operational Emissions		TCO2e	11,596.99	6,795.53	6,201.25	10,456.01

S. No.	Particulars	Units	FY 20	FY 21	FY 22	FY 23
A	Emission Intensity as per Footfall	TCO2e/1000 Footfall	0.79	1.04	0.60	0.84
B	Emission Intensity as per Revenue	TCO2e/Million INR	4.95	4.53	3.02	4.28
C	Emission Intensity as per leasable area	TCO2e/100 Sq. Ft.	0.99	0.57	0.52	0.84

Indoor Air Quality								
Parameters	CO2 in PPM	PM 2.5 in µg/M³	PM10 in µg/M³	CO in mg/M³	SO2 in µg/M³	NO2 in µg/M³	O2 in %	NH3 in µg/M³
Results	484	39.4	80.3	0.56	20.3	22.9	19.7	24.3

CERTIFICATIONS



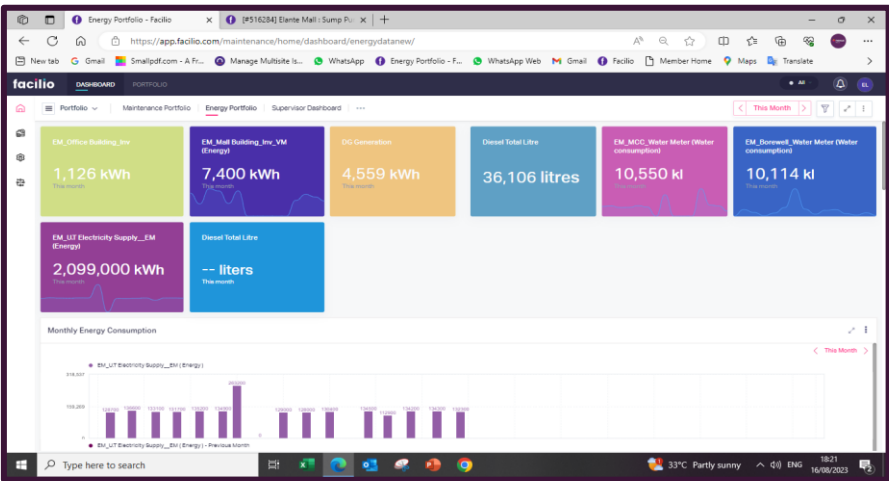
IGBC Platinum Certificate



Trusted Shopping Center Under IRF Trusted Brand Certificate, Audited by Bureau Veritas




Real-Time Monitoring of Energy Management Software




Real-Time Monitoring of Water Management Software



Energy Audit Report



DETAILED
ENERGY AUDIT
REPORT



May-2023

Innovative Energy Conservation Solutions
205, ECO TOWERS, SHIVALIK ENCLAVE SECTOR 125,
GREATER MOHALI-140301

- ISO 50001 Implementation:
- Ongoing efforts to implement ISO 50001 energy management standards.
 - Energy audit conducted by TP (Third Party) to assess energy usage.
 - Received intelligent energy solution recommendations from TP's report (screenshot attached).

