



**Godrej & Boyce Mfg. Co. Ltd.,  
Appliances Division, Shirwal**

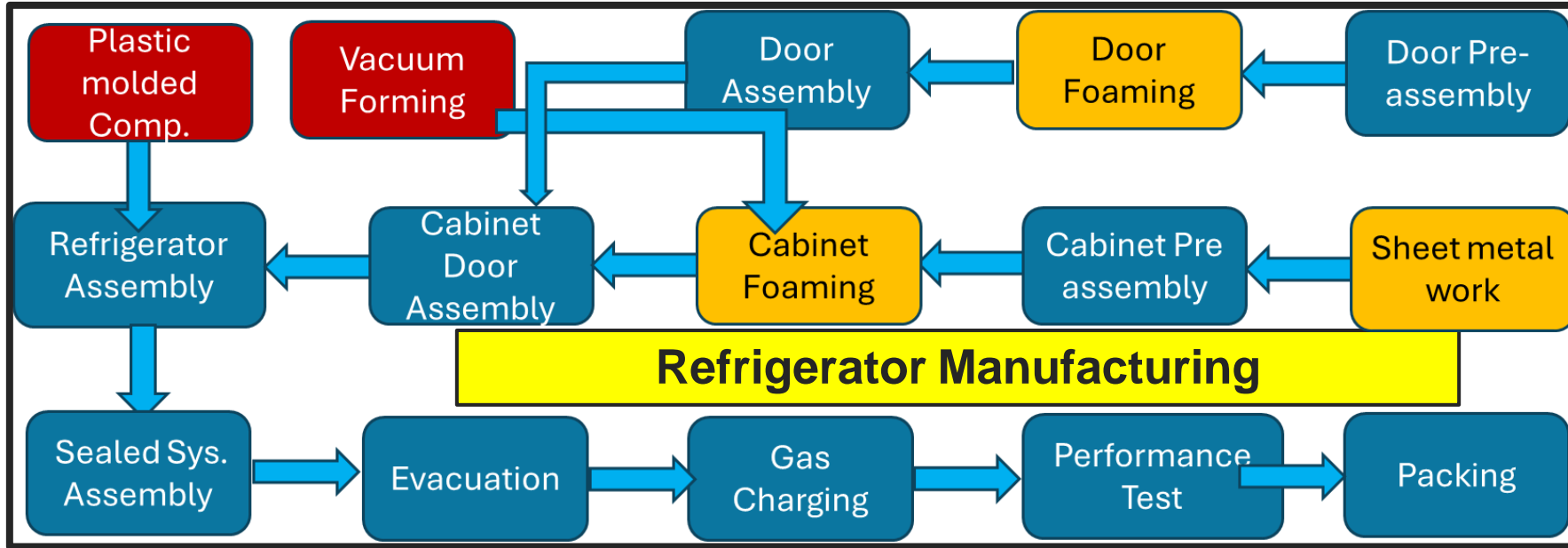
**Prasad Pendse – General Manager**

# Company Profile

## Flagship Division of Godrej & Boyce Mfg. Co. Ltd.

