Lucas-TVS Ltd., Padi, Chennai

Team Members – A K Srinivasan
V Ganesh
M Prabu

COMPANY PROFILE – LUCAS-TVS LTD, PADI, CHENNAI

- ✓ Established 1961, originally a joint venture between Lucas Plc UK and TVS, wholly owned since 2001
- ✓ Five decades of leadership on Indian Market
- ✓ 7 plants in India, main plant in Chennai with 2800 employees
- ✓ Product development capability: 75% of revenue from In-house developed products
- ✓ Technical Collaboration
  - *Mitsubishi Electric*: Geared Starters / Internal Fan Alternators
  - *Denso*: Ignition Systems, Two-Wheeler Starters
  - *YDK, Japan:* Blower Motors
  - *Usui, Japan*: Viscous clutch

Products:

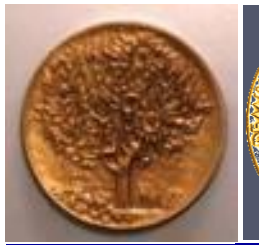
- Starters, Alternators, Ignition Products
- Automotive Motors : Wiper Motors, Compressor Motors, Window Regulator Motors, Blower Motors & Engine Cooling Fan Motors, two-wheelers, Cars, Tractors, Buses, Trucks, etc.

Green Co Gold rated company by CII

Green Co Best Practices Award 2016

EHS Awards 2015-16

ISO 50001:2011



DGP Award (2012)

Deming Quality Award (2004)

JIT Grand Prix Award (3 times)

MAJOR PROCESSES

Press

CNC Machining

Assembly

Single Piece Flow
Line Assembly

Proving Lab

Design & Development

Compressor House

Utility

Heat Treatment

Plating

ENERGY MANAGEMENT

ISO50001 Certification

Bureau Veritas Certification

LUCAS TVS LIMITED

Lucas TVS DRIVEN

HO & SITE: PADI, CHENNAI – 600 050, TAMIL NADU, INDIA.

This is a multi-site certificate, additional site(s) are listed on the next page(s)

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above Organisation has been audited and found to be in accordance with the requirements of the Management System Standard detailed below.

Standard

ISO 50001:2018

Scope of certification

DESIGN, DEVELOPMENT AND MANUFACTURE OF AUTOMOTIVE ELECTRICAL EQUIPMENTS AND WATER PUMP MOTORS.

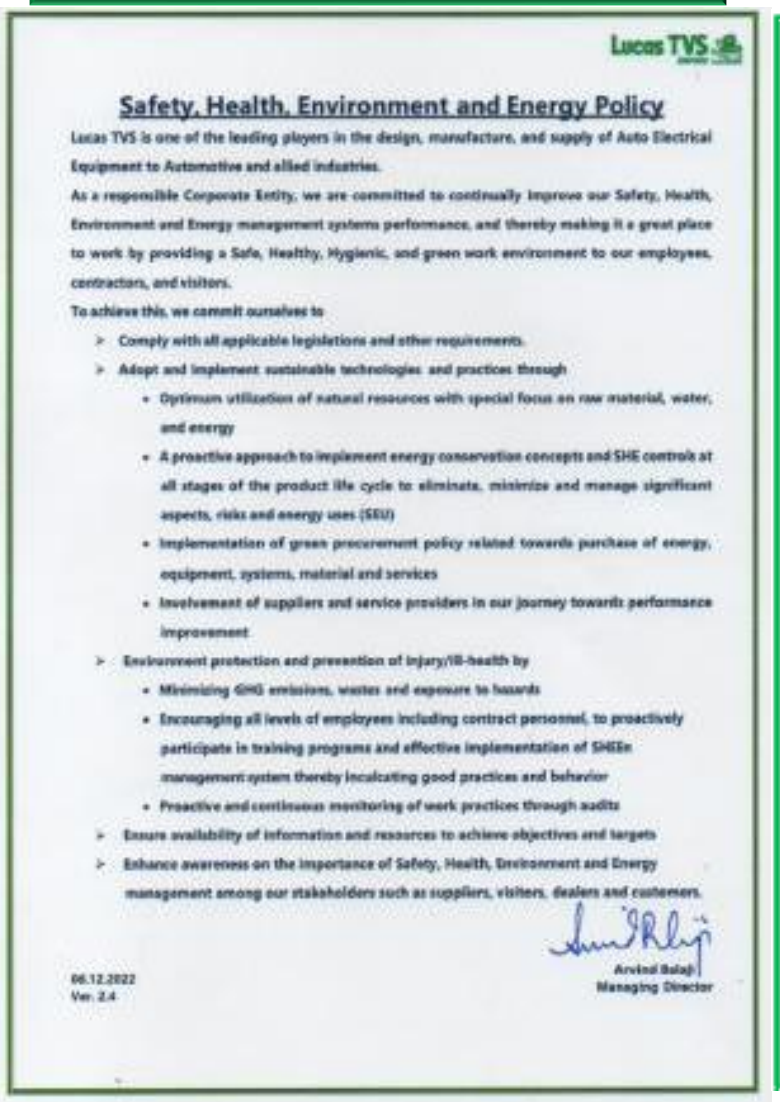
Original cycle start date: 14 August 2014
Recertification cycle start date: 14 August 2023
Subject to the continued satisfactory operation of the Organization's Management System, this certificate is valid until: 13 August 2026
Certificate No: IND.23.8051/ENU Version: 1 Issue date: 14 August 2023

For certificate authenticity, click here https://certcheck.ukas.com/

Signed on behalf of BVCH SAS UK Branch
Jagatheesh N. MANIAN
Director – CERTIFICATION, South Asia
Commodities, Industry & Facilities Division

UKAS

Energy Policy



Lucas TVS DRIVEN

Safety, Health, Environment and Energy Policy

Lucas TVS is one of the leading players in the design, manufacture, and supply of Auto Electrical Equipment to Automotive and allied industries.

As a responsible Corporate Entity, we are committed to continually improve our Safety, Health, Environment and Energy management systems performance, and thereby making it a great place to work by providing a Safe, Healthy, Hygienic, and green work environment to our employees, contractors, and visitors.

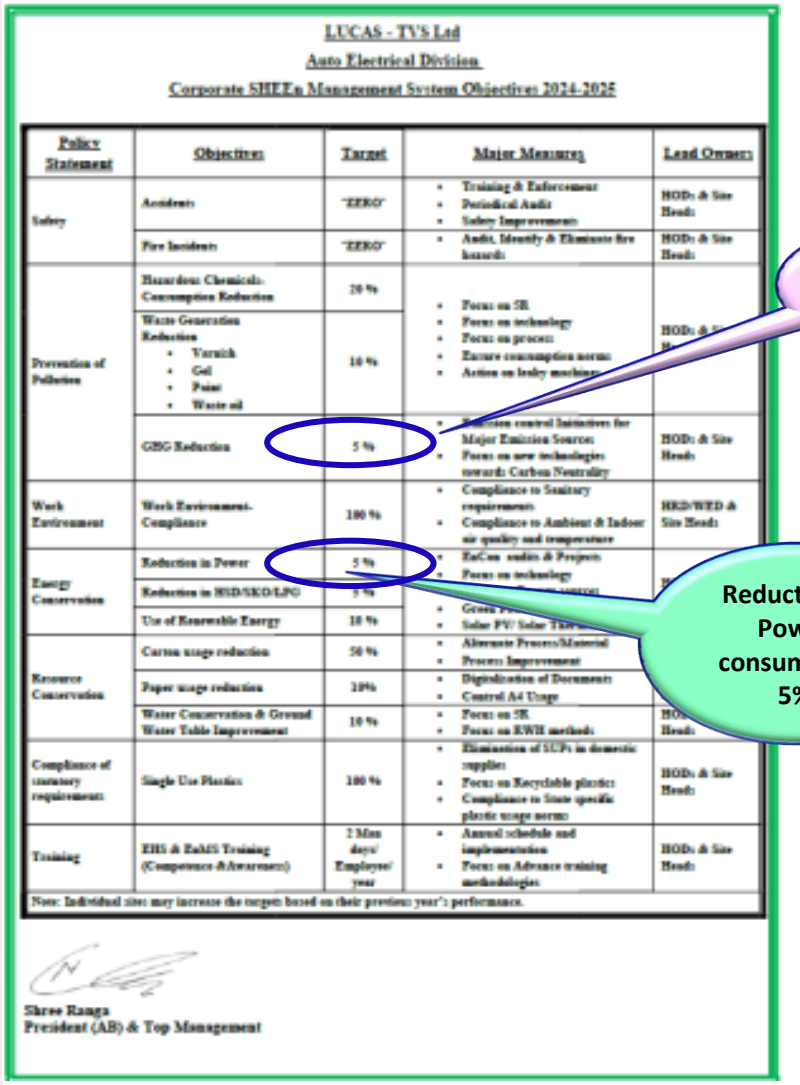
To achieve this, we commit ourselves to

- Comply with all applicable legislations and other requirements.
- Adopt and implement sustainable technologies and practices through
  - Optimum utilization of natural resources with special focus on raw material, water, and energy
  - A proactive approach to implement energy conservation concepts and SHE controls at all stages of the product life cycle to eliminate, minimize and manage significant aspects, risks and energy uses (SEU)
  - Implementation of green procurement policy related towards purchase of energy, equipment, systems, material and services
  - Involvement of suppliers and service providers in our journey towards performance improvement
- Environment protection and prevention of injury/ill-health by
  - Minimizing GHG emissions, wastes and exposure to hazards
  - Encouraging all levels of employees including contract personnel, to proactively participate in training programs and effective implementation of SHEEn management system thereby inculcating good practices and behavior
  - Proactive and continuous monitoring of work practices through audits
- Ensure availability of information and resources to achieve objectives and targets
- Enhance awareness on the importance of Safety, Health, Environment and Energy management among our stakeholders such as suppliers, visitors, dealers and customers.

06.12.2022
Ver. 2.4

Arvind Balaji
Managing Director

Corporate Objectives



LUCAS - TVS Ltd
Auto Electrical Division
Corporate SHEEn Management System Objectives 2024-2025

Policy Statement	Objectives	Target	Major Measures	Lead Owners
Safety	Accidents	"ZERO"	• Training & Enforcement • Periodical Audit • Safety Improvements	HOD's & Site Heads
	Fire Incidents	"ZERO"	• Audit, Identify & Eliminate fire hazards	HOD's & Site Heads
Prevention of Pollution	Hazardous Chemicals Consumption Reduction	20 %	• Focus on 5R • Focus on technology • Focus on process • Ensure consumption norms • Action on leaky machines	HOD's & Site Heads
	Waste Generation Reduction • Varnish • Coil • Paint • Waste oil	10 %		
	GHG Reduction	5 %	• Reduction control Initiatives for Major Emission Sources • Focus on new technologies towards Carbon Neutrality	HOD's & Site Heads
Work Environment	Work Environment-Compliance	100 %	• Compliance to Sanitary requirements • Compliance to Ambient & Indoor air quality and temperature	HRD/WED & Site Heads
Energy Conservation	Reduction in Power	5 %	• EnCon audits & Projects • Focus on technology	
	Reduction in HSD/SKO/LPG	5 %		
	Use of Renewable Energy	10 %	• Green P • Solar PV/ Solar T	
Resource Conservation	Carton usage reduction	50 %	• Alternate Process/Material • Process Improvement	
	Paper usage reduction	10%	• Digitalization of Documents • Control A4 Usage	
	Water Conservation & Ground Water Table Improvement	10 %	• Focus on 5R • Focus on RWH methods	HOD's & Site Heads
Compliance of statutory requirement	Single Use Plastics	100 %	• Elimination of SUPs in domestic supplies • Focus on Recyclable plastics • Compliance to State specific plastic usage norms	HOD's & Site Heads
Training	EHS & EnMS Training (Competence &Awareness)	2 Man days/ Employee/ year	• Annual schedule and implementation • Focus on Advance training methodologies	HOD's & Site Heads