ROAD MAP FOR ACHIEVING CARBON NEUTRALITY

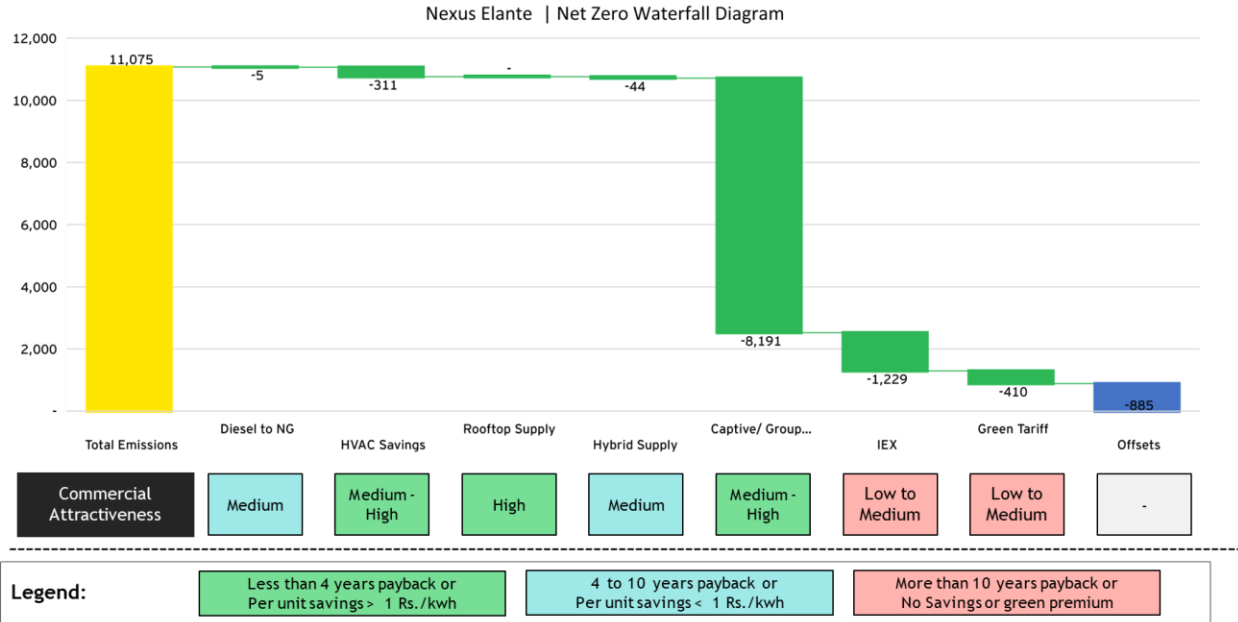
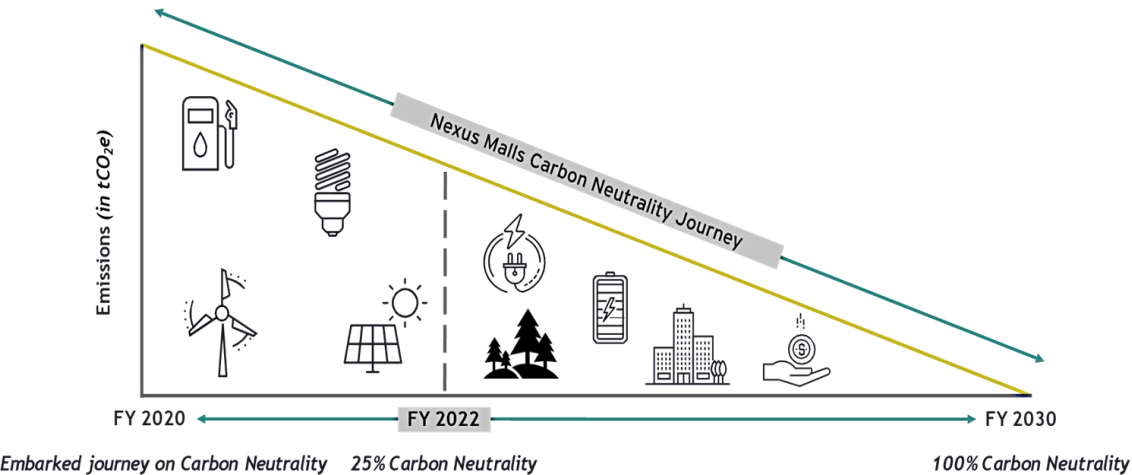


Entity	Baseline Year	Baseline Emissions (tCO2e)	Target Year	Current Emissions FY23(tCO2e)	Current Progress in FY23
Nexus Select Trust	2019-20	69,276.51	2029-30	60,341.32	-12.90%
Nexus Elante	2019-20	11,596.99	2029-30	10,456.01	-9.94%

For Nexus Elante, we have to shake hands with technology and initiate multiple initiatives to optimize energy and water conservation. Compared to our baseline, we are able to reduce carbon emissions by 9.94% and further, and we will follow the SBTi (science-based target initiative) approach to meet the goal.