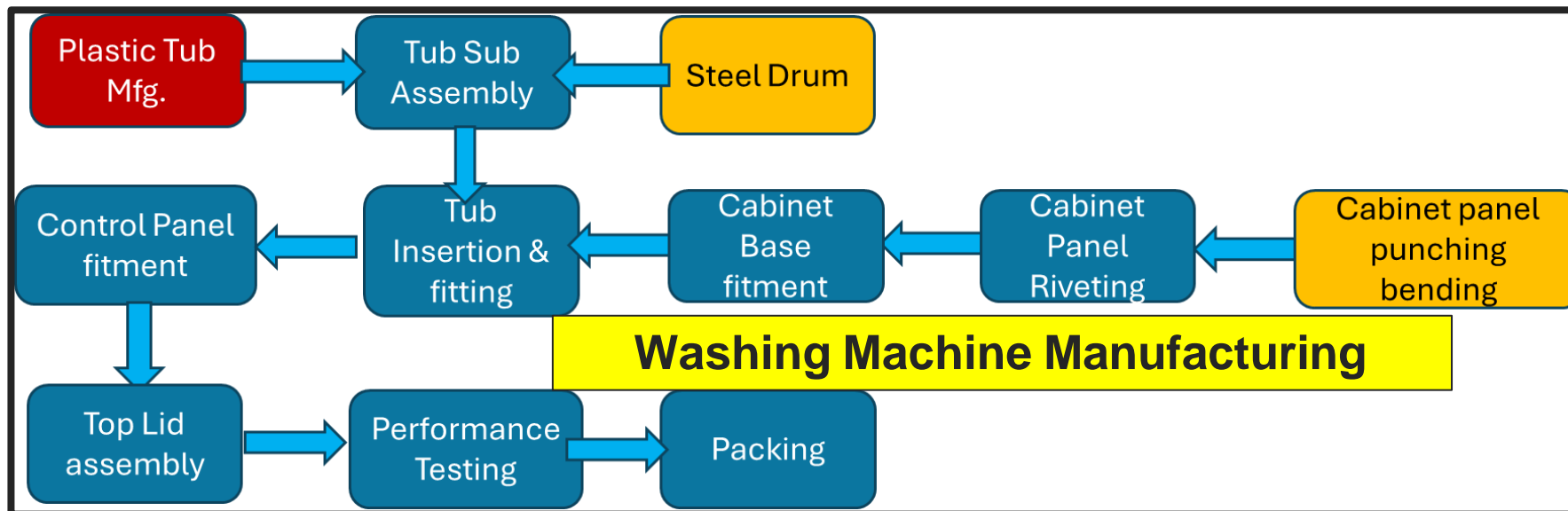


# Manufacturing Processes - Ref. & Washer



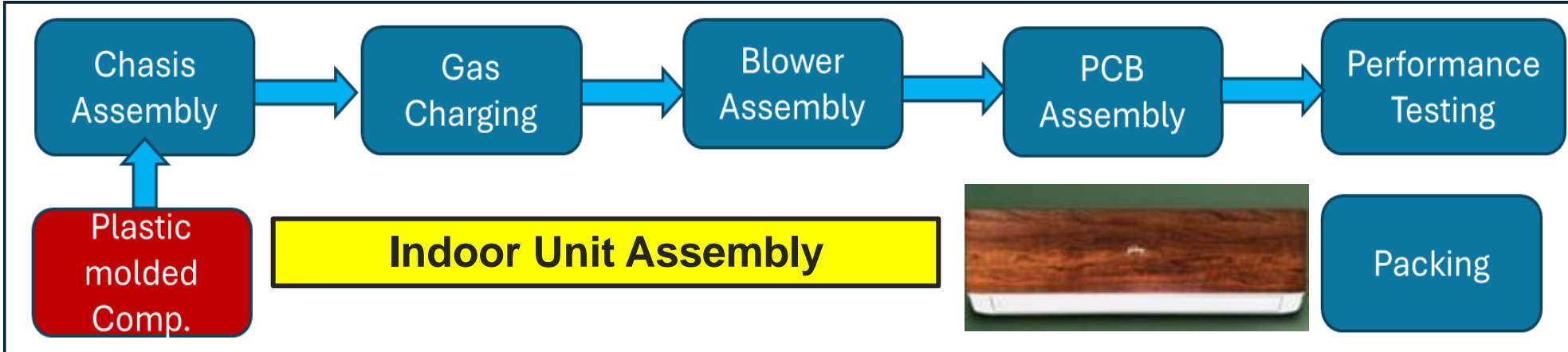
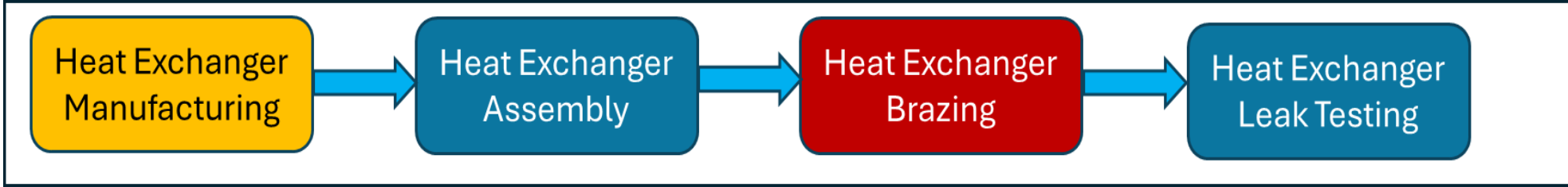
High Energy Intensive