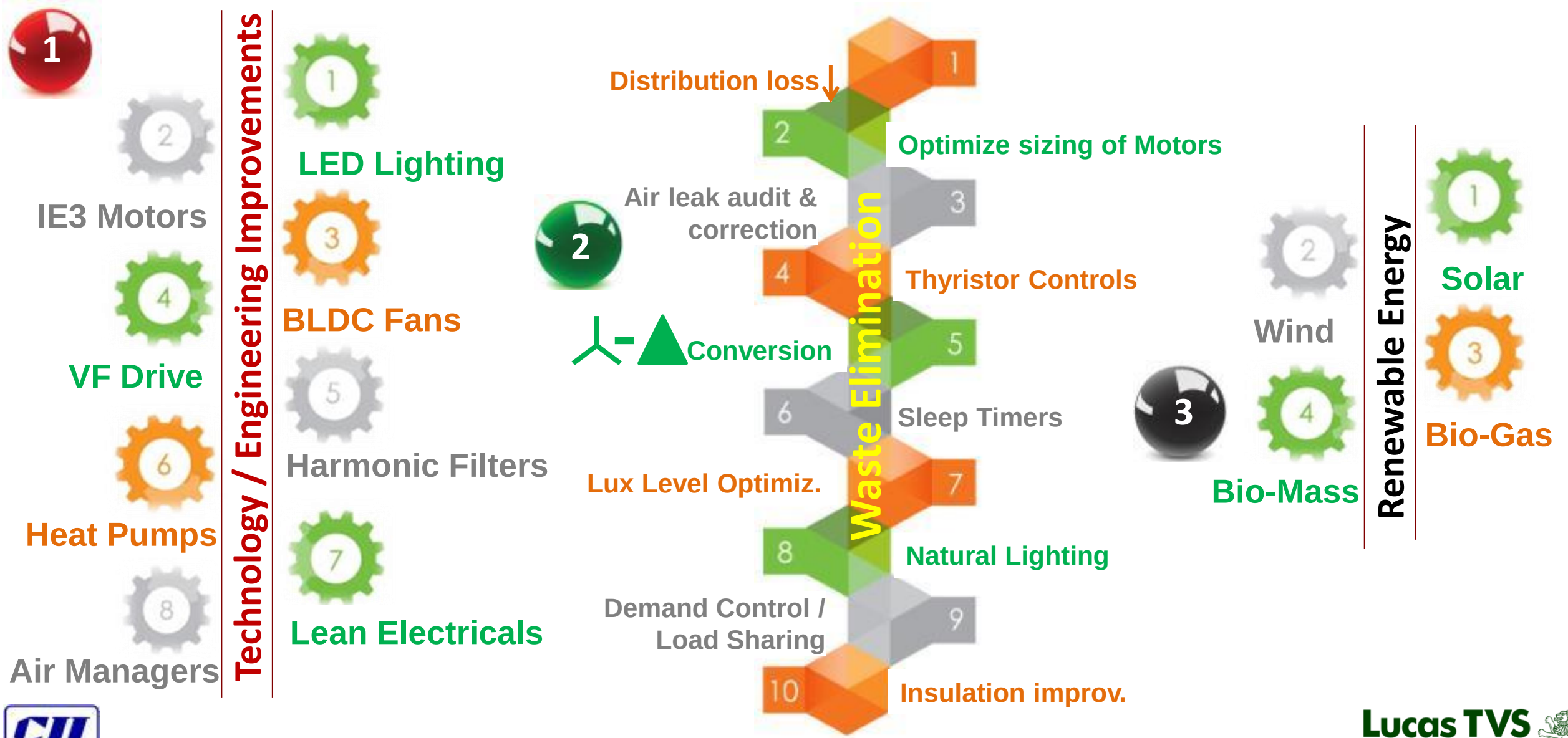
Note: Individual sites may increase the targets based on their previous year's performance.

Shree Ranga
President (AB) & Top Management

GHG Reduction by 5%

Reduction in Power consumption 5%

APPROACH ON ENERGY CONSERVATION



ENCON PROCESS

Significant Energy consuming Equipments

Continuous Monitoring & Control

System Adherence & Deviations

Need for Training & Awareness

Statutory Compliances

Work Efficiency improvement

Internal Audit (1/2 yearly)

Obsolete Model & Replacements

Waste Elimination

Technology Upgradation

System Evaluation & Improvements

Regulations & Obligations

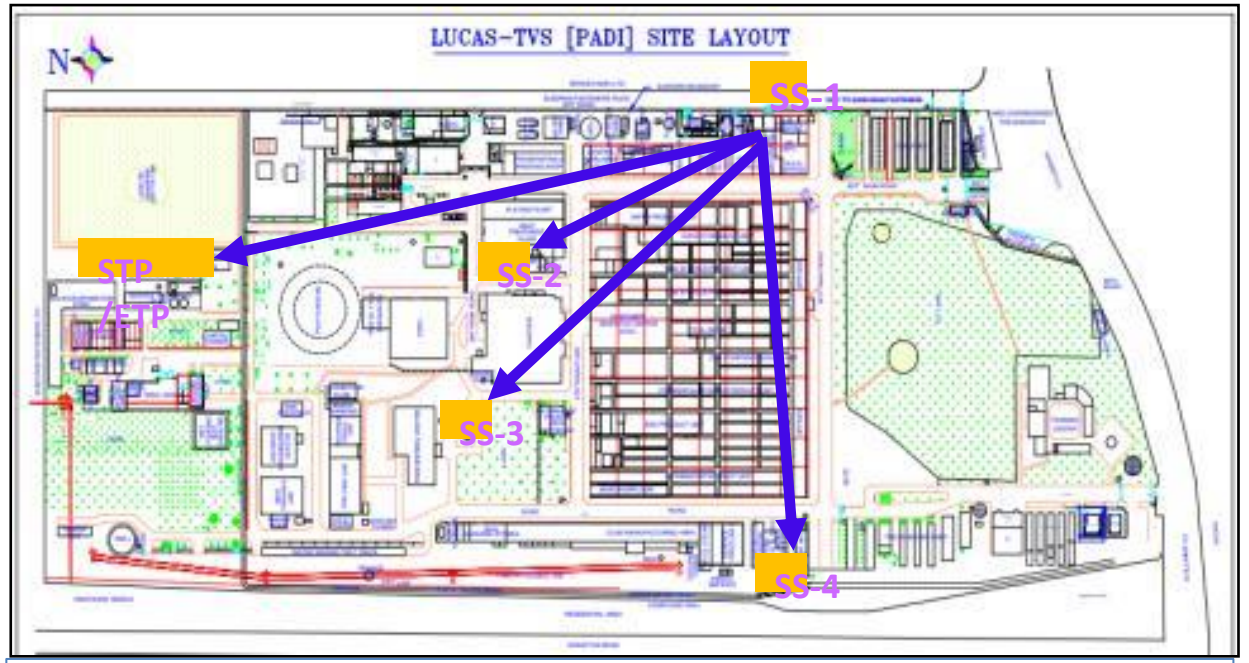
Equipment Efficiency improvement

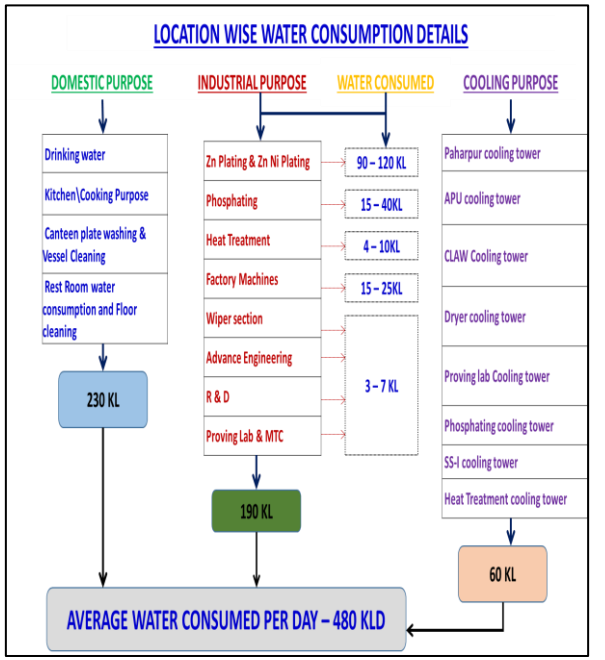
External Audit (Once in 2 years)

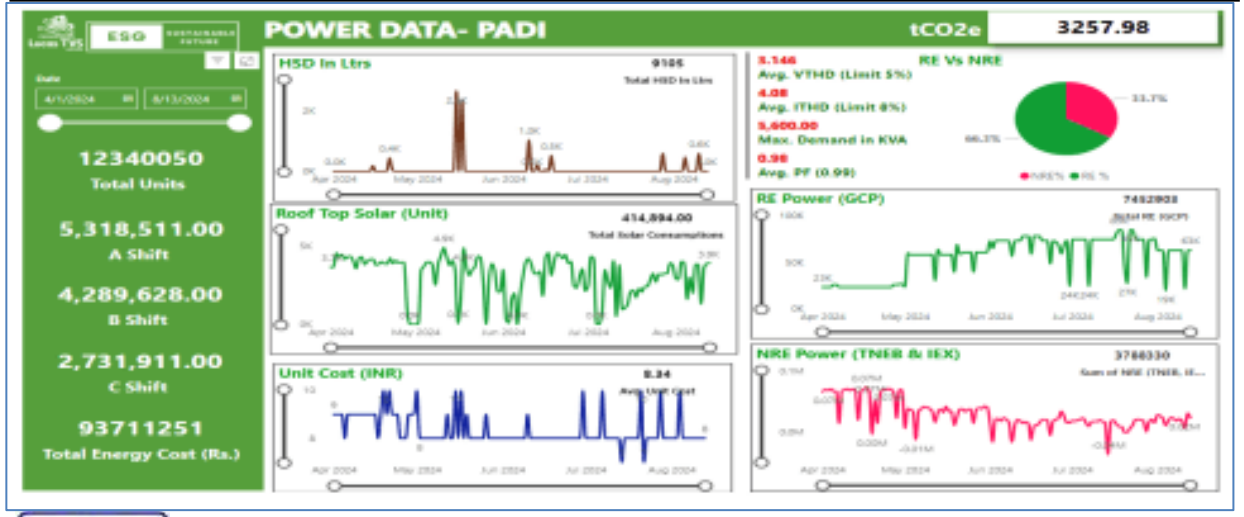
ENCON PROCESS FLOW

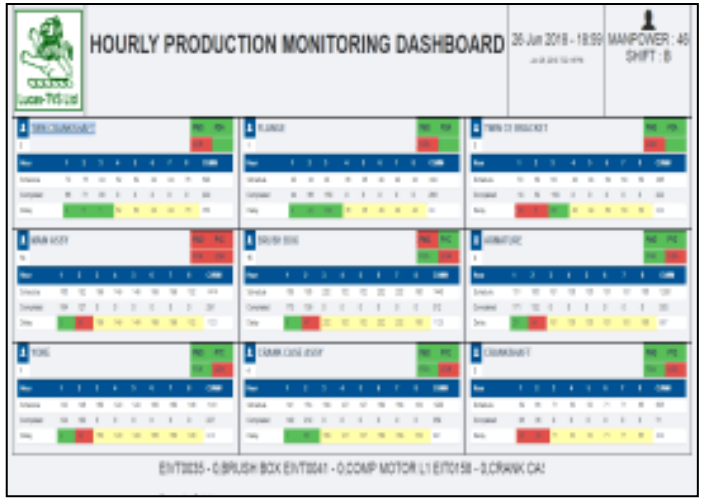
Audit → Identification of Projects → Evaluation → Proposal & Approvals → Execution → Result Verification

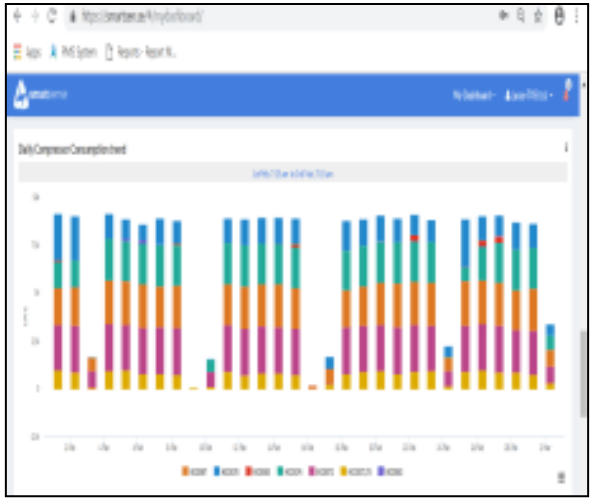
ENERGY BALANCING - Monitoring & Management System