Waterfall Diagram Nexus Elante

Proposed Carbon Neutrality Roadmap Overview

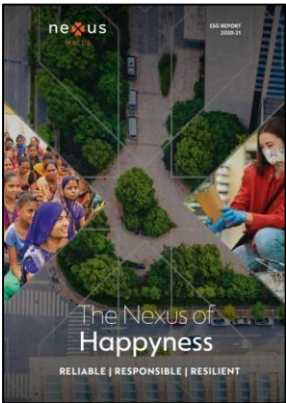


CARBON NEUTRALITY ACTION PLAN

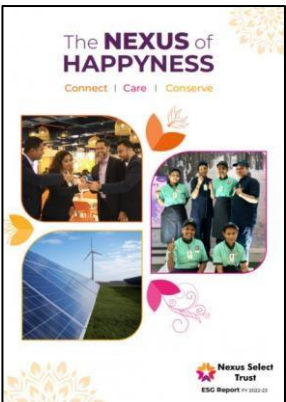


Public Disclosure

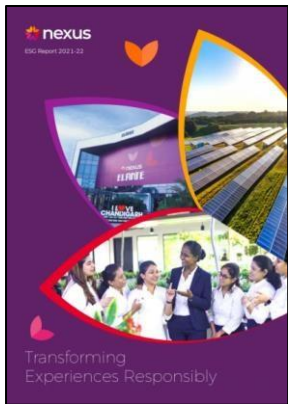
Nexus has published 3 ESG Reports



ESG Report FY 20-21



ESG Report FY 22-23



ESG Report FY 21-22



Target Year 2030

Nexus commitment for Net Zero

From a long-term perspective, our goal is to achieve carbon neutrality (Scope 1 and Scope 2) for our operational assets by 2030.

We have developed a comprehensive ESG strategy and decarbonization roadmap to positively impact our stakeholders, environment, and the larger ecosystem. Our six strategic pillars have multiple focus areas, defined KPIs, targets, and implementation plans.

Signatories



We have become a signatory to the India Business & Biodiversity Initiative, strengthening our commitment to preserving biodiversity.



We have joined The Task Force of Climate Related Financial Disclosures (TCFD). We ensure that our climate-related disclosures are consistent with the TCFD guidelines.



We have become a member of UNGC (United Nations Global Compact), committing to the corporate responsibility initiative and embracing UNGC's principles of upholding human and labour rights, protecting the environment, and implementing anti-corruption practices.



We have adopted the WASH pledge developed by the World Business Council for Sustainable Development and its member companies to increase access to safe Water, Sanitation, and Hygiene.

CARBON NEUTRALITY WAY FORWARD



Evaluate Innovative onsite RE Solar Hybrids for implementation

Create Real-Time emission monitoring dashboard



Commit to global target setting approaches such as SBTi targets, RE 100 and so forth



Explore fuel shift solution towards Natural Gas/ Bio CNG from Diesel usage in DG sets.



Engage with RE developers to explore alternative modes of RE procurement via Interstate RE Transactions / Virtual PPAs

Keep a tab on RE Regulatory developments to support change advocacy on state specific Green Open Access



AWARDS AND RECOGNITION OF NEXUS



Won 10 awards including “The Most Admired Centre’ of the Year



Recognised as ‘The Economic Times Best Organisation for Women 2023’



Great Place to Work- Certified™ for the third year in a row



Awarded Best Workplaces for Women in 2022

S&P Dow Jones Indices

A Division of **S&P Global**

Overall Score



We scored 61 in our first DJSI (Dow Jones Sustainability Indices) assessment, putting us in the 94th percentile among the 523 companies assessed.

