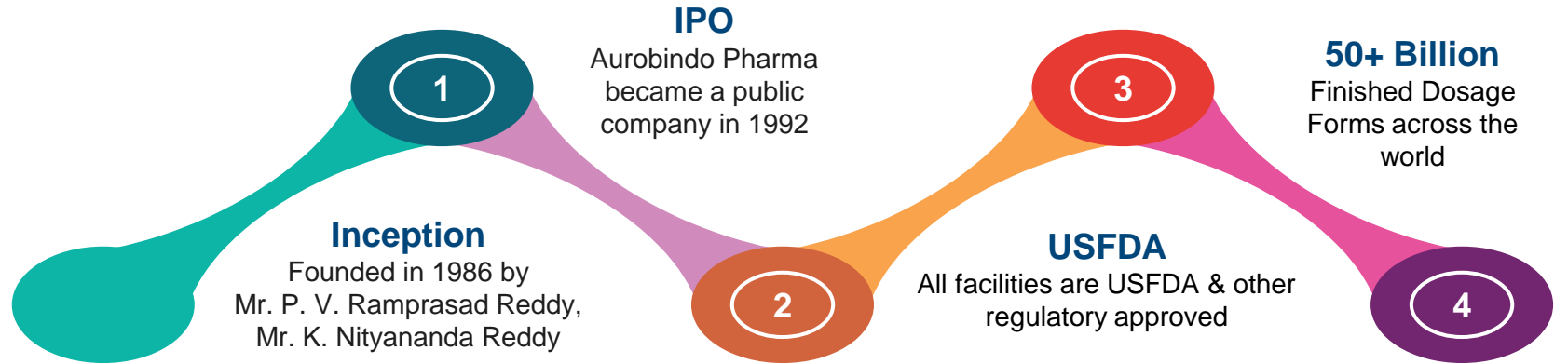

Apitoria Pharma Private Limited

UNIT - V

**25TH NATIONAL ENERGY CONSERVATION
AWARD FOR EXCELLENCE IN ENERGY
MANAGEMENT- FY'24**





We manufacture 52% of our API requirements in-house.

- 01 #1** Largest generics company in the US (by Rx dispensed)
- 02 #2** 2nd Largest listed Pharma by revenue (India)
- 03 17%** Reduction in carbon emissions from baseline year FY20 (Achieved more than 100% of 2025 target)

₹373 Millions In CSR initiatives FY24
8.59 Lakh Beneficiaries

R&D Capabilities
5 in India and 4 in the US
1,500+ Scientists and analysts globally

Employees **37k+**

Market presence **150+**

Mfg. Facilities **29**

Facility

Total Factory area	87134 m² (21.5 Acrs.)	
Build up Area (m ²)	37885	44%
Roads (m ²)	12507	14%
Green Belt area (m ²)	26330	30%
Open area (m ²)	10412	12%

Process Equipment

- ❖ Reactors: 118 No's
- ❖ Centrifuges : 28 No's
- ❖ ANFD : 7 No's
- ❖ Lyophilizer : 8 No's

Utility Equipment

- ❖ FBC boiler : 24 & 12 TPH
- ❖ Air Compressors : 2015 CFM
- ❖ Chillers(+5°C) : 2544 TR
- ❖ Chillers (-20°C) : 250 TR
- ❖ Chillers (-35°C) : 320 TR
- ❖ Cooling towers : 10150 TR

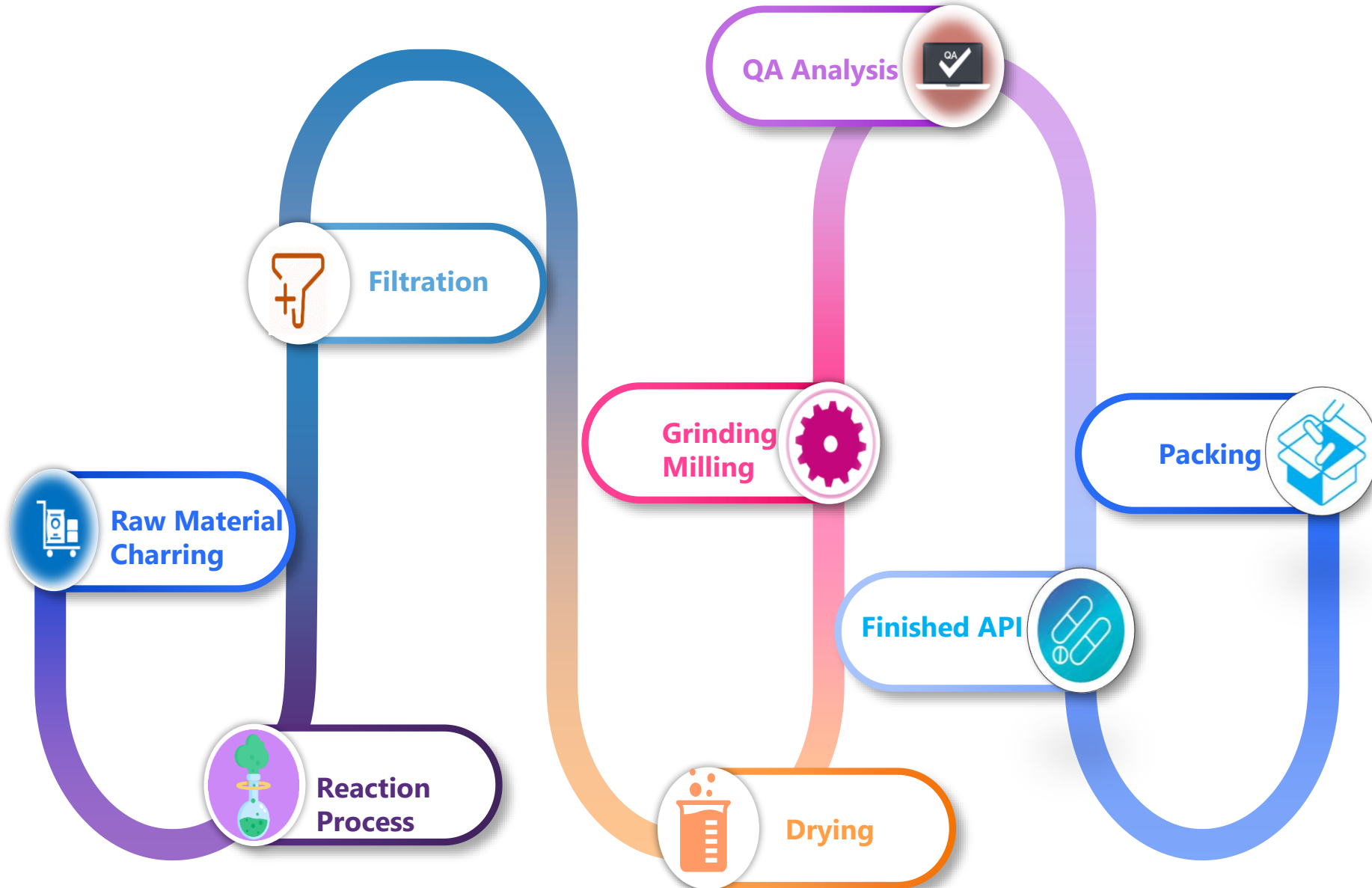
Electrical

- ❖ CMD : 7000 KVA
- ❖ LT Connected : 21657.53 HP + 1580.4 KW
- ❖ Transformers : 8 No's (13.45 MVA)
- ❖ DG system : 13 No's (11010 KVA)



- Amoxicillin Trihydrate
- Piperacillin and Tazobactam
- Ampicillin Sodium Sterile
- Flucloxacillin Sodium
- Dicloxacillin Sodium

Major products :