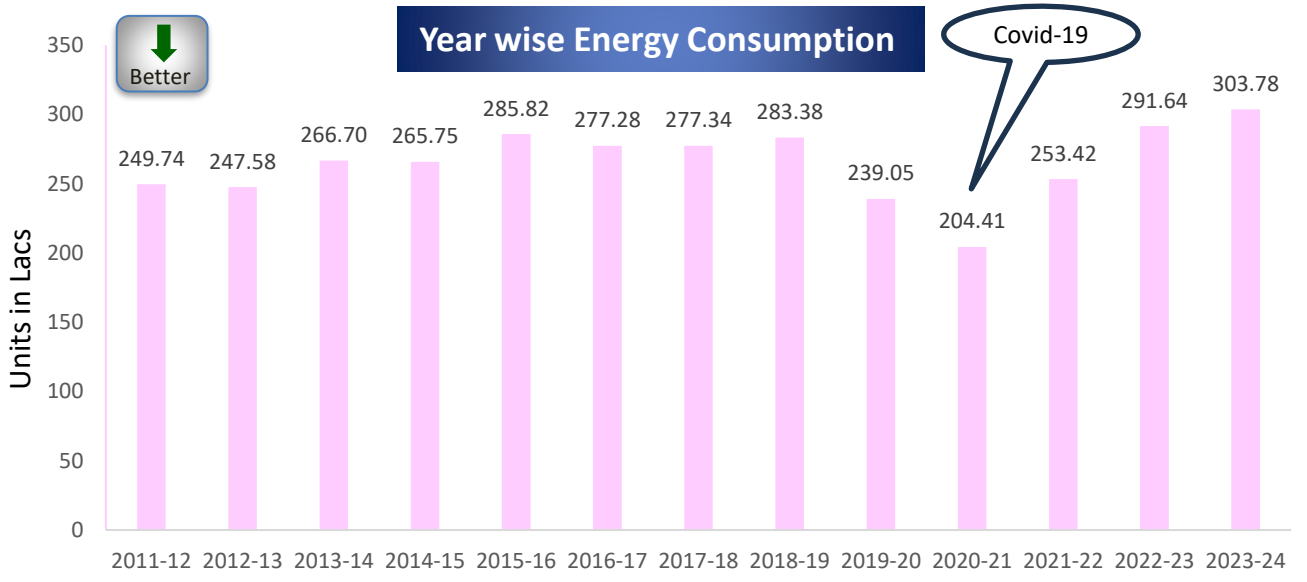


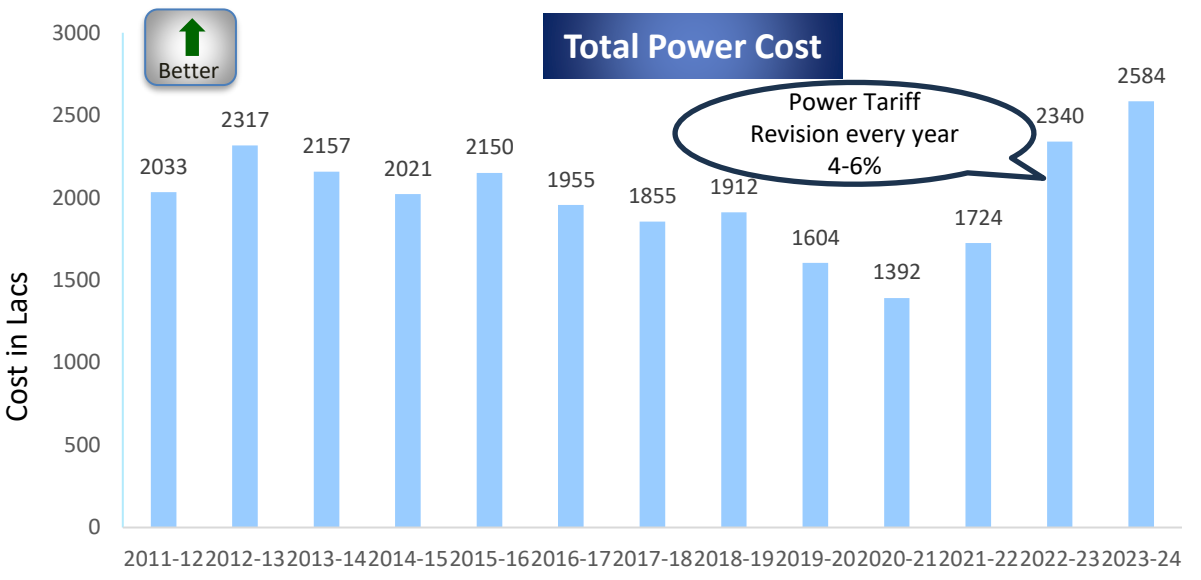


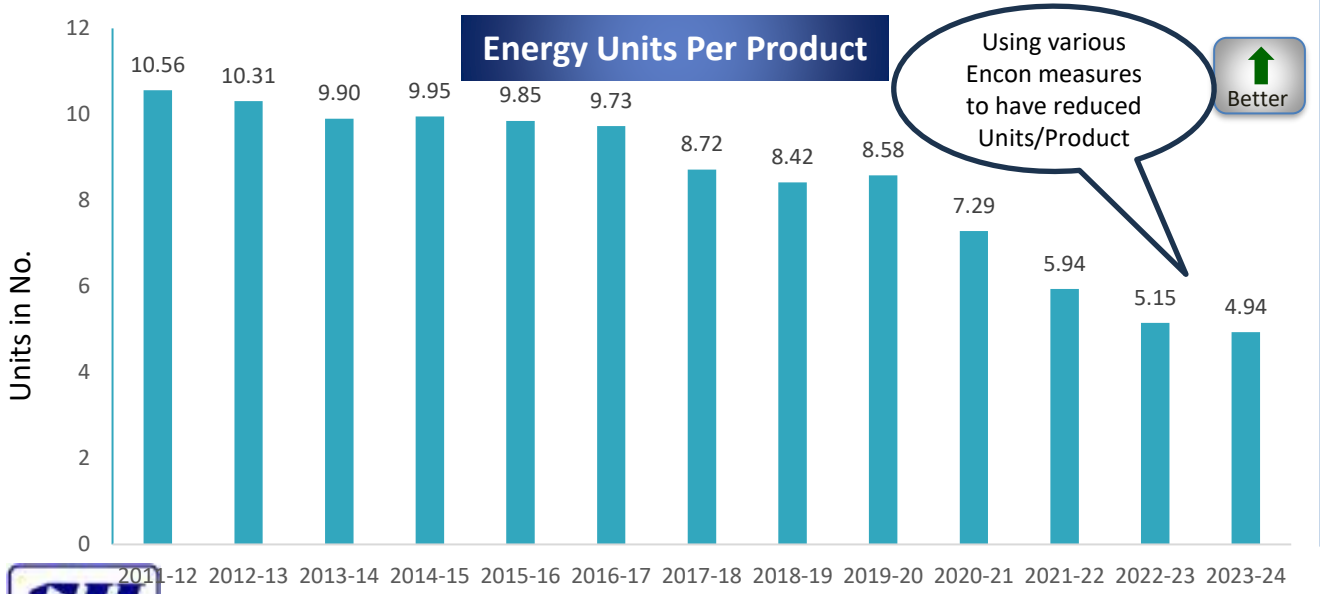


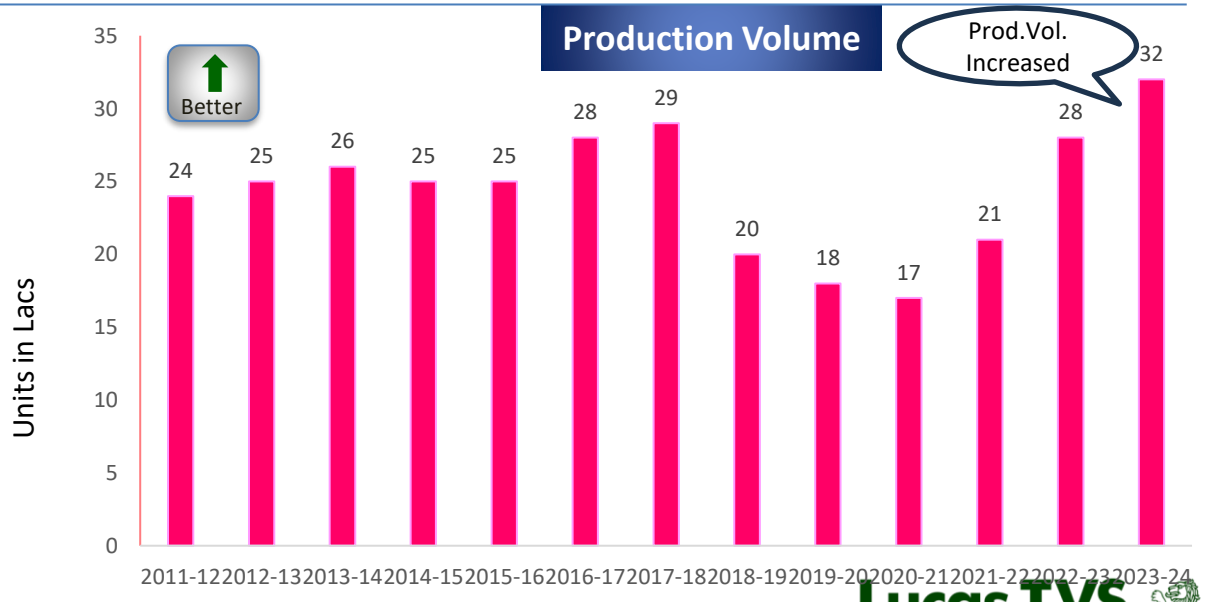


Specific Power Consumption Trend

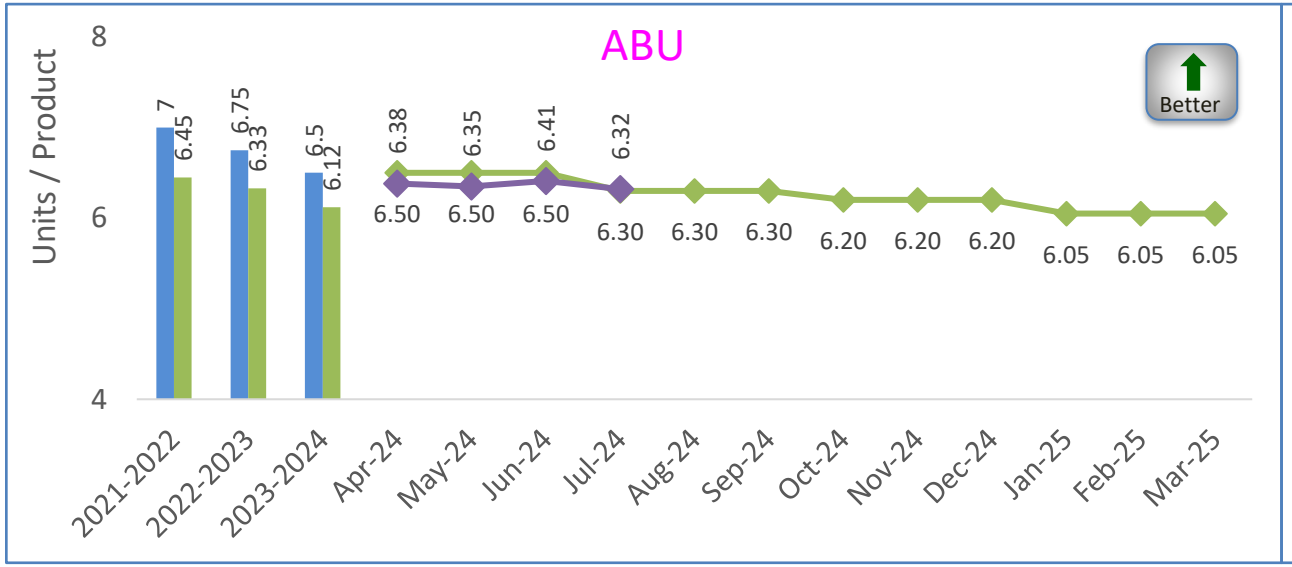


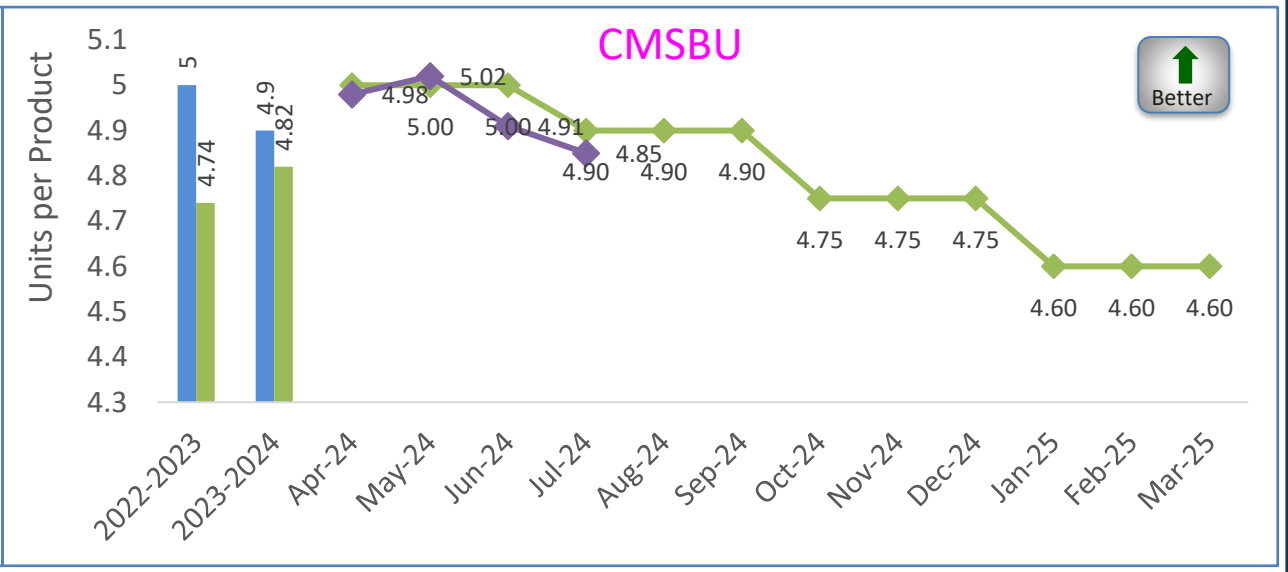


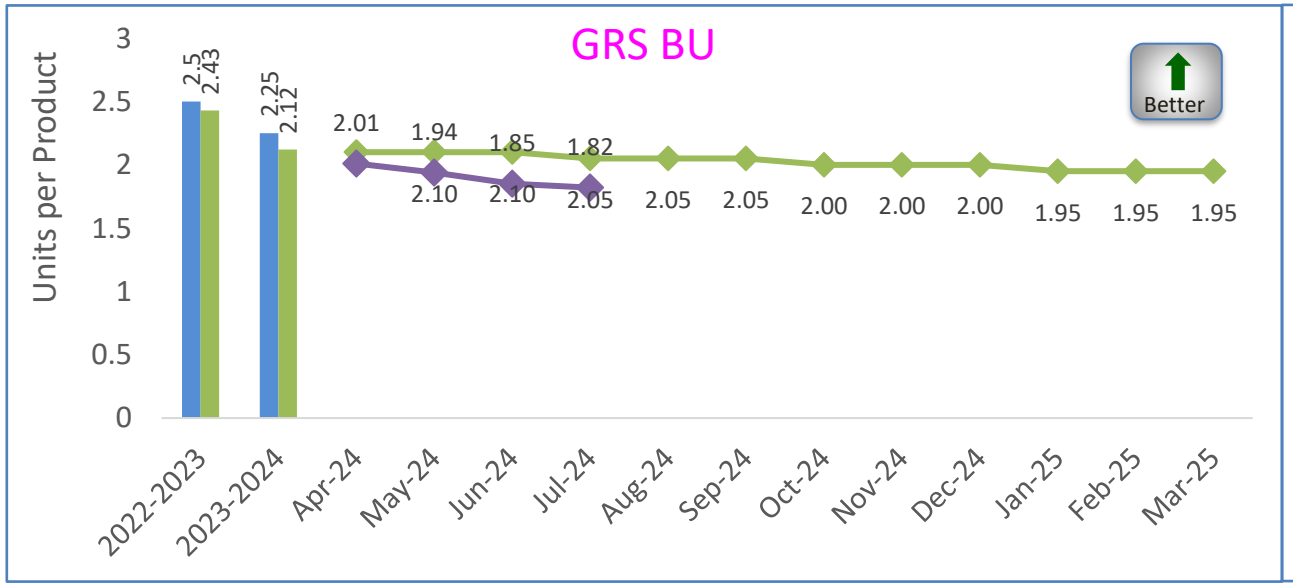


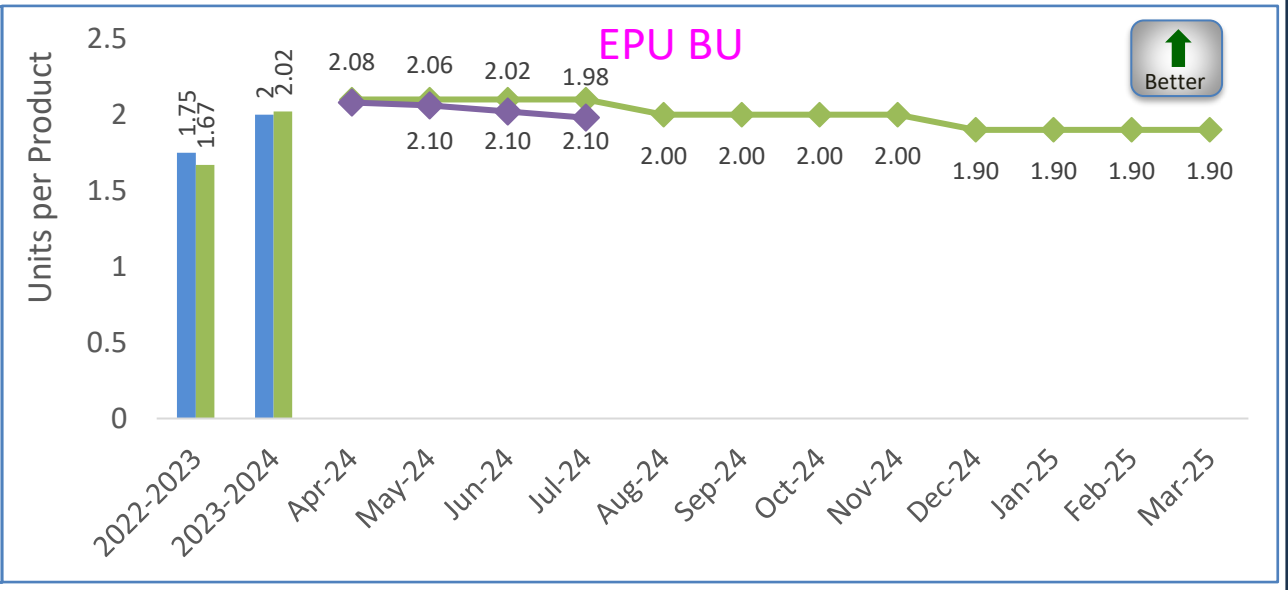


Specific Electrical units / Product unit Wise trend









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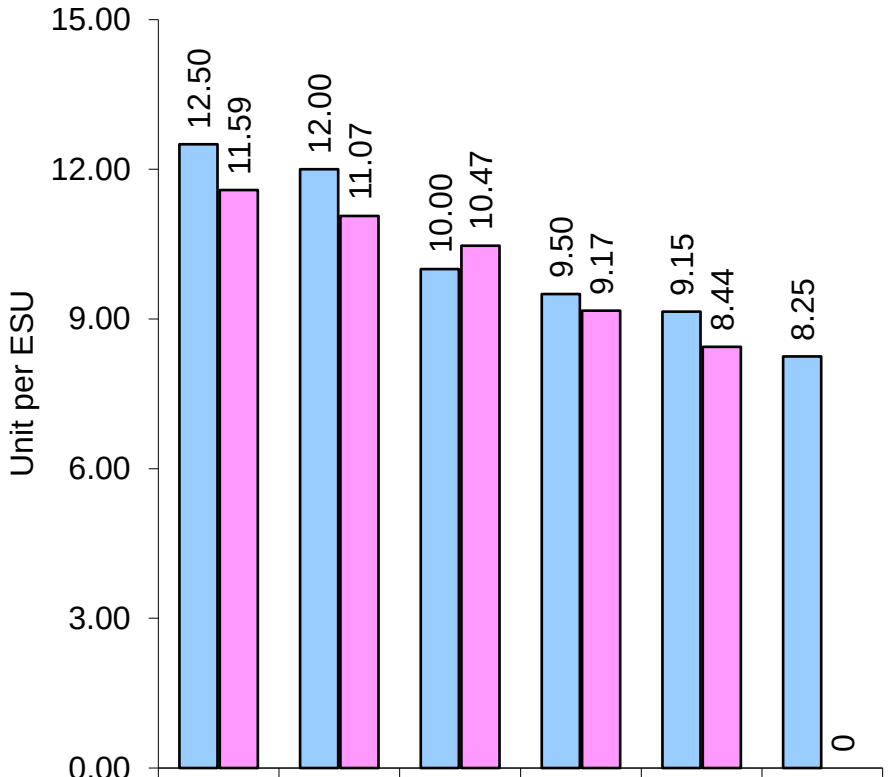