Environment



Nexus 64 | Industry Mean 23 | Industry Best 98

Social

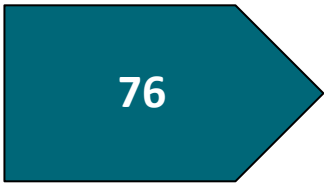


Nexus 68 | Industry Mean 21 | Industry Best 87

Governance



Nexus 46 | Industry Mean 28 | Industry Best 87



Our first-time participation in the Global Real Estate Sustainability Benchmark (GRESB) exercise earned us a score of 76 with a 3-star green rating



CUSTOMER, RETAILER AND EMPLOYEE FRIENDLY SERVICES AT THE MALL



Temperature Sensor Installed For Monitoring



Fully Accessible Mall For Specially Abled Patrons



Installed CO Sensors In The Basement And AHU Room



Dedicated Parking For Specially Abled



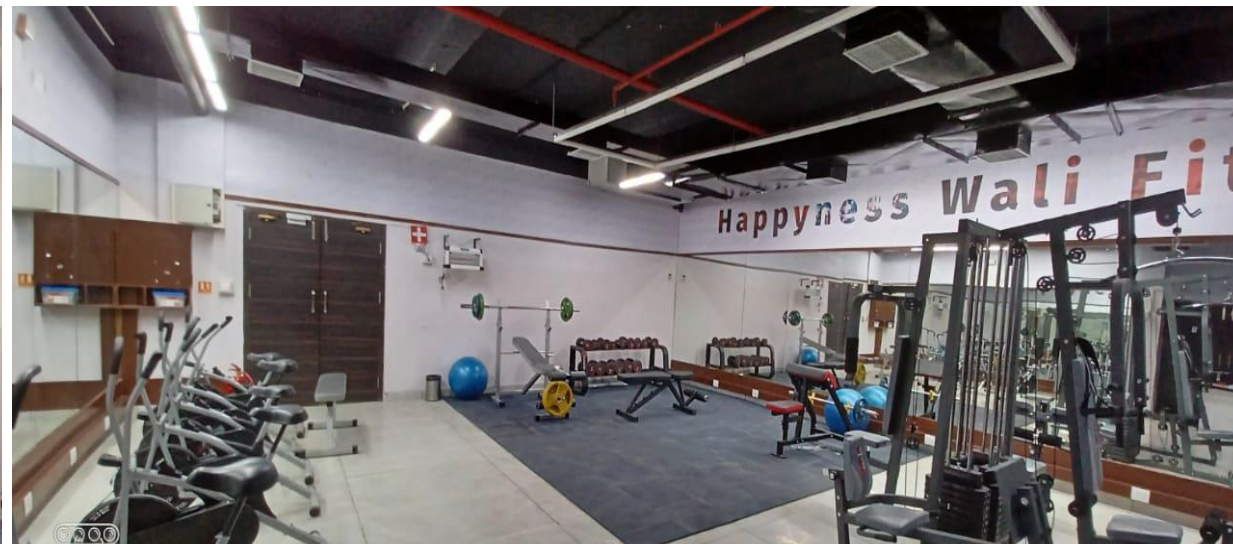
Learning Centre For Mall & Retail Employees