PRODUCTION

YEAR	VALUE (MT)
FY 2021-22	1300
FY 2022-23	1837
FY 2023-24	2408

SPECIFIC ENERGY

YEAR	VALUE (m kcal/MT)
FY 2021-22	80.95
FY 2022-23	59.34
FY 2023-24	55.39



Production
31.1%

YEAR	VALUE (m kcal)
FY 2021-22	72,560
FY 2022-23	74,066
FY 2023-24	94,168

THERMAL ENERGY COAL



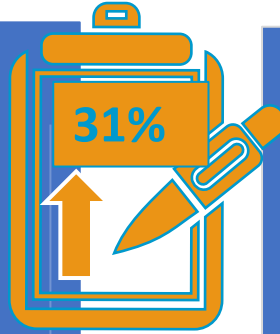
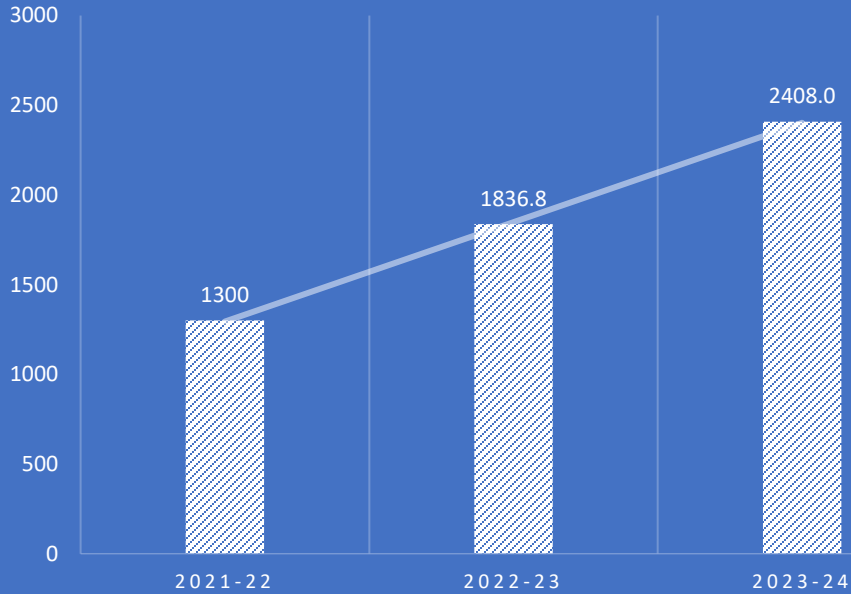
YEAR	VALUE (m kWh)
FY 2021-22	38.0
FY 2022-23	41.0
FY 2023-24	45.6

ELECTRICAL ENERGY POWER

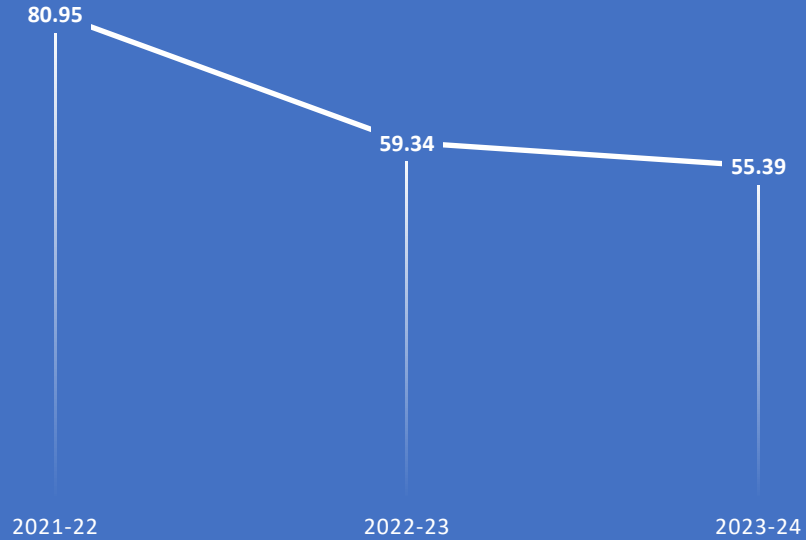


Specific Energy
6.6%

PRODUCTION VALUE (MT)



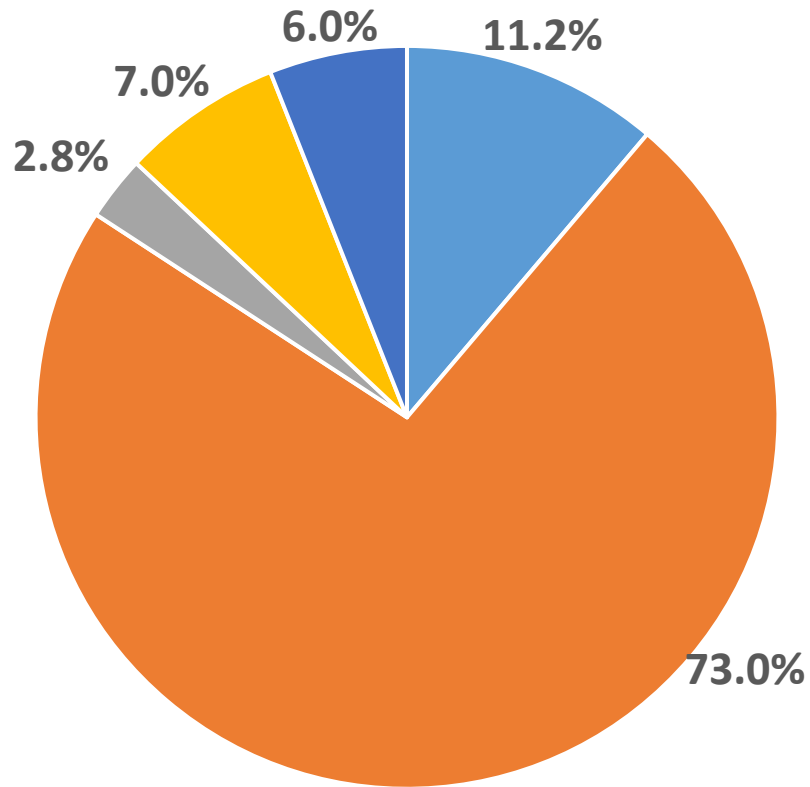
SPECIFIC ENERGY VALUE (M KCAL/MT)



SEC reduction consistently over last 3 years evident, in FY 2023-24 shows reduction of 6.6 % in overall SEC of the Plant. It shows that positive approach towards Energy conservation.

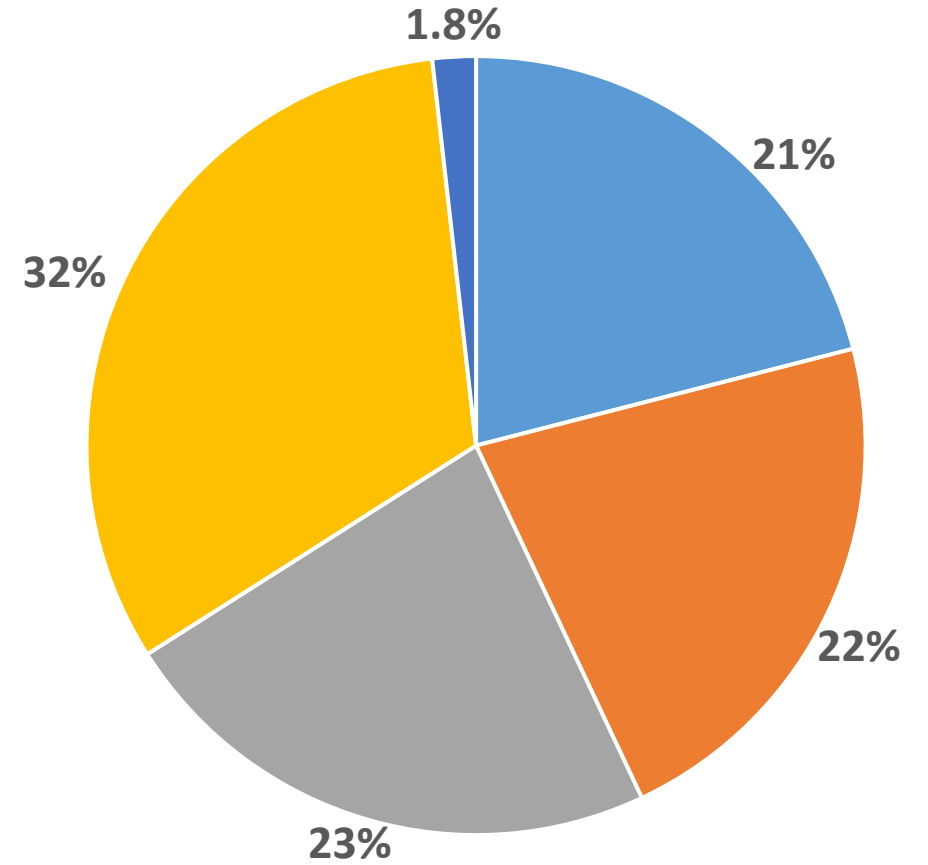
Implementation of various energy conservation activities contributed reduction of 6.6 % in overall SEC of the Plant in FY 23-24 while production improved 31%.