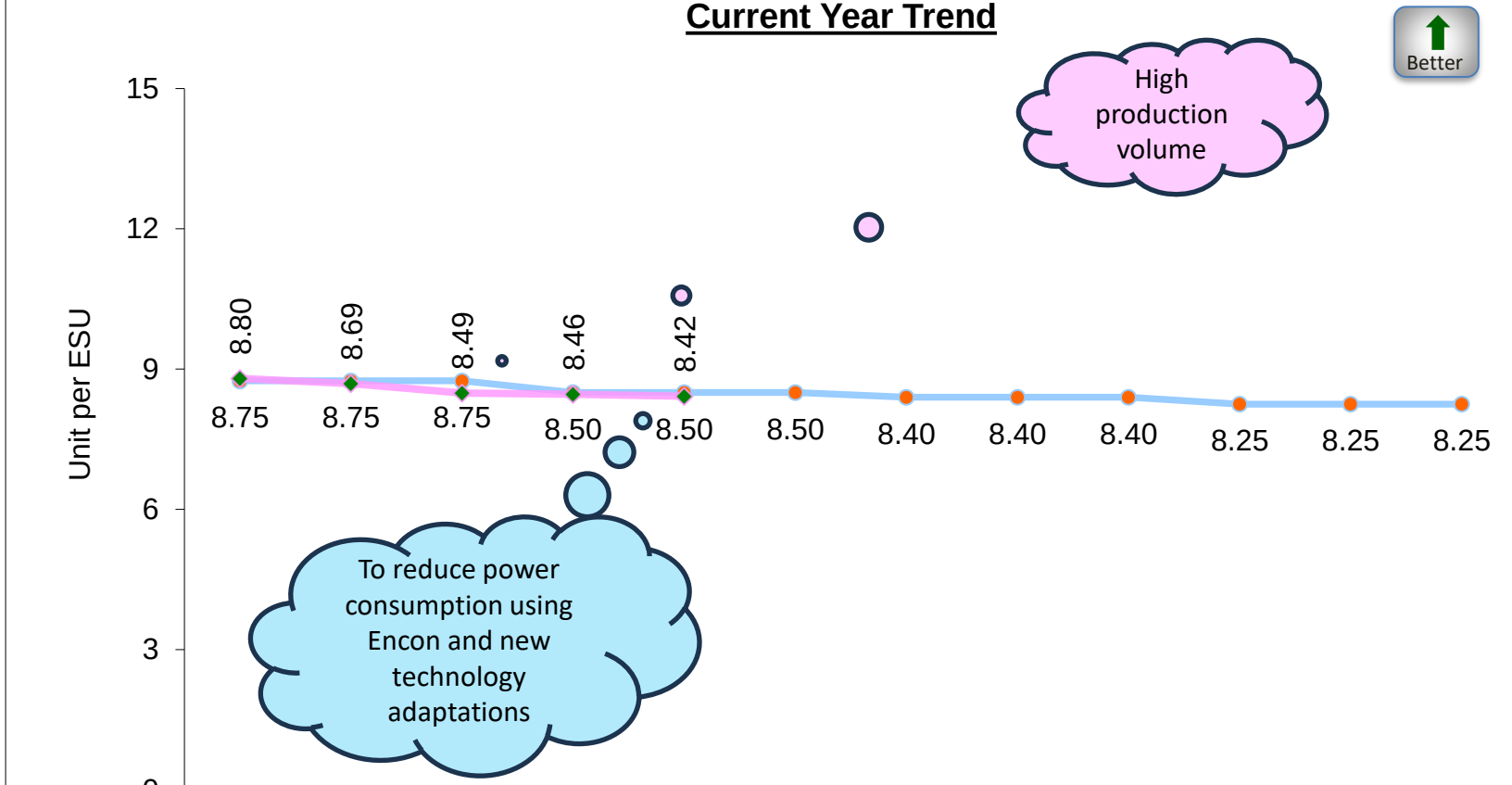
Specific Electrical units / ESU Trend 2024-25

Previous Year Trend



	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Plan	12.50	12.00	10.00	9.50	9.15	8.25
Actual	11.59	11.07	10.47	9.17	8.44	0

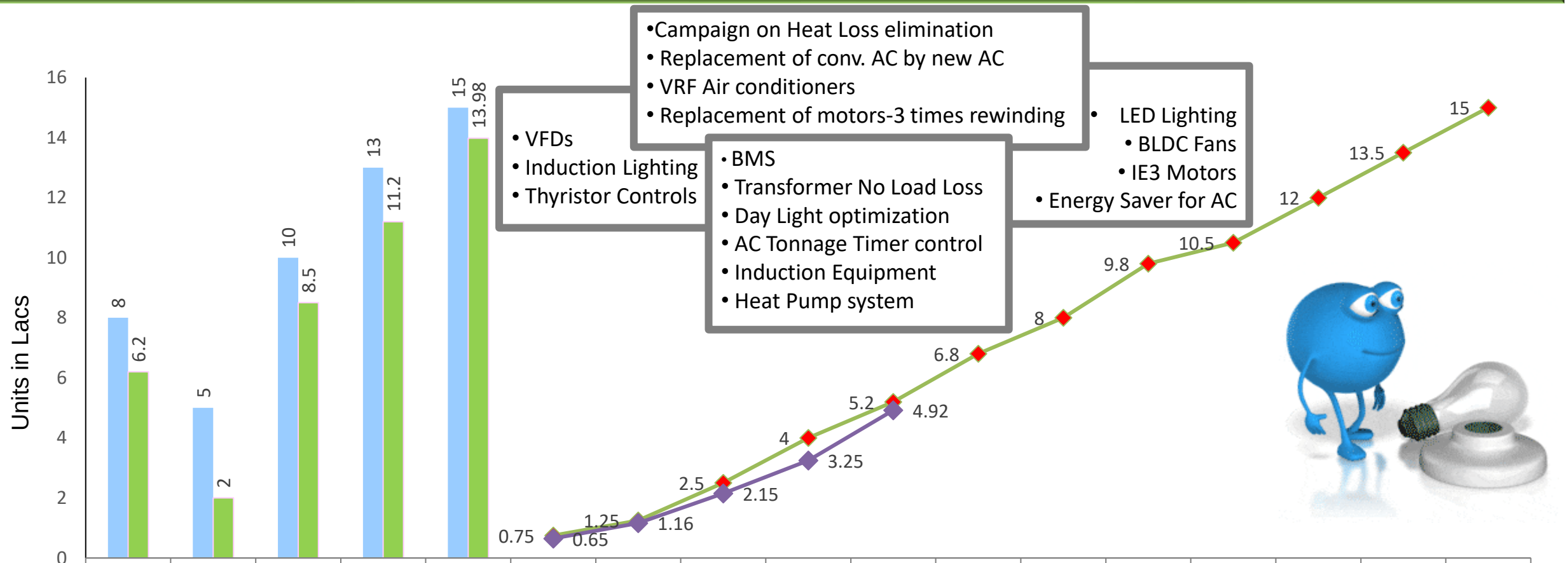
Current Year Trend



	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
Plan	8.75	8.75	8.75	8.50	8.50	8.50	8.40	8.40	8.40	8.25	8.25	8.25
Actual	8.80	8.69	8.49	8.46	8.42							

ESU – Equivalent Standard Unit

Power Saving using - ENCON (Continual Improvement)