Recreation Centre for Employees



Learning Centre for Mall, Retail and Agency Employees



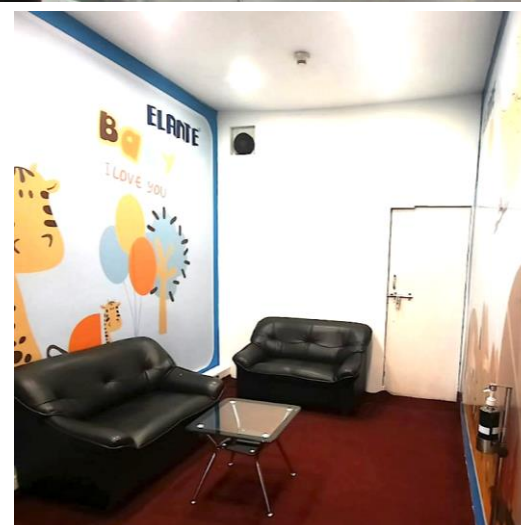
Fitness Centre for Employees



Wheelchair & Porter Service



Family Washroom



Baby Care Rooms



Crèche For Employees' Kids



Women Protection Cell



Sanitary Pad Dispensers In All Female Washrooms



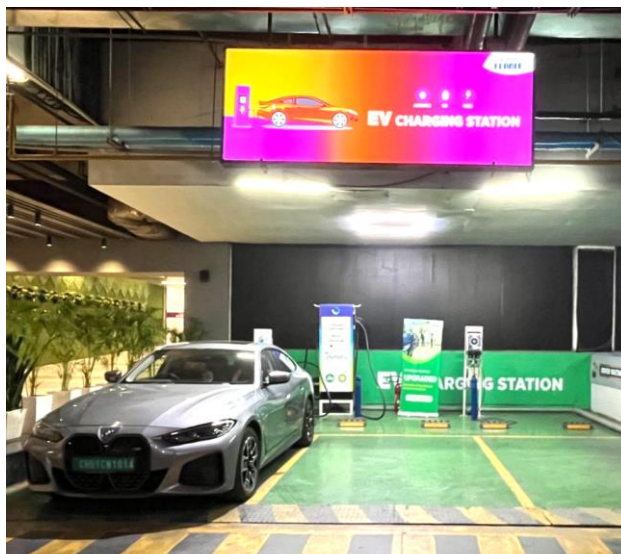
Plastic Bottle Crusher



Mobile Charging Stations



Dedicated Women Parking



EV Charging Stations



Dedicated Parking For Senior Citizen and Specially Abled



Braille Lift Call Buttons

Women Protection Cell	Privileged Parking For Women	Medical Room	Dedicated Parking For Senior Citizens & Differently Abled	EV Charging Station	Lost & Found Assistance
ATM	Tailoring Services	Umbrella Wrapping Machine	Wheelchairs	Drinking Water	Sanitary Vending Machines
Elante Day Care	Baby Care	Kids Tagging	Family Washroom	Driver Waiting Area	Valet Parking
Trolley Docking Station	Baggage Counter	Dry Car Wash	Helmet Counter	Porter Services	Mobile Charging Station
Free Wi-fi	Plastic Bottle Crushing	Organic Waste Compost Machine	Learning Centre	Fitness Centre	Air Purifiers In Mall Common Areas
Braille Friendly Lifts	One Time Plastic Free	Nexus Elante App	100% Specially Abled Friendly	Art Gallery	Horticulture Nursery

HEALTH AND COMFORT

Housekeeping green chemicals



Fully Automatic Organic Waste Composter Machine



MSDS

SealedAir
Diversity Care

MATERIAL SAFETY DATA SHEET

Page 1 of 4
Date of issue : July 2016
Date of revision : July 2016

FOR EMERGENCY AND GENERAL INFORMATION
SealedAir India Pvt. Ltd. 301, 3/9 Floor, Adarsh Centre Prime,
MIDC Chhatrapati, Andheri (East), Mumbai - 400033, INDIA
Tel: +91 22 66464222 Fax: +91 22 66464223

TOLL FREE HELPLINE : 1800 209 2939

SECTION 1 - PRODUCT IDENTIFICATION
Product Name : Alpha-HF® Multi-Surface Cleaner
Application of the product: Cleaning product. This product is intended to be diluted prior to use.

SECTION 2 - HAZARDS IDENTIFICATION
Emergency Overview: CAUTION: CAUSES EYE IRRITATION, MAY BE MILDLY IRRITATING TO SKIN.
Principal routes of exposure : Eye contact, Skin contact, Inhalation.
Eye contact : Moderately irritating to the eyes.
Skin contact : May be mildly irritating to skin.
Inhalation : None known.
Ingestion : May cause irritation to mouth, throat and stomach.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS
CAS Ingredients Weight% LD50 Oral - Rat mg/kg LD50 Dermal - Rabbit mg/kg LC50 Inhalation - Rat 2 mg/L (4 h)

7722-84-1 Hydrogen peroxide 1 - 5% 801 2000 mg/kg 2 mg/L (4 h)

SECTION 4 - FIRST AID MEASURES
Inhalation: No specific first aid measure required.
Skin contact: Flush immediately with plenty of water. If irritation develops, get medical attention.
Eye contact: Flush immediately with plenty of water. Irritation persists, get medical attention.
Ingestion: If swallowed, give a cupful of water or milk.
Aggravated Medical Conditions: None known.