Power Consumption



■ Manufacturing ■ Utilities ■ SRS ■ ETP ■ others

Steam Distribution



■ Manufacturing ■ SRS ■ ZLDF ■ Utility, HVAC & Water System) ■ Others



Information on Internal benchmark - Utility

Refrigeration Plants :

Description	Design Temp (oC)	Design SEC (kW/TR)	Operating SEC (kW/TR)	Target SEC (kW/TR)
Reciprocating Chillers (Water Cooled)	+5	0.86	0.87-0.89	0.87
	-20	1.59	1.65-1.68	1.65
	-30	1.83	2.1-2.2	1.95
	-35	1.95	2.42-2.51	2.2
Screw Chillers (Water Cooled)	+5	0.63	0.64	0.64
Screw Chillers (Air Cooled)	+5	1.20	1.28 – 1.32	1.25

Description	Design SEC (kW/CFM)	Operating SEC (kW/CFM)	Target SEC (kW/CFM)
Air Compressors	0.16	0.19-0.20	0.18

Description	Design SFR (KG/KG)	Operating SFR (KG/KG)	Target SFR (KG/KG)
Boiler	5	4.47	4.6

Major Encon Projects Planned in FY 2024-25



405TR WC Screw Chiller by Replacing Reciprocating Chiller

Investment : ₹ 8.25 million
Savings : ₹ 8.74 million
Payback : 11 Months



Heat Pump for HVAC Temperature & RH

Investment : ₹ 6.4 million
Savings : ₹ 6.7 million
Payback : 12 Months



250TR WC Screw Chiller by Replacing R22 Air Cooled Chiller

Investment : ₹ 7.6 million
Savings : ₹ 6.54 million
Payback : 14 Months



In line Automatic Tube Cleaning System

Investment : ₹ 1.3 million
Savings : ₹ 1.1 million
Payback : 15 Months



ENCON Projects Planned in FY 2024-2025

S.NO	Title of Project	Proposed Investment (₹ Million)	Expected Monetary Savings/ Annum (₹ Million)	Payback (Months)
1	By Installing 405TR water cooled chiller witch SEC is 0.65 Kw/TR & planning to stop H-Block 400TR air cooled chiller witch SEC is 1.20 Kw/TR.	8.3	8.7	11
2	Heat Pump for Production Block -2 (PB-II) manufacturing facility for HVAC purpose	6.4	6.3	12
3	Replace the A&B Block -30°C aged/non performing secondary pumps with energy efficient pumps along with aged lines.	1.8	1.2	19
4	Steam operated Pump trap setup for SRS re-boilers to replacing conventional ball float steam traps.	0.5	0.7	9
5	Condenser pre Cooling System with water mist for air cooled chillers X 04 No's (2507TR X 01 No's, 400 TR X 01 No's & 100TR X 01 No's)	3.1	1.4	28
6	Non performing & high energy consuming Boiler Air compressor is replaced with new energy efficient reciprocating canopy model air compressor along with IE3 motor.	1.2	1.0	15
7	In line Automatic Tube Cleaning System for 02 No's of 400 TR Water cooled chillers to supply the uninterrupted chilled (+5) water supply to C-Block, A&B block HVAC & process requirements	1.3	1.1	15
8	High Efficiency 250 TR water cooled chiller witch SEC is 0.65 Kw/TR & planning to stop I-Block 177TR air cooled chiller which SEC is 1.28 Kw/TR.	7.6	6.7	14
9	High Efficiency 200 TR water cooled chiller witch SEC is 0.65 Kw/TR & planning to stop G-Block 177TR air cooled chiller which SEC is 1.32 Kw/TR.	7.5	6.1	15
10	Intelligent Energy Saving Compressed Air Flow Control System with Godrej ControlAiRTM IFC – Demand Side Management System	5.2	10.3	6
11	Replace the A&B Block -30°C aged/non performing secondary pumps with energy efficient pumps along with aged lines.	1.8	1.2	19
12	Flash Steam Jet Pump With FRP Insulation along with Steam Motive Accessories for ATFD Flash Steam Recovery	1.4	0.9	19
Aggregate Savings		46.1	45.4	12

Energy Saving projects implemented in last 3 Years

2021-22

32 No's

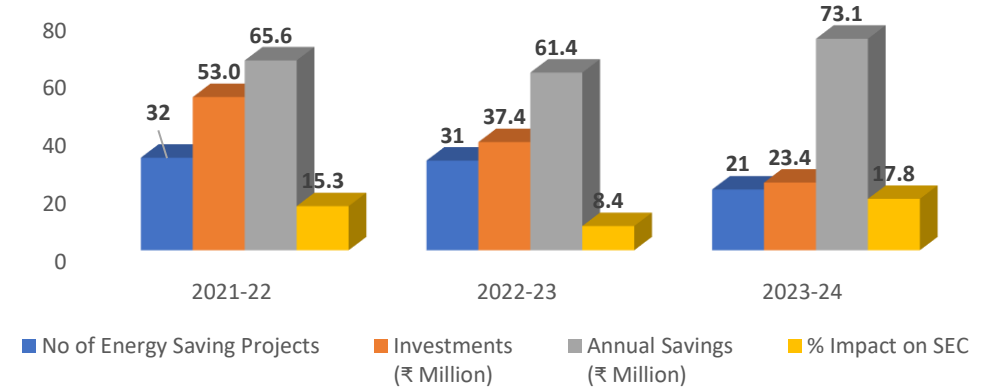
2022-23

31 No's

2023-24

21 No's

Energy Conservation Projects - Last 3 years



Investments(₹ Million)	: 53
Electrical (Million kWh)	: 6.44
Thermal (Million kcal)	: 10516
Monetary Savings (₹ Million)	: 65.6
Impact on SEC (%)	: 15.3%

Investments(₹ Million)	: 37.4
Electrical (Million kWh)	: 7.03
Thermal (Million kcal)	: 3096
Monetary Savings (₹ Million)	: 61.4
Impact on SEC (%)	: 8.4%

Investments(₹ Million)	: 23.4
Electrical (Million kWh)	: 4.0
Thermal (Million kcal)	: 20254
Monetary Savings (₹ Million)	: 73.1
Impact on SEC (%)	: 18.1%

FY 2023-24



CO₂
EMISSION
REDUCTIONS



TRIPLEX PLUNGER PUMP

- ETP RO aged/ non performing HP (High Pressure i.e. 700 PSI) pumps replaced with new and improved flow rate from 11.8 to 15 M³/Hr.
- Energy Savings : 3.11 Lakh Units, Investment : ₹ 2.36 million
- In addition to savings in RO, got performance in terms of flow improvement(21%) lead to less running hours.



Boiler Automation by Combustion Control System

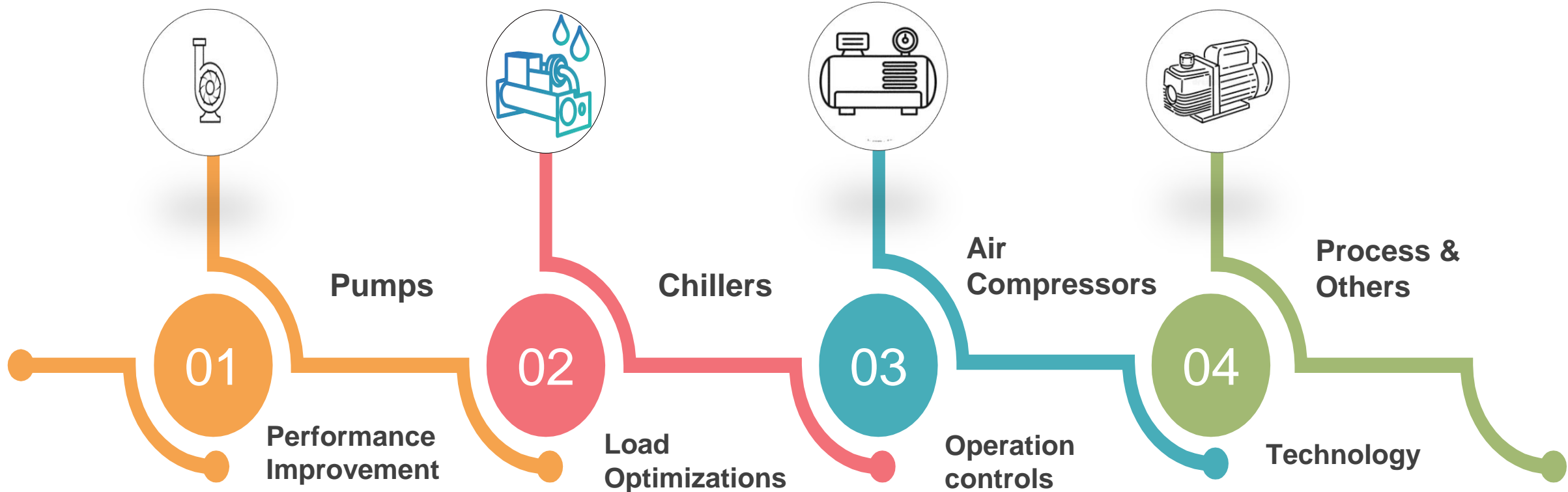
- Performance evaluation done and identified the opportunity
- Estimated Coal Savings : 3157 MT, Estimated Savings : ₹ 23.16 M
- improved the Boiler Efficiency 11%
- Challenges :Momentary venting while less Boiler load (i.e <35% load)
- Operator friendly operation & 24/7 Daily critical parameters log.