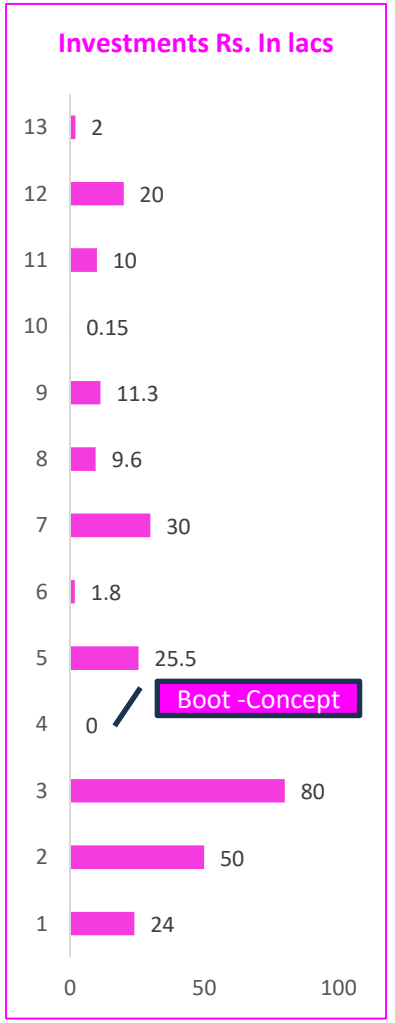


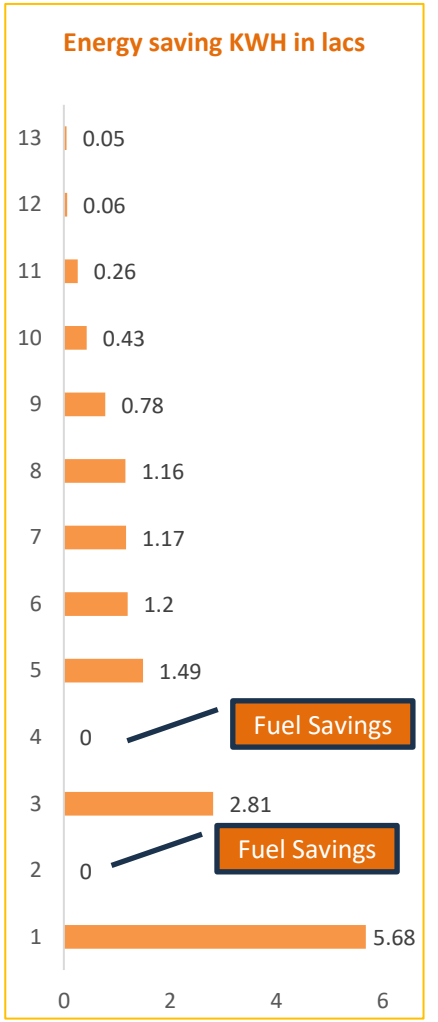
	2019-20	2020-21	2021-22	2022-23	2023-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
Plan	8	5	10	13	15												
Actual	6.2	2	8.5	11.2	13.98												
Plan2						0.75	1.25	2.5	4	5.2	6.8	8	9.8	10.5	12	13.5	15
Actual						0.65	1.16	2.15	3.25	4.92							

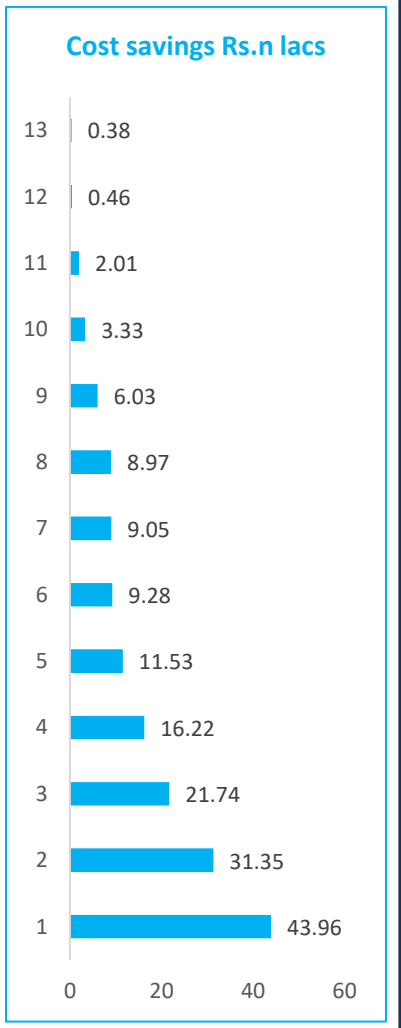
Target for year 2024-25 is 15 lac unit / so far achieved 4.92 lacs unit.

Energy Conservation Project - Plan vs Actual 2023-24

Project Title	Investment	Energy Saving	Cost Saving
Introduction of Thyristor for Process Plant			
Elimination of Transformer no load loss by replacing 40 years old			
Day light optimization by introducing Sola Tube in Warehouse			
Downsizing the cooling tower pump based on process sizing.			
Introduction of energy efficient ACs by replacing old Acs			
IE3 Motor for Manufacturing Machines in Shopfloor			
Replacement of conventional Industrial Fan with BLDC mancoolers			
Introduction of all day Timer for Air conditioners use optimized (10 to 3)			
Replacement of conventional Ceiling Fan with BLDC ceiling fan			
Heat Pump System in place of Thermopack – SKO Elimination (Boot concept)			
Installation of HVLS Ceiling Fan instead of Almonard fans			
Induction equipment @ canteen for reduction of fuels like LPG /HSD			
Introduction of Energy Efficient Lighting across factory			







Energy conservation Plan 2024 – 25 (Major Projects)

Project Title	Energy saving expected in Lacs
Replacement of motors to IE3 & Energy Saver Unit for Air conditioners	1.9 kWh
Elimination of Transformer no load loss by replacing with new ONAN transformer	0.5 kWh
Heat Pump System at process plant	2.36 kWh
Lean automation in manufacturing lines	
Day light optimization by introducing Solar Tube in Claw and BU Warehouse	0.24 kWh
Power Quality improvement by installing Active & passive Filters (TDD /THD)	2.1 kWh
Energy Efficient Lighting across factory	
Downsizing of Motors in Manufacturing machineries in shop floor &Thyristor for Induction Hardening Machine	2.40 kWh

Expected Savings of Around 15 Lac Units in 2024-25

Investment on Energy conserving Projects 2·08 Crores

CII

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SKO Elimination - HEAT PUMP SYSTEM

Before

Thermopac

Plating shop

Phospating shop

Thermopacs were being used for Phospating and Plating application. SKO consumption per day -540 Litres
Avg. Expense – Rs.6.92 per M Cal.

After

Heat Pump System were introduced by eliminating Thermopacs for Phospating and Plating application.
Avg. Expense – Rs.6.09 per M Cal.

Financials (in Lakhs)

INVESTMENT

Zero

Energy saving

185KL of SKO

COST SAVING

₹16.22

CO2

293 TCO_2e

INNOVATIVE PROJECT – INDUCTION EQUIPMENT

LPG – Stove @ Canteen

Induction Cookware's @ Canteen

Fuels were being used for Canteen cooking application.
LPG consumption per day - 100 Kg.
HSD Consumption per day – 150 liters.

Induction kitchen equipment system were introduced by eliminating fuel for cooking application.
LPG consumption per day - 50 Kg.
HSD Consumption per day – 0 liters.

Financials (in Lakhs)

INVESTMENT

₹ 50

Energy saving

21-MT of LPG & 55 KL of HSD

COST SAVING

₹31.35

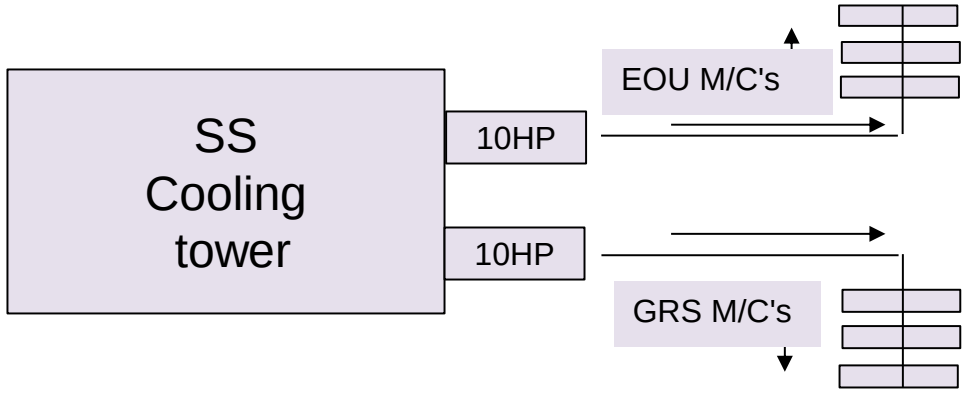
CO_2

113.8 TCO_2e

15

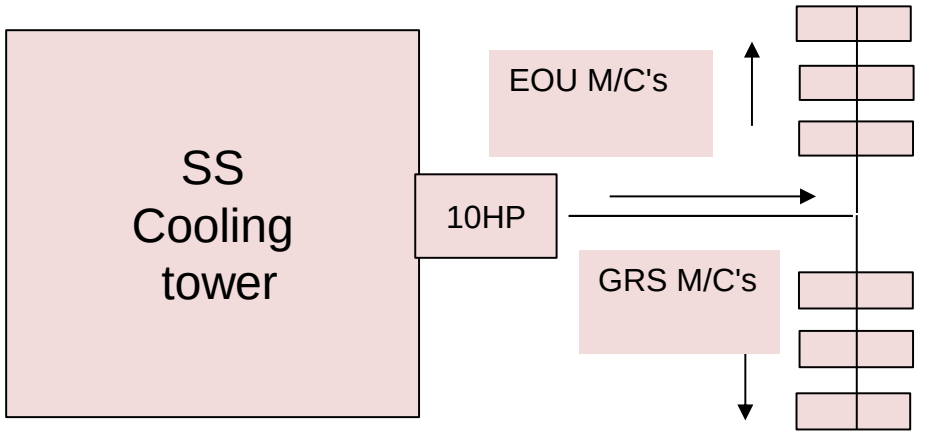
Energy Conservation Projects – Cooling Tower Pump Motor Optimization

Before



Two different 10HP motors were being used to feed EOU & GRS requirements individually.

After



However, it was identified that both EOU & GRS requirements can be fed with a single 10 HP motor & the other motor has been removed from the circuit.

Financials (in Lakhs)

INVESTMENT

₹0.15

Energy saving

0.43 kWh

COST SAVING

₹3.33

CO2

36.5 TCO_2e

Energy Conservation Projects – New Transformer With OLTC

Before

We had a 40-year-old transformer 1000 kVA Transformer with OCTC in substation.

After

The transformer was replaced with 1000 kVA ONAN with OLTC which results in reduction of no-load losses by 5% and constant output voltage as required output.

Financials (in Lakhs)

INVESTMENT

₹20

Energy saving

0.06 kWh

COST SAVING

₹ 0.46

CO2

5.16 TCO_2e

Energy Conservation Projects - IE3 Energy Efficiency Motor

Before

After

Old Conventional motors in Machine Manufacturing line of different capacity

This motors was replaced with higher efficiency IE3 motor resulting in 5% reduction of energy consumption.

Financials (in Lakhs)

INVESTMENT

₹9.6

Energy saving

0.90 kWh

COST SAVING

₹6.98

CO2

76.74 TCO_2e

Energy Conservation Projects – SCR Control Instead of Power Contactor

Before

In Previous control systems, Heaters were continuously running in ITA 0073 Armature Gel coating plant, ITA 0074, ITA 0076 Stator varnishing plant, even in ideal condition

After

Thyristor control was introduced in Pre-heat & baking zone resulting in 6% reduction of energy consumption.

Financials (in Lakhs)

INVESTMENT ₹2.0

Energy saving 0.13 kWh

COST SAVING ₹ 1.03

CO2 11.33 TCO_2e

Energy Conservation Projects – Comport AC Timer for Auto switching

Before

After

Previously, In office areas ACs were continuously running without a timer-based system which resulted in wastage of energy. (8 hours operation)

Now, an energy saver is used to optimize usage of ACs depending on the ambient temperature
(5 hours operation)

Financials (in Lakhs)

INVESTMENT

₹1.8

Energy saving

2.08 kWh

COST SAVING

₹16.1

CO2

177 TCO_2e

Energy Conservation Projects – VRF AC Units

Before

After

Previously, Window type ACs were installed in offices, standards room & labs consuming high energy.

Window type ACs were replaced with VRF type ACs in Engg centre & Advanced Engg., HR dept & Quality office resulting in a reduction of energy consumption by 25%.

Financials (in Lakhs)

INVESTMENT

₹11.3

Energy saving

1.09 kWh

COST SAVING

₹ 8.47

CO_2

93 TCO_2e

Energy Conservation Projects – BLDC Ceiling Fans

Before

Conventional 75W ceiling fans were being used throughout the company.