SECTION 5 - FIRE FIGHTING MEASURES
Suitable extinguishing media : The product is not flammable. Extinguish fire using agent suitable for surrounding fire.
Specific hazards: Decomposition releases oxygen, which may intensify fire.
Unusual hazards: None known.
Specific methods: No special methods required.
Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Extinguishing media which must not be used for safety reasons: No information available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES
Personal precautions: Not relevant for the product itself.
Environmental precautions and clean-up methods : Clean up methods- large spillage: Absorb spill with inert material (eg dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

MSD-001716 (Contd. on page 2)

Diversity

SealedAir
Diversity Care

MATERIAL SAFETY DATA SHEET

Page 2 of 4
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Tel: +91 22 66464222 Fax: +91 22 66464223

TOLL FREE HELPLINE : 1800 209 2939

SECTION 1 - PRODUCT IDENTIFICATION
Product Name : Crest® Bathroom Cleaner And Scale Remover #46
Application of the product: Restroom care. This product is intended to be used as a pre-rinse.

SECTION 2 - HAZARDS IDENTIFICATION
Emergency Overview: CAUTION: CAUSES EYE AND SKIN IRRITATION.
Principal routes of exposure : Eye contact, Skin contact, Inhalation.
Eye contact : Severe eye irritation.
Skin contact : Moderately irritating to the skin.
Inhalation : May be irritating to nose, throat and respiratory tract.
Ingestion : May cause irritation to mouth, throat and stomach.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS
CAS Ingredients Weight% LD50 Oral - Rat mg/kg LD50 Dermal - Rabbit mg/kg LC50 Inhalation - Rat

112-24-5 Dichlorine gas (body water) 10 - 20% 400 2000 mg/kg Not available

SECTION 4 - FIRST AID MEASURES
Inhalation: If breathing is affected, remove to fresh air. Get medical attention.
Skin contact: Flush immediately with plenty of water. If irritation persists, get medical attention.
Eye contact: Flush immediately with plenty of water for at least 15 minutes. Keep eyelids open. Get medical attention.
Ingestion: Give a cupful of water or milk. Then IMMEDIATELY CONTACT A PHYSICIAN OR POISON CENTER. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Aggravated Medical Conditions: Persons with pre-existing skin disorders may be more susceptible to irritating effects.

SECTION 5 - FIRE FIGHTING MEASURES
Suitable extinguishing media : The product is not flammable. Extinguish fire using agent suitable for surrounding fire.
Specific hazards: Not applicable.
Unusual hazards: None known.
Specific methods: No special methods required.
Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Extinguishing media which must not be used for safety reasons: No information available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES
Personal precautions: Use appropriate protective equipment.

MSD-001716 (Contd. on page 3)

Diversity

SealedAir
Diversity Care

MATERIAL SAFETY DATA SHEET

Page 3 of 4
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MSD-001716 (Contd. on page 4)