TURBO OXY JET AERATOR MIXER

- Turbo Oxy Jet Aerator systems that outperform traditional diffusers with up to 30% power savings, zero noise, and no maintenance, boasting a superior oxygen transfer rate of 2.4 kg/Kw-hr.
- Energy Savings : 0.59 Lakh Units, Investment : ₹ 1.10 million
- In addition to power savings, improvement of effectively mix and aerate waste water up to 9.5 meters deep and 25 - 30 meters in length.

apitoria Major Encon Projects – Medium / Low Investment - FY 23-24



- VFD with pressure Transmitter
- Impeller Trimming
- Auto Level Cutoff
- Swapping of pumps

- Shifting of load from low efficient chillers to highly efficient Chillers.
- Regular assessments and monitoring & replacements

- No Air Loss Drain Valves
- Reducing the Pressure Settings
- Air audits
- Arresting Air Leakages

- Dry Screw Vacuum Pumps
- EE High Pressure Pumps



ENCON PROJECT'S IMPLEMENTED FY 2023-24

S.NO	Title of Project	Total Annual Savings (Rs million)	Investment Made (Rs million)	Payback (Months)	S.NO	Title of Project	Total Annual Savings (Rs million)	Investment Made (Rs million)	Payback (Months)					
1	Boiler Efficiency Monitoring with Combustion Control System to improve the efficiency & eliminate steam vent losses.	25.52	3.67	1.72	12	Bio ETP Aged/ poor performing float type aerator 01 Nos is replaced with new TURBO OXY JET AERATOR MIXER along with IE3 motor.	0.45	1.10	29.52					
2	Pumps which are having flexible loads (Connected to multiple equipment's) to be installed with VFD with PID (Pressure vs. RPM) Controller.	4.13	2.36	6.85	13	BY Implementing in-house ENCON/ Kaizen projects initiated in the year of 22-23. 1. G-Blk +5 177 TR chiller stopped and diverted load to H-blk 400 TR chiller 2. AB-Blk -35 Condenser replaced, load decreased and stopped 01 no compressor 90 KW i.e. 50% Load 3. Air compressor Stopped for G&H block Daily 8-10 x 02 no's Hours and divert to C-blk Air compressor 4. I-Blk -30 Plant 01 no Compressor 125 KW Stopped with 50% Load i.e. 62 KW 5. -30°C Refrigeration Compressor RPM optimization by replacing the Motor Pulley.	4.39	0.78	2.13					
3	Energy efficient E-Glass Epoxy fans for Cooling towers 02 No's (Cap.:500TR & 700 TR) in FY'24 Replacement of Existing Cooling tower ID fan blades with Energy Efficient E-Glass Epoxy blades instead of Aluminium blades for one cooling tower. Reduction of cooling tower ID fan operating cost by 22%.	0.59	0.15	3.07										
4	Boiler area aged, Non performing & high energy consuming Air compressor is replaced with new energy efficient reciprocating canopy model 210CFM air compressor along with IE3 motor.	1.20	1.35	13.52										
5	Steam operated Pump trap setup for SRS reboilers to replacing conventional ball float steam traps. Presently our SRS reboilers are steam outlet is connected with conventional ball float steam traps, which were operating for NMT 100 Deg.C solvent boiling operations. Steam is consumed at 1.5 barg for all Columns & there is isolation Valve & ON /OFF valve at steam inlet to Reboilers / Kettles. Isolation valve is further throttled incase of overshoot / non achievement of column temperature . Bypass of the Steam Trap is kept 30 -40 % open during startup & kept crack open during running hours of the Solvent Recovery since plant team is facing issues in acheiving precise temperature at Column bottom & top with bypass closed condition.	1.9	0.78	4.99						14	I Block & QC 177TR Air Cooled chiller performance improving purpose installed Adiabatic Cooling System.	2.42	0.78	3.87
										15	A&B Block process conventional hot water generator is replaced with Energy efficient Hot Water generator with CIRCULATION UNIT CAP: 2.5 M3/HR with 80°C set point.	0.34	0.46	16.19
6	Installation of Automatic Pump Trap (APT) - 40NB for condensate Stall Prevention on Stripper	2.3	0.85	4.48	16	Replaced Existing aged Biological effluent plant pumps 05 No's with EE efficient & optimized flow / head to reduce power Consumption & to improve Efficiency. (14 KW Operating power Reduced)	0.85	0.58	8.14					
					17	AB Block oil ring vacuum pump is retrofitted with BOOSTER VACUUM PUMP with TWIN LOBE along with IE3 Motor to save energy & reducing drying time by increase vacuum.	0.39	0.44	13.57					
7	Use the renewable resource of rice husks as fuel for boilers to reduce the need for fossil fuels and decrease CO2 emissions while increasing income to small farmers and transporters.	9.3	2.5	3.23	18	Installed 24 Nos of CMTD (Compact Module Thermodynamic) Steam trap for avoiding the steam losses in Boiler Main distribution line & connected back to condensate recovery system.	1.51	0.54	4.29					
8	ETP RO aged/ non performing HP (High Pressure i.e. 700 PSI) pumps 03 No's replaced with new & energy efficient pumps with IE3 motors.	2.37	2.36	11.92	19	Sterile D&F Sterile Block AHUs Semi Automation-Three way valves along with temperature controllers installed for total 7 AHU's & savings till date	0.41	0.30	8.74					
9	Production Block-II Ms. Blue star 250 TR Air cooled chiller condenser pre cooling unit & Air cooled condenser coils with anti corrosive coating (Blue fin) to improve the energy consumption & mitigating the corrosiveness.	1.64	2.14	15.66	20	Utility -15 & -35°C chilled brine plant primary pumps flow & head optimized by impeller trimming & balancing.	0.67	0.25	4.47					
10	G-Block DRY SCREW VACUUM PUMP to replace the convention water ring VACUUM PUMP to improve the energy conservation & mitigating effluent generation.	0.67	1.50	26.87	21	No Air Loss Auto Drain Valves 05 No's installed in year 23-24 for air receivers & Air dryers in place of conventional air traps which are loosing compressed air	0.31	0.05	1.97					
11	Improved the Operating Efficiencies of Chilling plants and associated systems by regular energy assessments and corrective measures taken like descaling, refrigerant charging, flow corrections and CT water maintaining.	11.83	0.45	0.46	Aggregate Savings		73	23	4					

Nano filtration System for extracting Amoxicillin Trihydrate Product from filtration MLs

Shortlisted the filtration technologies which are similar to the requirement.

Freezing

Trial

Yield improved by 3.5%
High TDS effluent decreased: 42 KLD
MEE & ATFD load decreased by: 17.2%
Estimated Payback : < 6 Months

Feasibility

Survey on available technologies to separate product from ML's.

Nano Filtration System to Trails taken for its effectiveness & extracted product quality.