After

35W BLDC type Ceiling fans are being introduced in all the offices and stores to reduce energy consumption by 46%
- 850 Nos replaced so far

Financials (in Lakhs)

INVESTMENT

₹25.50

Energy saving

1.49 kWh

COST SAVING

₹ 11.53

CO2

147 TCO_2e

Energy Conservation Projects – BLDC 30” MAN COOLERS

Before

240 W Industrial type fan

Almonard fans

286 Nos x 240W =68.6 kW

BLDC fans proposed

180 W Industrial type man cooler

286 Nos x 180W =51.5 kW

2023-24
230 Fans

After

2024-25
40 Fans

240W Almonard Industrial fans were being used in Shopfloor and peripherals for operators in production

Introduction of 180W BLDC Man Coolers by replacing Almonard fans.

Financials (in Lakhs)

INVESTMENT

₹30

Energy saving

1.24 kWh

COST SAVING

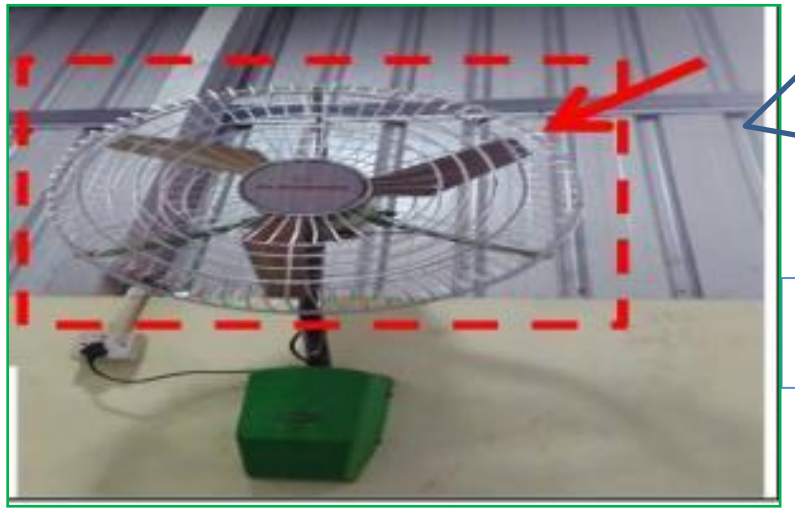
₹ 9.61

CO2

105 tCO_2e

Energy Conservation Projects – HVLS 24” Fans

Before



240 W Industrial type fan

Almonard fans

385 Nos x 240 W =92.4 kW

HVLS fans proposed

1200 W 24” BLDC / PMSM

42Nos x 1200W =50.4 kW

After

240W Almonard fans were being used in Main Assembly lines. 240 W x 10 Nos – 2400 W per Assembly.

Introduction of HVLS fans by replacing Almonard fans in shop-floor. 1200W x 1 No. = 1200W per Assembly. Effective air coverage Area – 24000 Sq.ft

Financials (in Lakhs)

INVESTMENT ₹80

Energy saving 2.81 kWh

COST SAVING ₹ 21.74

CO2 238 TCO_2e

Energy Conservation Projects – Solar tubes Lightings

Before

Previously, Warehouse had high wattage light fittings and was in operating condition day and night(24 hrs)

After

After installation of Solar tubes, Usage of Light fittings were reduced to only 12 hours in the night as Natural lighting was used during the day.

Financials (in Lakhs)

INVESTMENT

₹10

Energy saving

0.26 kWh

COST SAVING

₹ 2.01

CO2

21.8 TCO_2e

Energy Conservation Projects LED Lights

Before

We were equipped with 36W Tube-lights, 72W recess mounted fittings & 150 W high bay lights.

After

18W | 36W | 75W

The conventional light fittings were replaced with energy efficient LED Lights – 3507 / 5358 Nos.
Reduction in Energy by 50% .

Financials (in Lakhs)

₹24

4.90 kWh

₹ **37.96**

416 TCO_2e

Energy Conservation Projects – Water Conservations

Before

- Tap water flow rate is 15 L/min & 2.7 KL per Day
- Solar Panel cleaning purpose water use 9 liters per panel

After

- Tap water flow rate reduced to 1.5 L/min & 900 Ltrs per day.
- Solar Panel cleaning after nozzle renewed 3 liters per panel. (Cleaning frequency @ once in three months)

Financials (in Lakhs)

INVESTMENT ₹0.80

Energy saving 832 kL

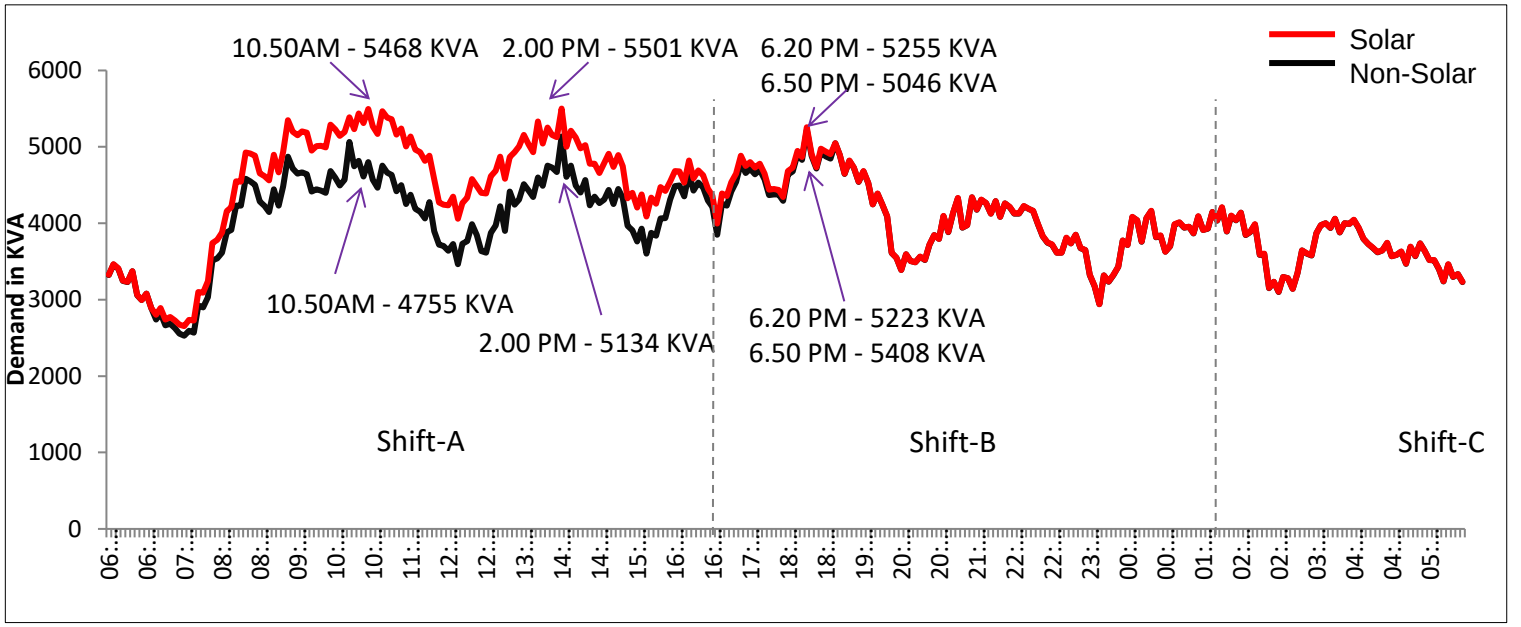
COST SAVING ₹ 1.09

CO2 4.6 TCO_2e

RENEWABLE ENERGY SOURCE In-House Rooftop Solar

Before

After



Ref. data : 31.03.2024 (Total consumption- 1,12500)

- Reduce Peak demand with help of solar power
- Cost saving of Rs 1.17 Lacs per month on Demand charges

Project : Roof Top Solar Power Plant

Plant Capacity : 1.3 MWp

Project Cost : Zero investment – Opex Model

Power generation : 5000 Units / day & 14 Lacs / Year

Benefit : Cost Saving @ 1.87 Lakhs / Month

: 100% Compliance with TNREC regulation (RPO)

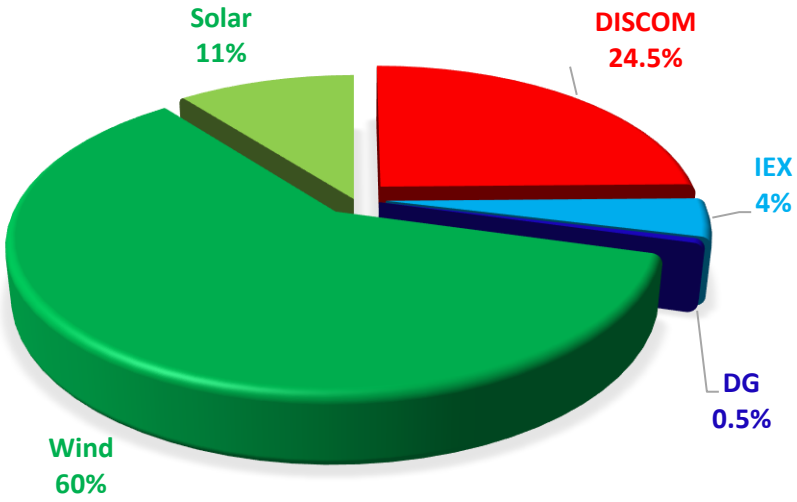
Yearly recuring savings @ 23 Lacs /Annam

Satellite of L-TVS Padi Roof top.

RENEWABLE ENERGY SOURCES – GCP / CPP

External Solar Power

Wind Power



Purchase quantum	**: 3.80 MW (Wind / Solar Power)**
Contract Agency	**: M/s OGPL / Watsun / DRPL**
Purpose	**: Use of Renewable Energy**
Energy Unit Generate	**: 230 Lacs Units per Month**
Benefit	**: Off setting by 66%**

Windmill Capacity	**: 1 MW (4 nos. x 250 KW)**
Installed Location	**: Tirunelveli**
Purpose	**: Use of Renewable Energy**
Energy Unit Generate	**: 14 Lacs Units / Annum**
Benefit	**: Off setting by 4%**

<u>Proposed Projects:</u>

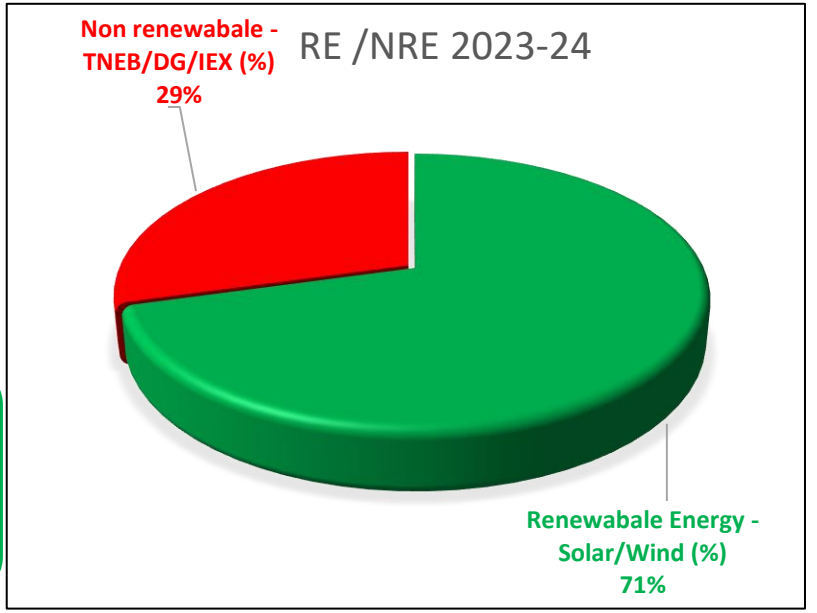
In house Roof top solar expansion to 2.4 MWP instead of present 1.3MWP.