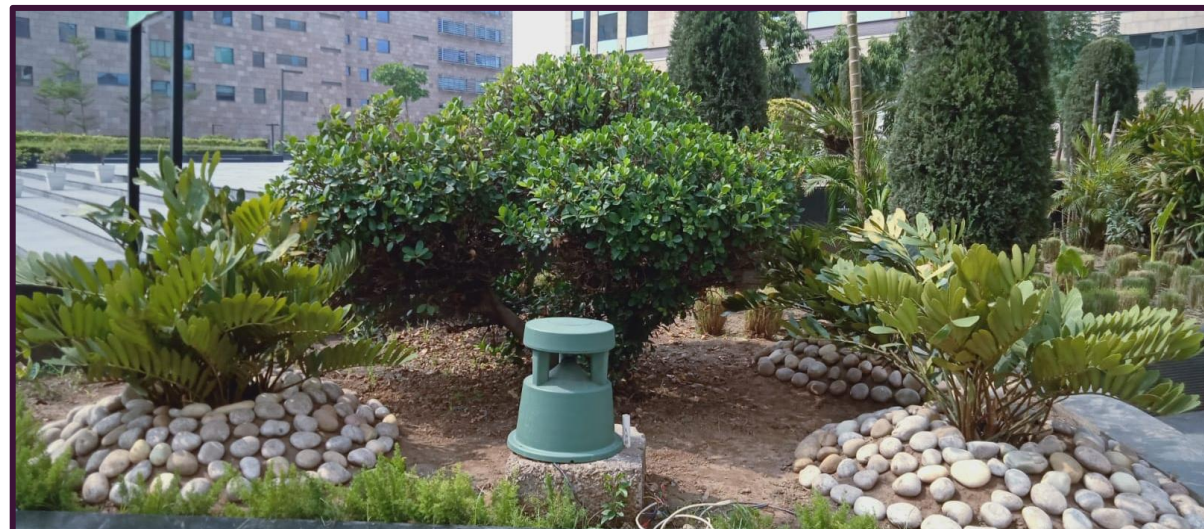
Diversity

100% Green Chemicals in House Keeping

INDOOR AIR PURIFICATION & GREEN PLANTATION | MORE THAN 6500 INDOOR

50+ Dyson Air purifiers installed

9000 + plantations within the property





Bird Feeding Station For Migratory Birds



Nursery In Basement

nexus
ELANTE

nexus
ELANTE

nexus
ELANTE

Wall of HAPPYNESS

IF YOU DON'T NEED IT, **LEAVE IT**
IF YOU NEED IT, **TAKE IT**

CLOTHES

FOOTWEAR

CLOTHES

BOOKS &
STATIONERY

TOYS



ART GALLERY AT BASEMENT ESCALATOR LOBBY



ENGINEERING STUDIO



BOH AREA

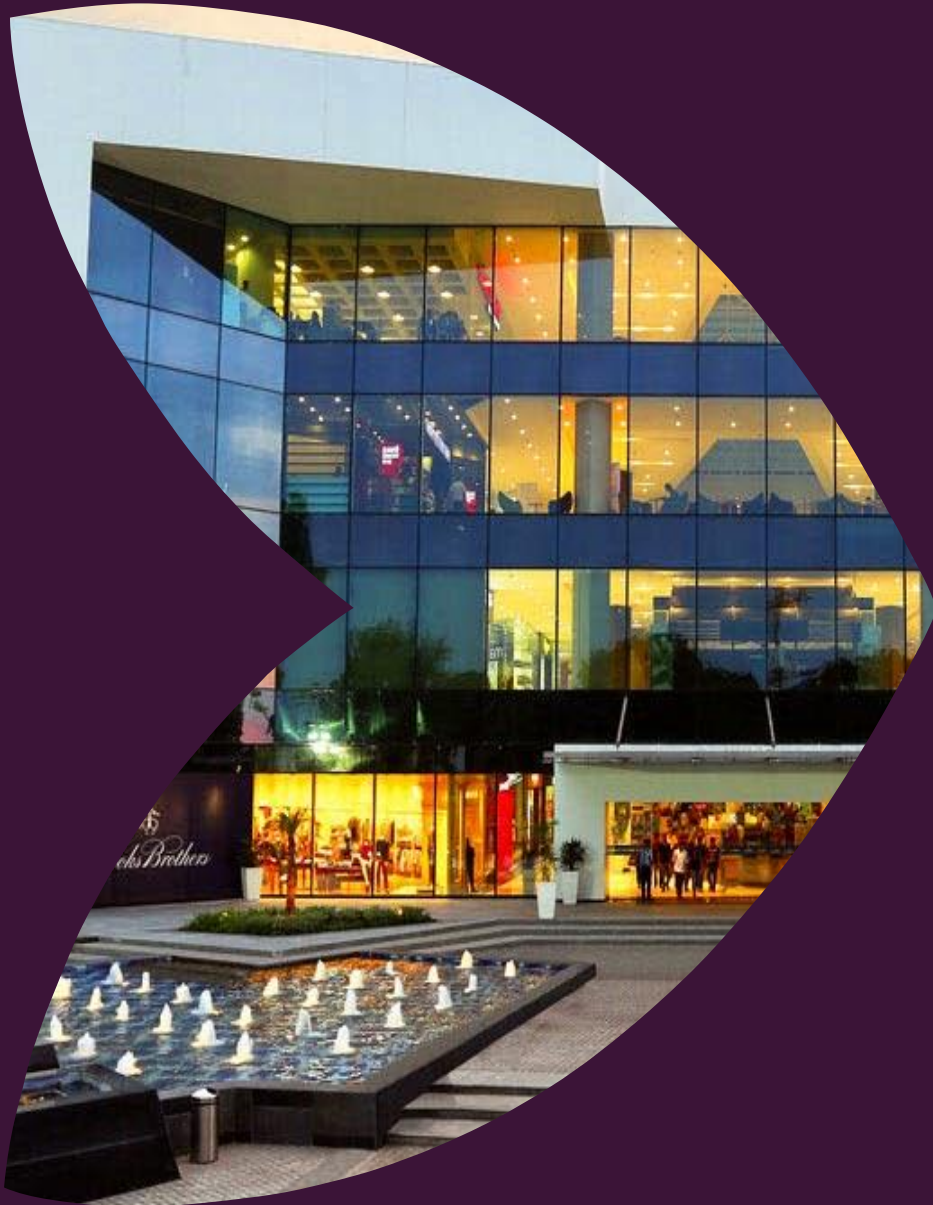


A Visual Representation Of The BOH Area

AWARDS & RECOGNITION



- ISCA - Most Admired Shopping Centre - Launch Of The Year North - 2014
- Realty Excellence Awards - Retail Property Of The Year - North - 2014
- Realty Plus - Retail Property Of The Year - North - 2015
- National Awards For Marketing Excellence - Award For Marketing Excellence In Shopping Malls - - 2015
- Property India Estate Awards - Retail Property Of The Year - National - 2015
- ISCA - Most Admired Shopping Centre Of The Year - Non-Metro North - 2016