Potential : Highly replicable
For ML's product recovery & effluent reduction



Ethyl Acetate (EA) Recovery improvement

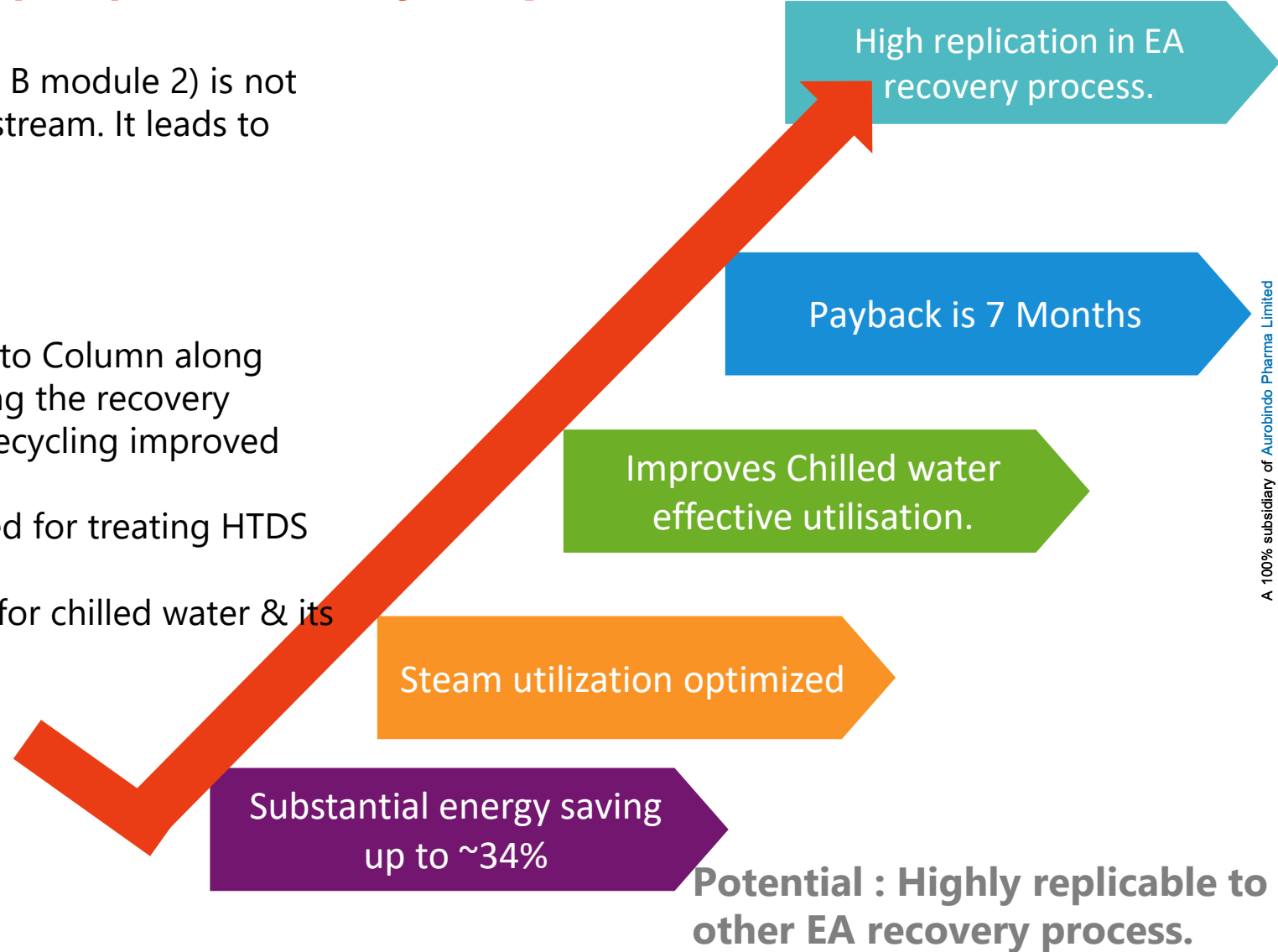
Previous Process:

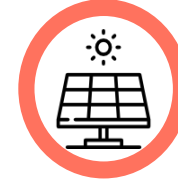
- Aq. EA CF MLs from Piperacillin (Production block B module 2) is not recovering not recovering & Bleedoff with HTDS stream. It leads to
 - Fresh Solvent usage increased.
 - Solvent recovery rate is very low.
 - HTDS effluent quantity is more

Improved Process:

So in Production Block 3, which are treated and sent to Column along with I Block module 1 recovered EA thereby increasing the recovery percent of reuse of recovered solvent in the batch. Recycling improved from 50% to 90%.

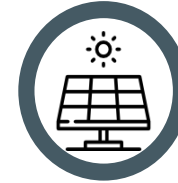
- Eliminating/ Minimizing the steam cost that is used for treating HTDS in MEE. ATFD.
- Minimizing power cost by reducing power usage for chilled water & its pumps.
- Solvent recovery improved by ~10%





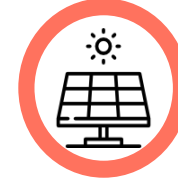
Installed Capacity

30 MW Solar Power Plant Under
Mode : Group Captive Mode
Project Timeline: 2022-25
Project mode : Off Site Generation



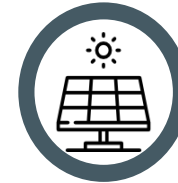
Location & Developer

Ramannapet, Yadadri Bhuvanagiri District, Telangana
M/s NVNR Ramannapet- I & II Power Plant P. Limited
Investment : ₹ 5.382 Cr.



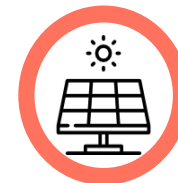
Type of Agreement

Open Access & 25 Years
Starting : July 022
Total 7 Nos units of Aurobindo considered



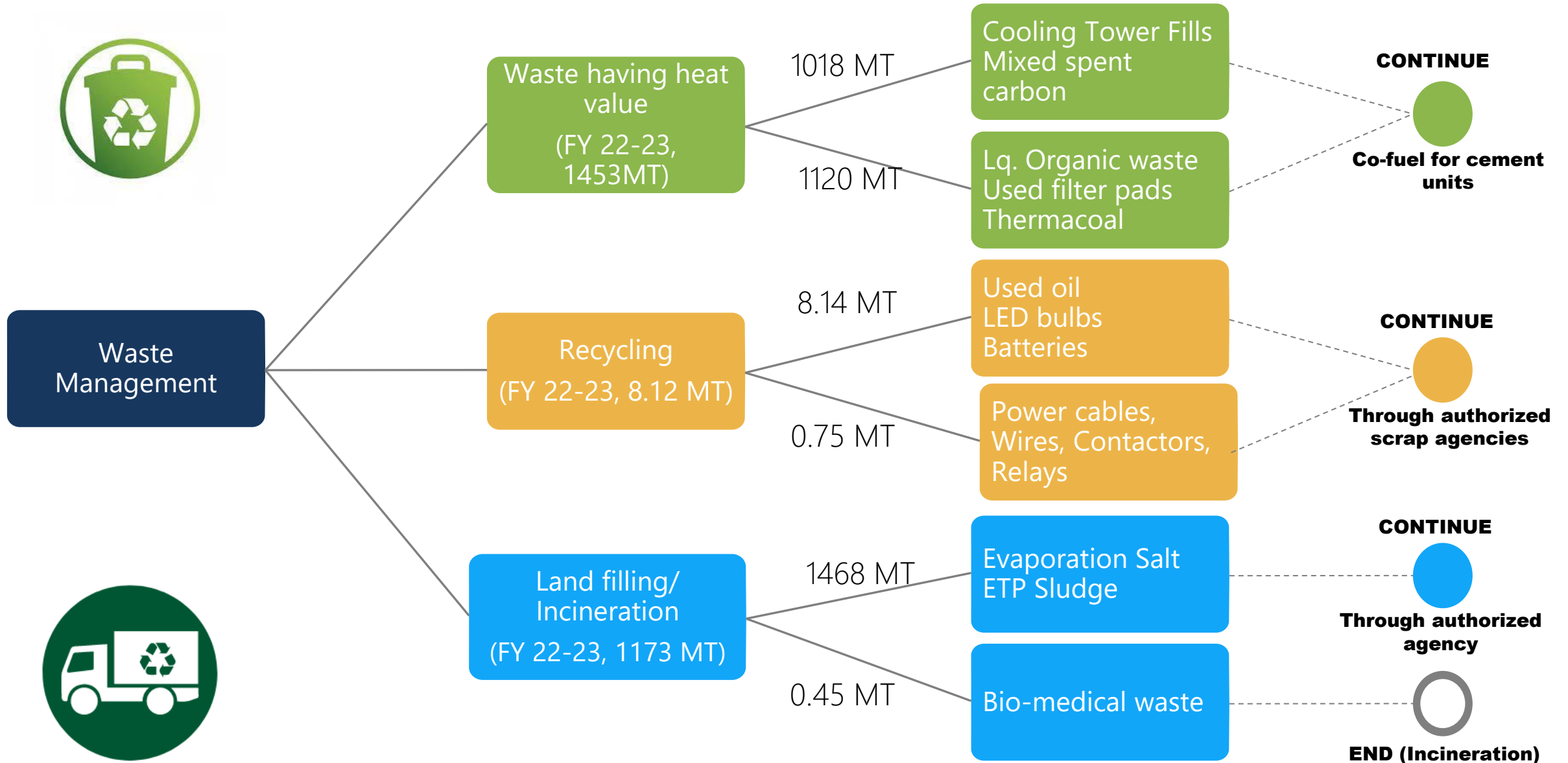
Expected Generation

Total expected generation : 3.2 Cr Units /Year
Approved Capacity : 3750 kW EB Load



% Share to Unit-V

CMD allotted from Solar : 1500 kW (21.4%) out of
7000 kVA
Allotted Generation: 1.28 Cr Units / Year
% Share in Energy Consumption : 19.4%



01
Sustainability
Report



2023-24

Integrated Sustainability & Annual report for FY 2023-24

2025

- 20% Renewable Energy Share (Power to Power) - 14% achieved & In progress.
- 12.5 % Reduction in Emissions -16% Achieved.
- 35% water conservation / restoration - 36% Achieved.
- 60% coprocessing of hazardous waste - 64% Achieved.
- 100% reuse & recycling nonhazardous waste - 100% Achieved.
- Sustainable sourcing (Supplier assessment on Suppliers' Code of Conduct) - ~51% Achieved.
- Social equity (12.75% Women workforce) – 12.54% Achieved.