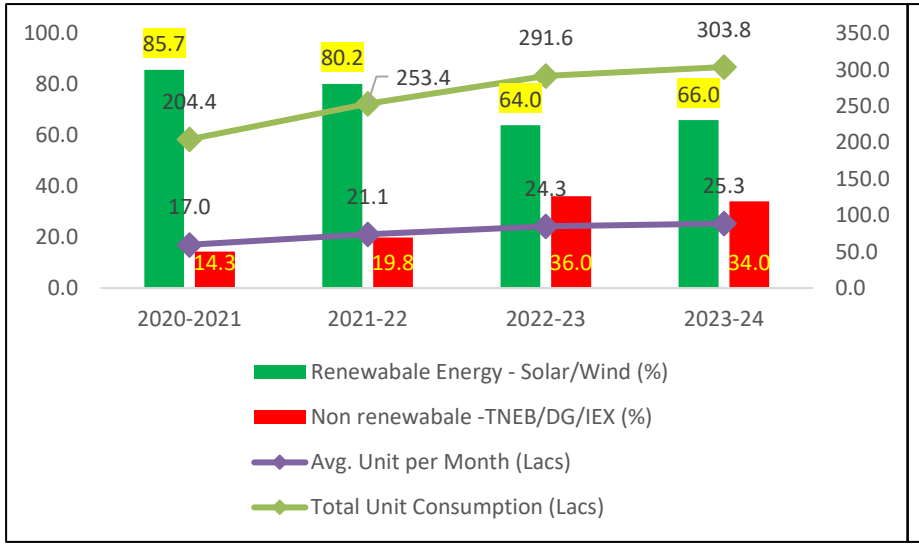
Re-powering of 25 years old wind mill from 1 MW to 2MW

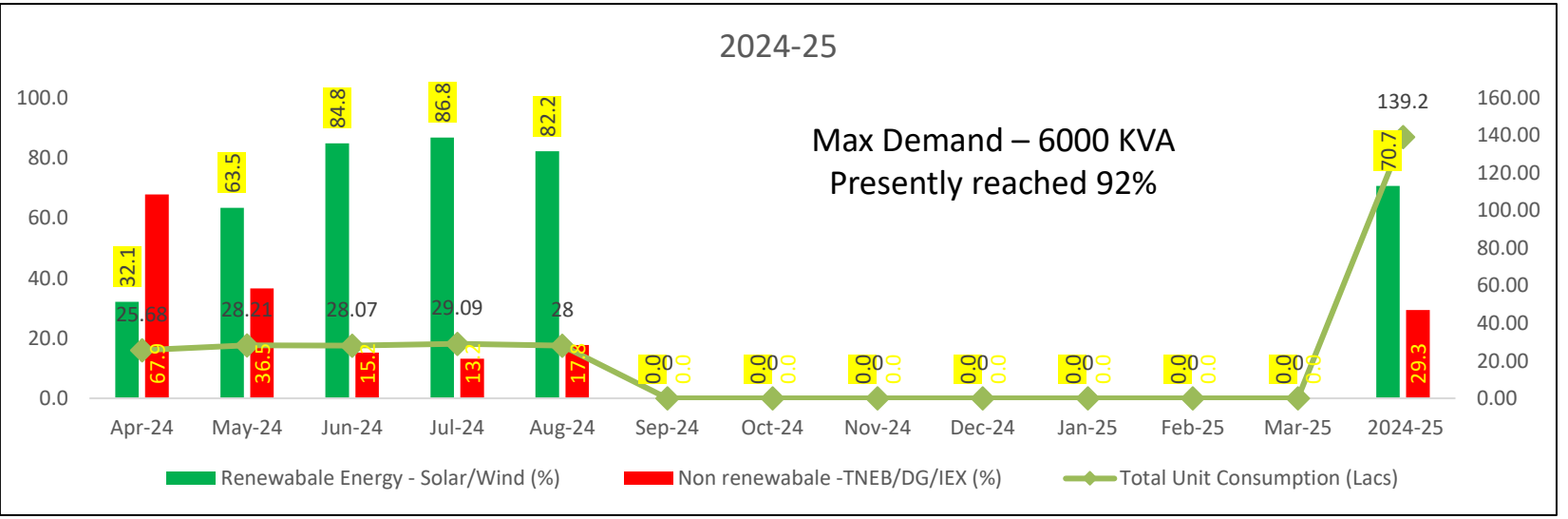
L-TVS Renewable Power Utilization Trend – 9 years

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Series1	266	286	277	277	283	239	204	253	292	304	305	310	315	320
Series2	121	111	188	168	157	178	175	203	187	200	250	300	315	320

Plan to enhance renewable power purchase from 70% to 100% FY 27-28







Utilization of Waste Material as Fuel

Waste Material Used – Canteen Food waste

Generation of 5 – 8 kg of Biogas per day from every 50 kg of food waste

Proposed to expanded the existing capacity from 50 kg to 200 kg and it will be Generating of 18 – 20 kg of Biogas per day from every 200 kg of food waste

Financials (in Lakhs)

INVESTMENT

₹5.0

energy saving

1825 kg (LPG)