- Indian Retail Awards - Retail Property Of The Year - North - 2016
- ISCA - Most Admired Shopping Centre Of The Year - Non-Metro North - 2017
- North India Franchise India - Shopping Mall Of The Year - North - 2017
- Times Of India - Real Estate Icons - Chandigarh Region - 2017
- ISCA - Most Admired Shopping Centre Of The Year - Non-Metro North - 2018
- My FM 94.3 - Award For Excellence - Recreational Destination - 2018
- Umbrella Aegis - Best Marketing Campaign - Best Use Of Social Networks - 2019
- ISCA - Most Admired Shopping Centre Of The Year - Retailers Choice - 2019
- ISCA - Most Admired Shopping Centre Of The Year - Non-Metro North - 2019
- ISCA - Most Admired Shopping Centre- ROI - 2021
- ISCA - Most Admired Shopping Centre Of The Year - Marketing & Promotion - 2021
- Franchise India - Shopping Centre Of The Year - North Non-Metro - 2021
- Bureau Veritas - Trusted Shopping Centre - IRF Trusted Mark – 2021
- MAPIC Shopping Centre Awards – Most Admired CSR – Compliant Philanthropist Shopping Centre - 2022



Thank You

Name: Md. Jamil Akhter

Email ID: jamil.Akhter@nexusmalls.com

Mobile: 8826855337