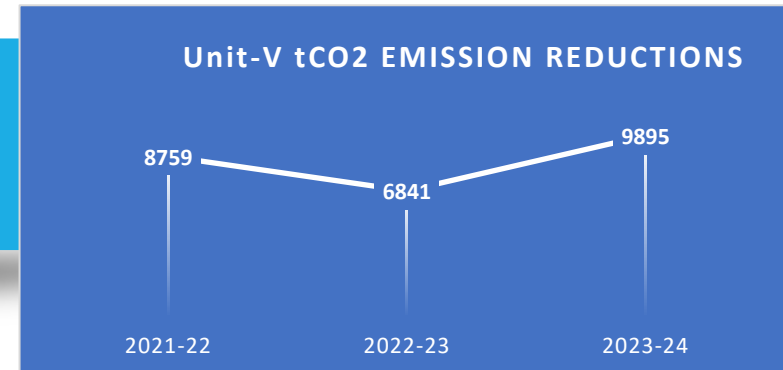
02
Goals & Targets -2025



FY 2023-24

FY	Scope 1 Emissions (tCO2e)	Scope 2 Emissions (tCO2e)	Total GHG Emissions (tCO2e)
2021-22	18358.9	24259.7	42618.6
2022-23	13036.6	18353.1	31389.7
2023-24	11797.7	15717.6	27515.4

03
GHG
Emissions



Forging a better future

At Aurobindo Pharma, we are deeply committed to establishing ourselves as a leading sustainable entity within the pharmaceutical sector. Our sustainability goals showcase our commitments to contributing to a better future.

Our sustainability objectives have been carefully crafted, incorporating valuable insights from our leadership team and feedback from both external and internal stakeholders.

Sustainability pillars

To assess our sustainability performance, we evaluate the extent to which we have achieved our short- and long-term goals across six pivotal dimensions of sustainability, known as the sustainability pillars. These pillars serve as guiding principles, helping us navigate our sustainability efforts and measure our progress effectively.

Sustainability pillars	Goals 2025	Progress made so far	Status
Responsible manufacturing 	20% Renewable energy share (power-to-power)	14%	In progress
	12.5% Reduction in carbon footprint	16%	Achieved
	35% Water neutrality (water conservation/restoration)	36%	Achieved
	60% Co-processing of hazardous waste	64%	Achieved
	100% Reuse/Recycle of non hazardous waste	100%	Achieved

Sustainability Pillars	Goals 2025	Progress made so far	Status
Sustainable sourcing 	100% Supplier assessment on Aurobindo's Suppliers' Code of Conduct	~51%	In progress
Social equity 	12.75% Women workforce	12.54%	In progress
	25 Training hours per employee	23.53	In progress
	Zero Reportable incidents across operations	Measures are being taken along with training to ensure no reportable incidents	In progress
CSR 	Empowering communities to build progressive ecosystem	Need based programmes are being implemented	In progress
Effective governance 	Highest levels of governance beyond compliance	Implementing industry best practices, ensuring highest level of governance	In progress
Access to healthcare 	Innovating and strengthening healthcare systems	Promoting innovative measures to strengthen healthcare systems	In progress

- Decreased Paper consumption and paper less / Digital transactions
- Paper less documentation & tracking of material.
- Barcoding & Document Tracking Software with Android Mobile App & Overhead Document Scanner

Sustainable supply chain management

01

02

WIFI for EM paperless software

Barcoding & Document Tracking

04

03

AIR vs SEA – Mode Control

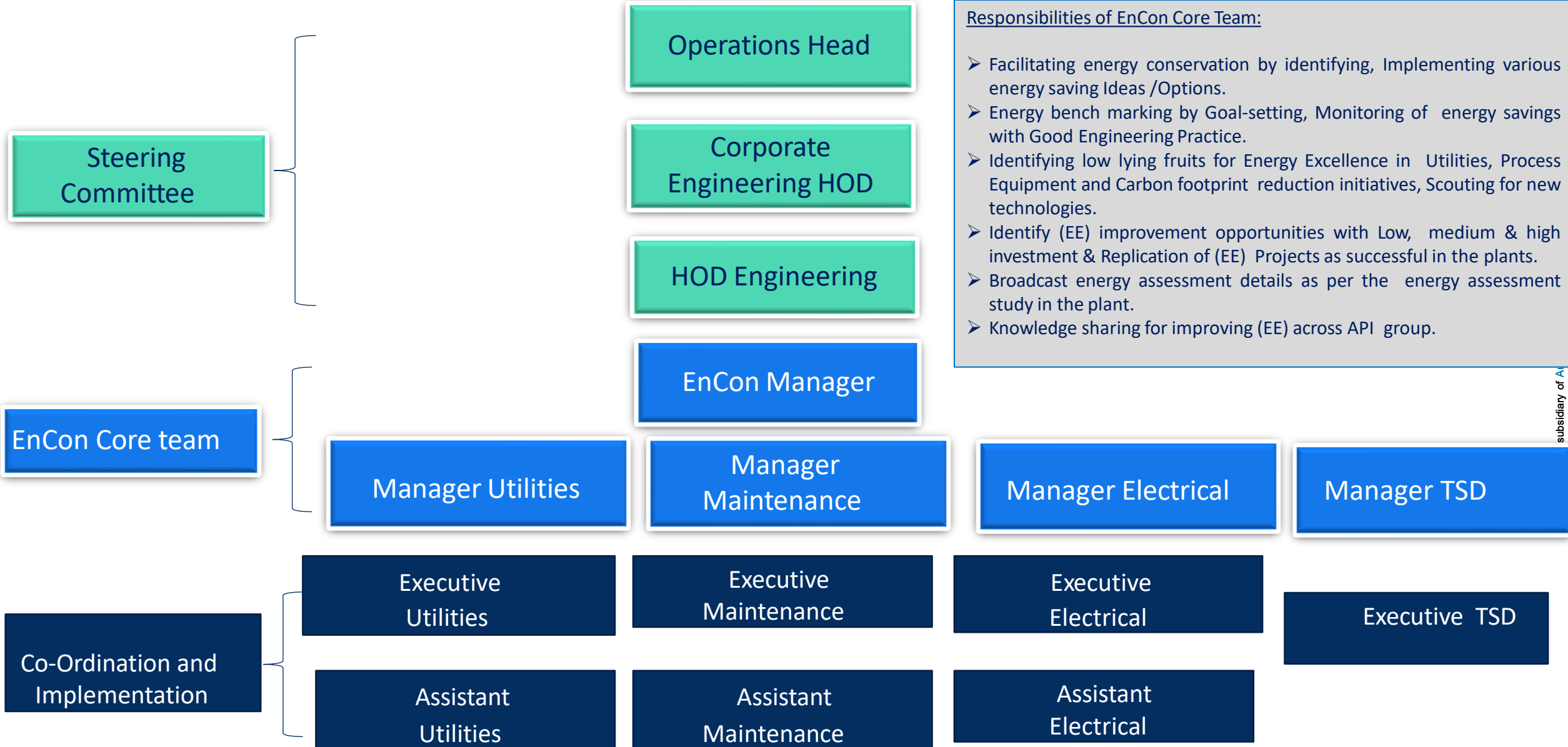
- Increased Sea transportation over Air transportation by pallet systems.
- Decreased air Tonnage and Increased loading by 30% by optimizing with shipper stuffing, Double Stacking

- Transparency in the supply chain, supplier engagement and audits, transition to eco-friendly logistics.
- Backward integration to build resilient supply chain.
- Our dedication to sustainability is evident in the steady increase in the adoption of sustainable packaging techniques and practices throughout the year.