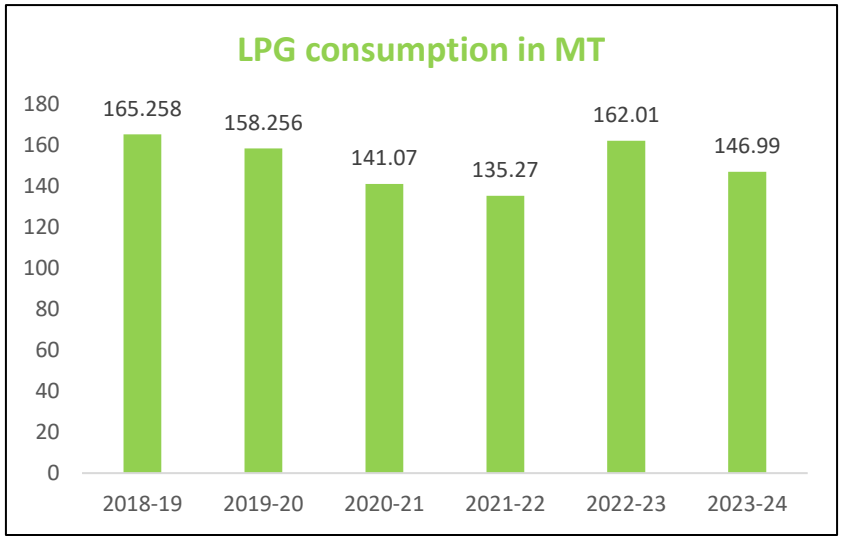
COST SAVING

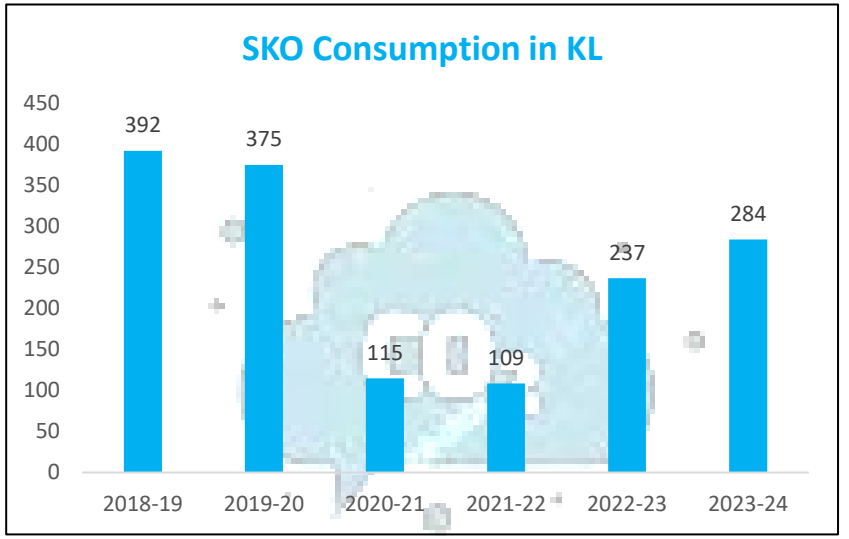
₹0.91

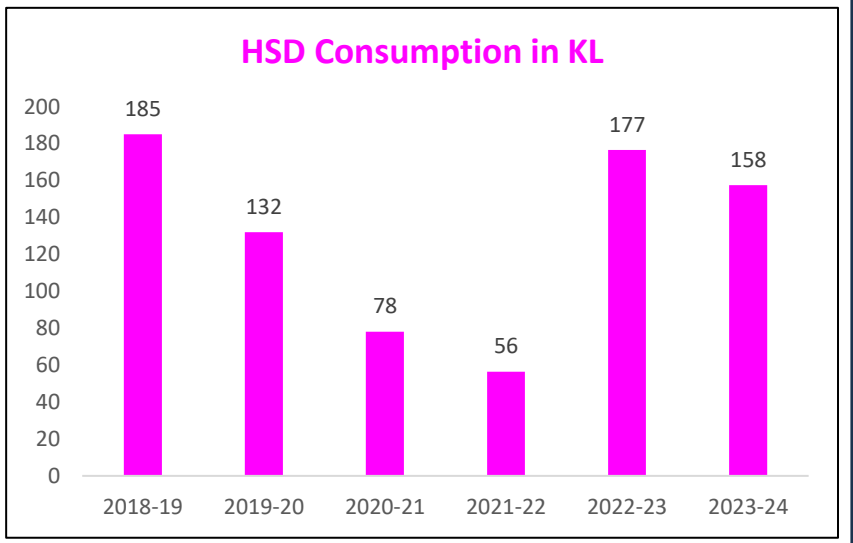
CO2

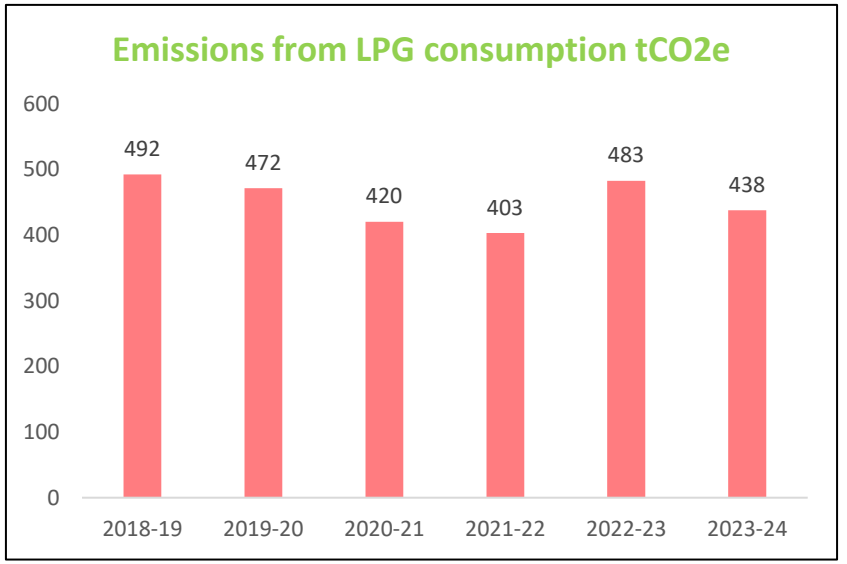
4.71 TCO_2e

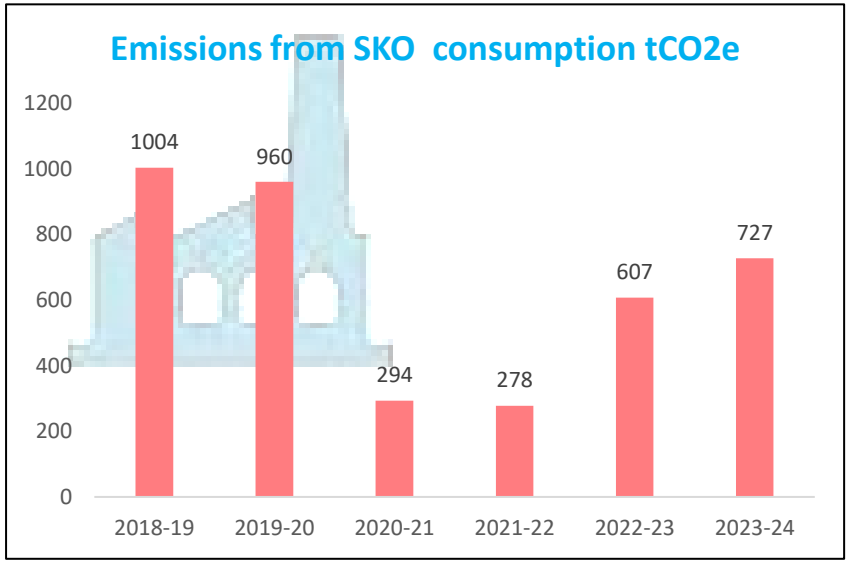
GHG Inventory – Scope 1

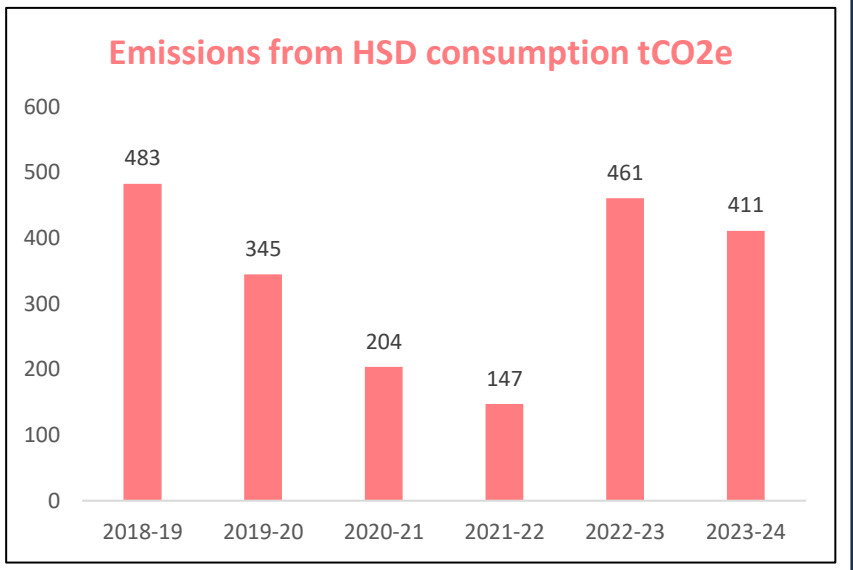








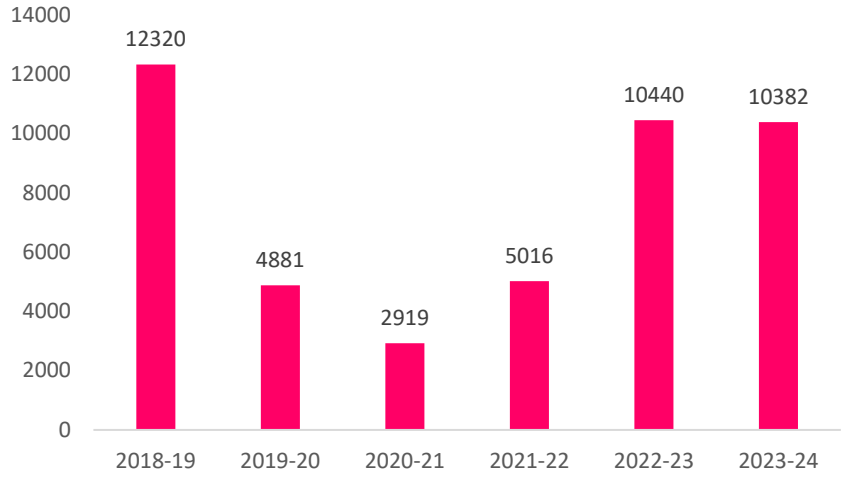




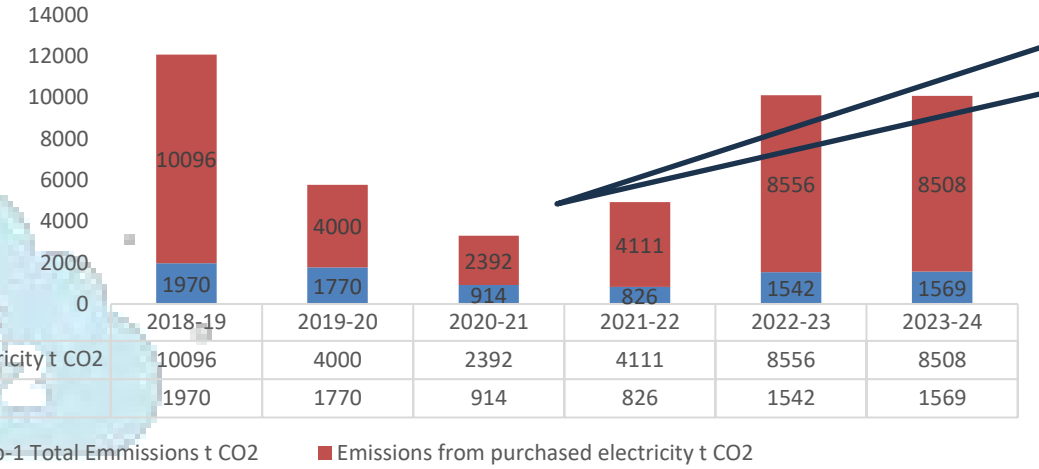
❖ **During The period from 2020 to 2022 Low production volume due to Covid-19**

GHG Inventory Scope-2 & Overall Emission tCo2e

Purchased electricity in MWh



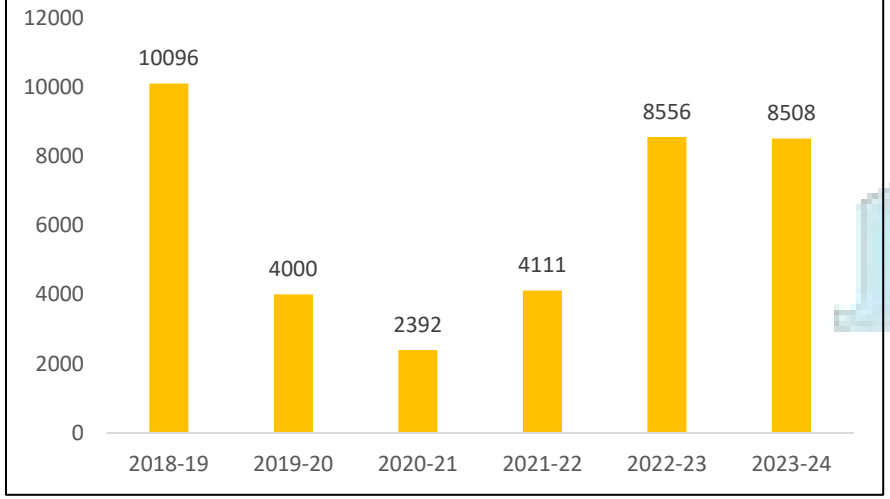
Total Scope- 1 + 2 Emissions = tCo2e



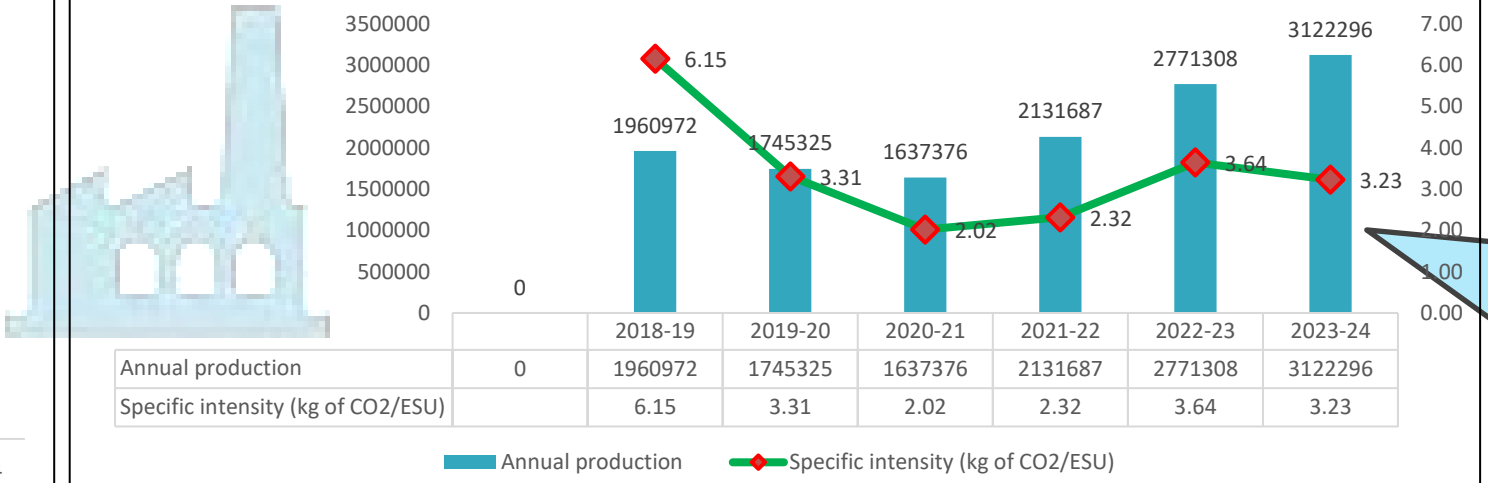
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Emissions from purchased electricity t CO2	10096	4000	2392	4111	8556	8508
Scop-1 Total Emmissions t CO2	1970	1770	914	826	1542	1569

During The period from 2020 to 2022 Low production volume due to Covid-19

Emissions from purchased electricity tCO2e



Overal Production - KgCo2/ESU



		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Annual production	0	1960972	1745325	1637376	2131687	2771308	3122296
Specific intensity (kg of CO2/ESU)		6.15	3.31	2.02	2.32	3.64	3.23

Specific intensity of CO_2 - % Reduction over last 4 years - 52%

❖ During The period from 2020 to 2022 Low production volume due to Covid-19

GHG Inventorisation

Scope 1 emissions		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
LPG consumption	MT	165.258	158.256	141.07	135.27	162.01	146.99
Emissions from LPG consumption	t CO2	**492**	**472**	**420**	**403**	**483**	**438**
HSD Consumption	KL	185	132	78	56	177	158
Emissions from HSD consumption	t CO2	**483**	**345**	**204**	**147**	**461**	**411**
SKO Consumption	KL	392	375	115	109	237	284
Emissions from SKO consumption	t CO2	**1004**	**960**	**294**	**278**	**607**	**727**
Scop-1 Total Emmissions	t CO2	**1970**	**1770**	**914**	**826**	**1542**	**1569**
Scope 2 emissions							
Purchased electricity	MWh	12320	4881	2919	5016	10440	10382
Emissions from purchased electricity	t CO2	**10096**	**4000**	**2392**	**4111**	**8556**	**8508**
Total emissions	**t CO2**	**12066**	**5770**	**3306**	**4936**	**10098**	**10077**
Annual production	ESU	1960972	1745325	1637376	2131687	2771308	3122296
Specific intensity (kg of CO2/ESU)		**6.15**	**3.31**	**2.02**	**2.32**	**3.64**	**3.23**

GREEN SUPPLY CHAIN – Vehicle Route Optimization

Routes optimized while vehicle allotment for reducing lead time, reduce cost of logistics and improve fuel efficiency.

CO_2 Emission reduced by 60 % - 107 T CO_2 e

Route 1 – Ambattur Zone – 7 Vehicles – 24 Suppliers Covered

Route 2 – Porur Zone – 2 Vehicles – 7 Suppliers Covered

Route 3 – Arumbakkam Zone – 2 Vehicles – 4 Suppliers Covered

Route 4 – Tambaram Zone – 3 Vehicles – 5 Suppliers Covered

Route 5 – Thirumazhisai & Thirumudivakkam Zone – 2 Vehicles – 8 Suppliers

Route 6 – Perungudi Zone – 2 Vehicle – 7 Suppliers

Route 7 – Guindy / Villivakkam Zone – 3 Vehicles – 15 Suppliers Covered

Route 8 – Other Zones – 2 Vehicles – 5 Suppliers

Before
Suppliers – 75
Vehicles - 48

After
Suppliers – 75
Vehicles - 23

Green Supply Chain - Carton Box Elimination in Incoming Supplies

Total Parts Identified	801 Nos
Completed	487 Nos
Balance To Complete	314 Nos

Proposed use of Polythene bags of thickness > 50 microns for;

- **Parts prone to oxidation / white rust**
- **Parts from outstation suppliers**
- **Smaller parts like bushes, washers, fasteners,etc.**

Larger Parts	174 Nos

Smaller Parts	517 Nos

Existing Method

Carton box

Present Method

PVC tray

Existing Method

Polythene bags < 40 Microns

Present Method

Polythene bags > 50 Microns

EnCON – Training Program & Knowledge sharing

Training Programme for Contractor

Training Programme for Trainee

Training Programme for Vendor

Training Programme for Family

Plantation @ Arignar Anna Zoological Park TN (Vandular Zoo)

Re - establishing a fruit orchard in AAZP - 785 tall seedlings of native fruit bearing trees. Re - establishing a fruid orchard in Arignar Anna Zoological Park on one hectare of land that will help to provide fresh, chemical free fruits & the best care to the 2382 zoo animals and 178 species that creates a naturalistic environment to make them feel at home. We are donated Rs.4.5 lacs DD given to Mr.Srinivas R. Reddy I.F.S.,Additional principal Chief conservator of Forest,Arignar Anna Zoological Park,Vandalur, Chennai.

SAPLING AND SEED BALLS PREPARATION COMPLETED













EXISTING RAINWATER HARVESTING DESILTING WORK COMPLETED 14 LOCATIONS

Cleaning and Removal of old Sludges,Replace the new sand and Pebbles layer.

Existing RWH – 14 Location

Desilting work completed – 14 location

Benefits :

- Improve Ground water table.
- Improve Water holding capacity.
- Improves the quality and quantity of groundwater

CII

Lucas TVS DRIVEN

MIYAWAKI FORESTS INSIDE LTVS,PADI

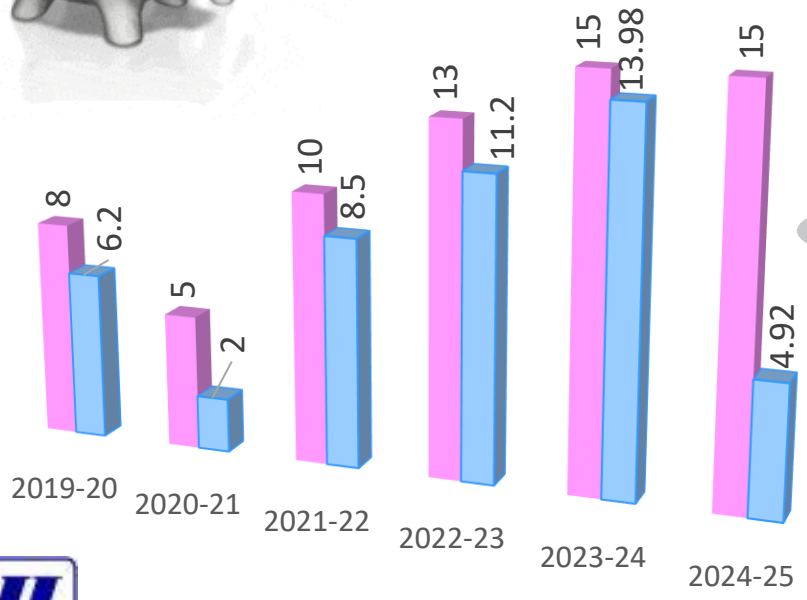
- We have created 2 Miyawaki forest (1600 Sq.m) method where various native species of plants are planted close to each other so that the greens receive sunlight only from the top and grow upwards than sideways.
- Created forests that grow 10 times faster and are 30 times denser than conventional ones.
- Increases carbon capture and pollution filtration

EnCON – SAVINGS

Units Savings

So far, continuous energy savings achieved in our journey is around

46.8 lacs .



01 Unit Savings

So far, continuous energy savings achieved in our journey is around 46.8 Lacs units.

02 Power Cost

So far, by continuous energy savings we have achieved Rs. 374.4 lacs.

Power Cost Savings

So far, by continuous energy savings we have achieved

Rs. 374.4 lacs.

SAVE ENERGY SAVE NATION SAVE EARTH

Lucas-TVS Limited

Thank you...