- Paper less documentation & tracking work
- a paperless environmental monitoring (EM) solution for the Life Sciences industry that automates quality control microbiology (QC Micro) data collection and management, including utility and product testing.

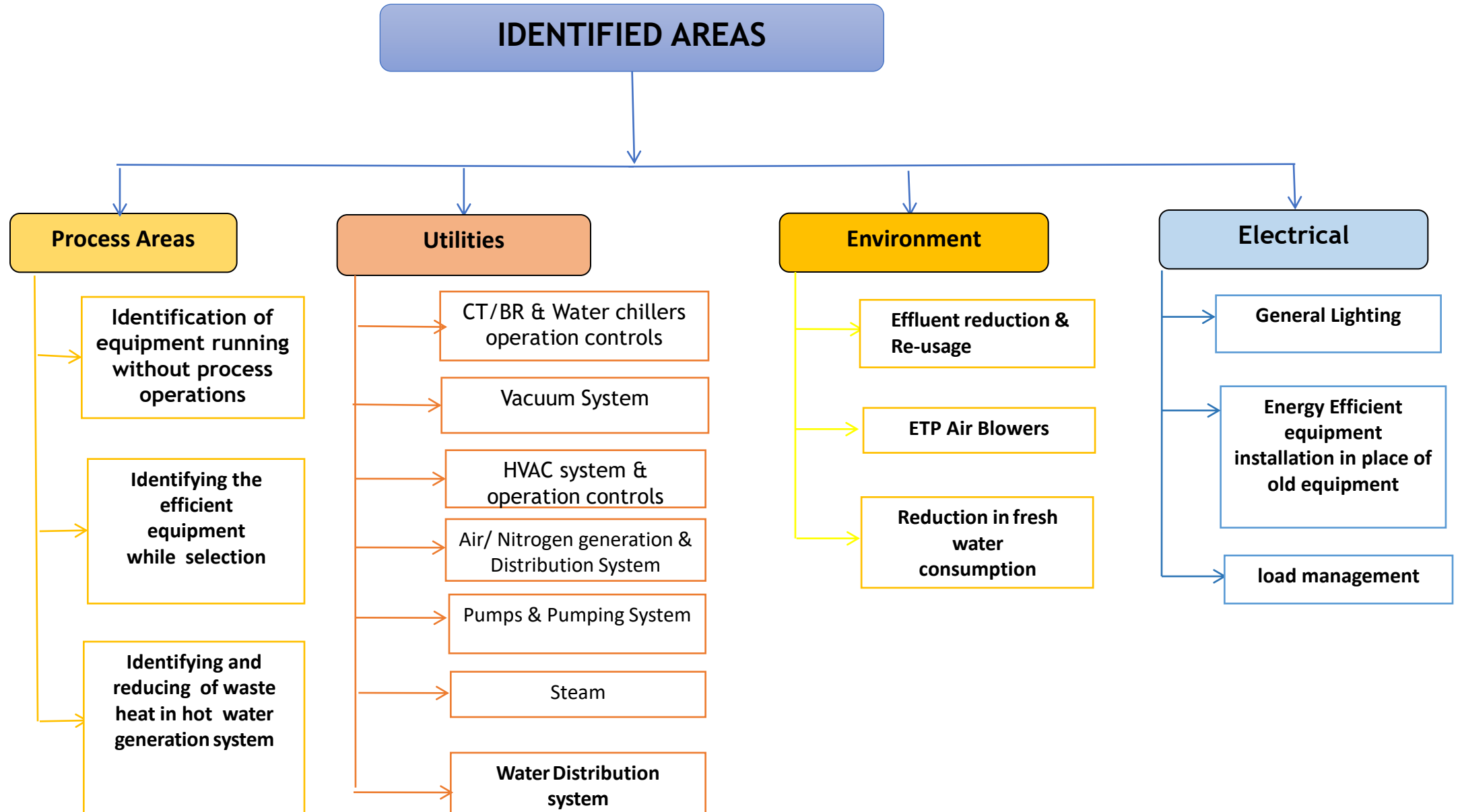


Energy Management Team



- Responsibilities of EnCon Core Team:
- Facilitating energy conservation by identifying, Implementing various energy saving Ideas /Options.
 - Energy bench marking by Goal-setting, Monitoring of energy savings with Good Engineering Practice.
 - Identifying low lying fruits for Energy Excellence in Utilities, Process Equipment and Carbon footprint reduction initiatives, Scouting for new technologies.
 - Identify (EE) improvement opportunities with Low, medium & high investment & Replication of (EE) Projects as successful in the plants.
 - Broadcast energy assessment details as per the energy assessment study in the plant.
 - Knowledge sharing for improving (EE) across API group.

subsidiary of A



- 1 Air compressor air pressure optimization based on requirement.
- 2 Diverting the CT water blow down to LTDS treatment stream which are previously connected to HTDS treatment stream.
- 3 Interlocking of process equipment with connected utility pumps & vacuum pumps with time delay option to eliminate the empty utilities running.
- 4 Avoided the part load operations of Chilling Plants in D&F Blocks by integrating the Chilling plants and avoided the operation of one 180 TR Chilling plant.
- 5 Improved the performance of pump by replacing impeller, casing & shaft and avoided the operation of 2nd pump in the system.
- 6 For Air Dryers conventional moisture traps are replaced with No Air Loss auto drain valves.
- 7 Installed Auto level cut-off systems for Condensate pumps are operating continuously & manual stoppage is eliminated.

Recognition & appreciation of Best ENCON & Kaizen measures



Teamwork



- Implemented Kaizen & 5S programmes by forming teams
- Awards & appreciations for best programmes

Employee Involvement



- Organized Energy Conservation Week Celebrations and involved all employees
- Energy review and monitoring
- Energy week 2023 celebrations 65% manpower participated

Training Programmes



- Given training programmes on Root cause analysis (RCA), and Reliability Maintenance (RM)
- Training on steam / utility systems
- Training on Energy conservation to related Employees in every month by Energy Manager

Monitoring

- Daily / weekly monitoring of Energy Consumption areas / major equipment.
- Review of KPIs, Performances in the MRM by the plant heads.

apitoria Daily Monitoring & Reporting System

ELnet Reports

From Date: Monday, August 01, 2022 | From Time: 00:00

To Date: Monday, August 01, 2022 | To Time: End of Day

12. Groupwise

HT - 0.00%	G Block - 3.02%
HT SUB - 0.00%	All Utilities - 3.90%
MD CONTROLLER - 46.34%	C Block - 8.80%
D block - 3.03%	All Columns - 2.03%
F block - 2.04%	A & B block - 7.17%
D&F Common Loads - 1.47%	H Block - 4.81%
LVO & Utilities - 2.75%	I Block - 5.20%
PB II/PSII - 3.31%	MEE & ETP - 2.36%
Boiler - 1.88%	Air Compressor - 1.89%

Report Style: Portrait | Energy Parameters: Wh Received/EB, Wh Delivered/DG, etc.

ELnet Online Energy Management System

HT Meter-5 (MD Controller) POWER

Harmonics	Total/Ave.	L1	L2	L3
Active Power(W)	5619.22k	1916.21k	1835.73k	1867.29k
Apparent Power(VA)	5647.18k	1929.76k	1843.24k	1874.18k
Reactive Power(VAr)	436.53k	168.89k	142.83k	124.81k
Power Factor(Cosp)	-0.995	-0.993	-0.996	-0.996

ENERGY Received vs Delivered

Active Energy (Wh)	48706940.00k	0.00k
Apparent Energy (VAh)	48947100.00k	0.00k
Reactive Energy Inductive (VArh)	3524822.00k	0.00k
Reactive Energy Capacitive (VAh)	-86209.24k	0.00k
Current Hours (Ah)	846.65k	0.00k
PF Average	-1.00	0.00k
Load Hours (JHMMSS)	715999-09-22	00:00:00

AUROBINDO PHARMA LIMITED UNIT-V BLOCK C MODULE 1 BUILDING MANAGEMENT SYSTEM

Current User: SSE111

AIR HANDLING UNIT

DEHUMIDIFIER: RUNNING

FRESH AIR: HEALTHY

PRE FILTER: HEALTHY

POST FILTER: HEALTHY

COOLING COIL: STOPPED

BLOWER: RUNNING

RETURN AIR DUCT: STOPPED

ASEPTIC FILLING ROOM

TEMP: 22.3 °C
RH: 30.0 %
DP: 32 Pa

AUROBINDO PHARMA LIMITED UNIT-V BLOCK C MODULE 1 BUILDING MANAGEMENT SYSTEM

Current User: SSE111

PROCESS AREA DIFFERENTIAL PRESSURE READINGS

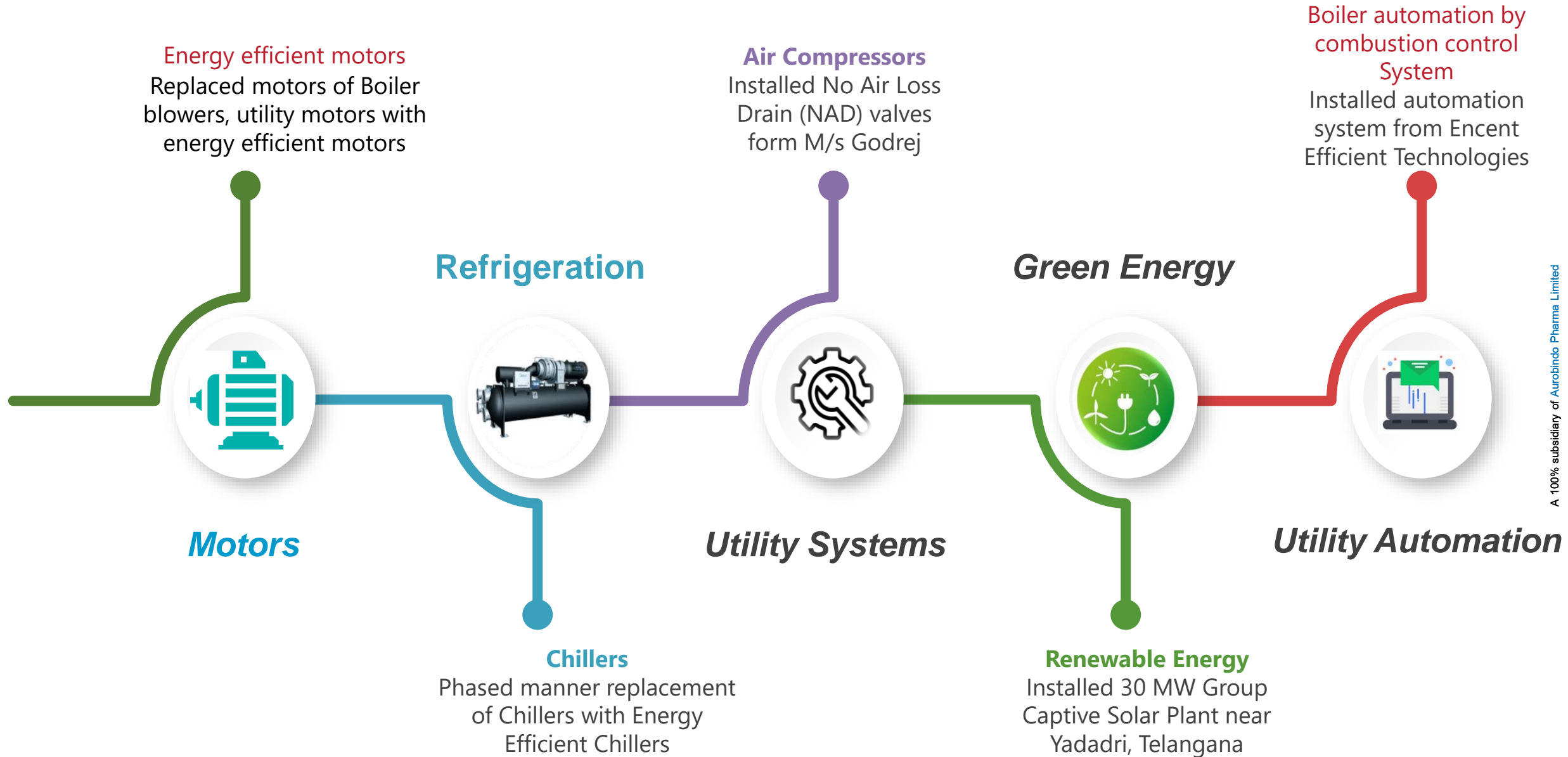
SLNO	HIGH PRESSURE ROOM	ROOM#	LOW PRESSURE ROOM	ROOM#	Value In Pa	NLT In Pa
01	Material Air Lock	C-133	Corridor-1	C-101	37	15
02	Washing & Sterilisation Rooms	C-122	Plant Entry Air Lock Rooms	C-123	11	5
03	Plant Entry Air Lock Rooms	C-123	Corridor-2	C-102	16	15
04	Solution Filtration Rooms	C-128	Solution Preparation Rooms-1	C-132	15	5
05	Solution Preparation Rooms-2	C-132	Plate & Frame Filter Rooms	C-131	13	5
06	Solution Preparation Rooms-1	C-130	Plate & Frame Filter Rooms	C-131	53	5
07	Solution Preparation Rooms-2	C-130	Carbon Slurry Preparation Rooms	C-129	74	5
08	Personnel Air Lock Rooms	C-134	Corridor-3	C-101	28	15
09	Aseptic Filling Rooms	C-113	Cryto Storage & Drying Rooms	C-117	43	5
10	Aseptic Filling Rooms	C-113	Entry Air Lock Rooms	C-121	8	5
11	Aseptic Filling Rooms	C-113	Exit Air Lock Rooms	C-110	14	5
12	Change Rooms-2	C-108	Change Rooms-1	C-107	31	15
13	Change Rooms-3	C-103	Air Lock Rooms	C-104	7	5
14	Entry Air Lock Rooms	C-111	Change Rooms-2	C-108	5	5
15	Exit Air Lock Rooms	C-110	Change Rooms-1	C-107	31	15
16	Change Rooms-1	C-109	Air Lock Rooms	C-104	16	15
17	Change Rooms-2	C-108	Air Lock Rooms	C-104	17	15
18	Change Rooms-1	C-107	Air Lock Rooms	C-103	32	15
19	Material Air Lock Rooms	C-105	Corridor-3	C-103	32	15
20	ASPD TECHNICAL ROOM	C-132	Corridor-1	C-101	15	5

PROCESS AREA TEMPERATURE & RH READINGS

SLNO	ROOM NAME	ROOM#	Value in °C	NMT in °C	Value in %	NMT in %
01	Washing & Sterilisation Rooms	C-122	19.3	25.0	45.0	INFORMATIVE
02	Solution Filtration Rooms	C-128	18.3	25.0	48.2	INFORMATIVE
03	Solution Preparation Rooms-1	C-130	19.8	25.0	43.0	INFORMATIVE
04	Solution Preparation Rooms-2	C-132	19.4	25.0	70.5	INFORMATIVE
05	Technical Rooms	C-122	23.7	25.0	55.4	INFORMATIVE
06	Entry Airlock Rooms	C-111	22.6	25.0	35.0	45
07	Exit Airlock Rooms	C-110	23.0	25.0	12.0	45
08	Aseptic Filling Rooms	C-113	21.4	25.0	41.0	45
09	Crystallization & Drying Rooms	C-117	20.3	25.0	38.0	45
10	Sterilized Bulk Receiving	C-121	23.0	25.0	10.0	45
11	Approved Rooms-1	C-044	20.0	25.0
12	Packing Rooms	C-059	19.5	25.0
13	Approved area	C-043	19.1	25.0
14	Raw Material Rooms	C-139	18.3	25.0
15	Quarantine Rooms	C-049	20.9	25.0

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Essay

Painting

Ideas

Quiz

Poster



Awareness

384 Participants participated from all departments like Production, Engineering & EHS, QC, QA and TSD etc.



Winner

Winner of the Best Site in Energy Saving Initiatives Unit-V, FY'23 held intra -units of Apitoria Pharma Pvt. Ltd. from Corporate Energy cell and L&D team



1



Operational Excellence



L&D Excellence” and “Best L&D Team” in 12th Edition Learning and development Summit & Awards 2023 organized by UBS FORUMS PVT. LTD.

2



CII NATIONAL AWARD FOR EXCELLENCE IN ENERGY MANAGEMENT



Energy Efficiency Unit,
24th National Award For Energy Efficient Unit 2023

3



Best Site in Energy Conservation Initiatives FY 23-24



Winner of the Best Site in Energy Saving Initiatives Unit-V, FY'23 held intra -units of Apitoria Pharma Pvt. Ltd.



- Aurobindo Oncology Block at MNJ Institute of Oncology and State Cancer Institute
- Serving 5,460 students with nutritious, free breakfastmeals daily
- Bicycle distribution for girl students.
- Support to Auro Mira Vidya Mandir





Thank You....

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