Medium Energy Intensive



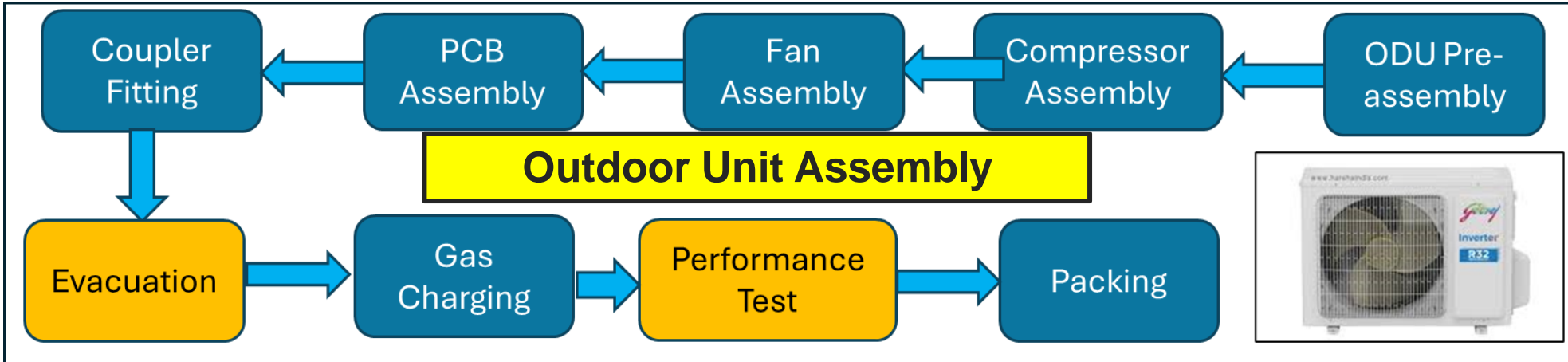
# Manufacturing Processes - AC

## Heat Exchanger manufacturing – Backward Integration



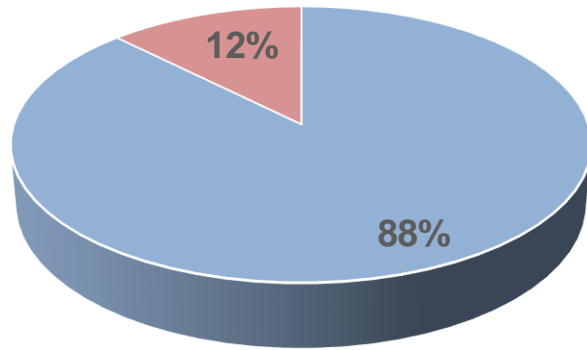
High Energy Intensive

Medium Energy Intensive



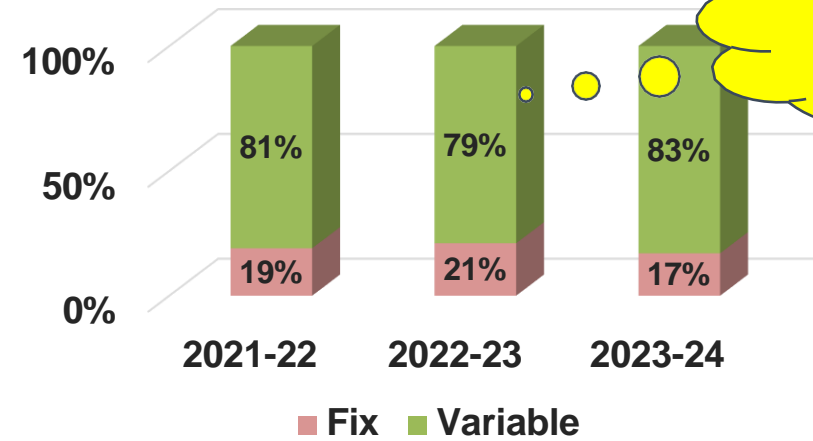
# Energy Consumption & SEC

## Energy Consumption

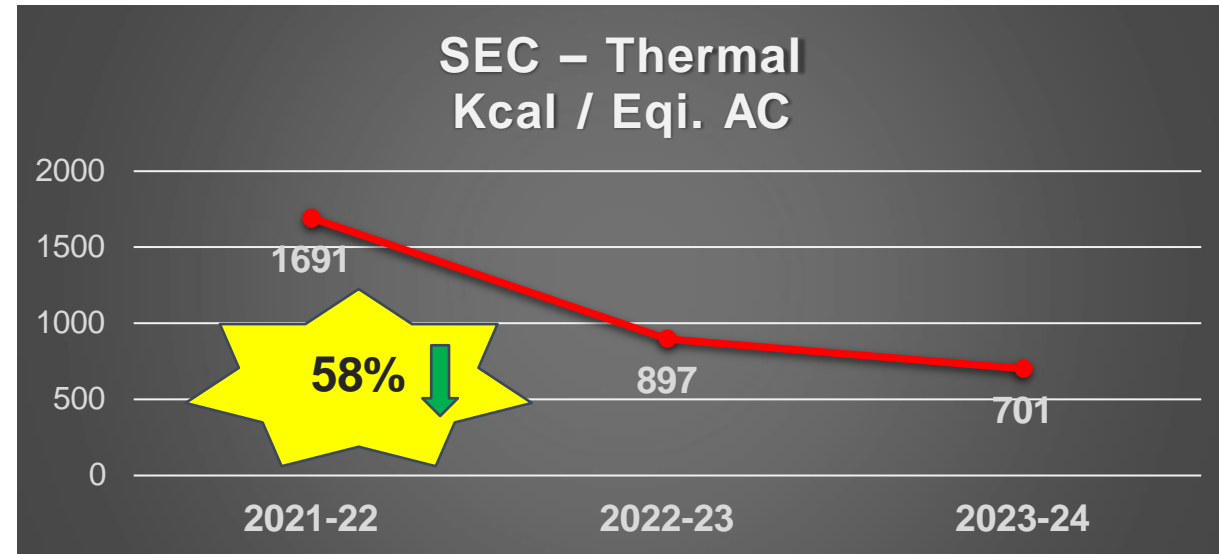
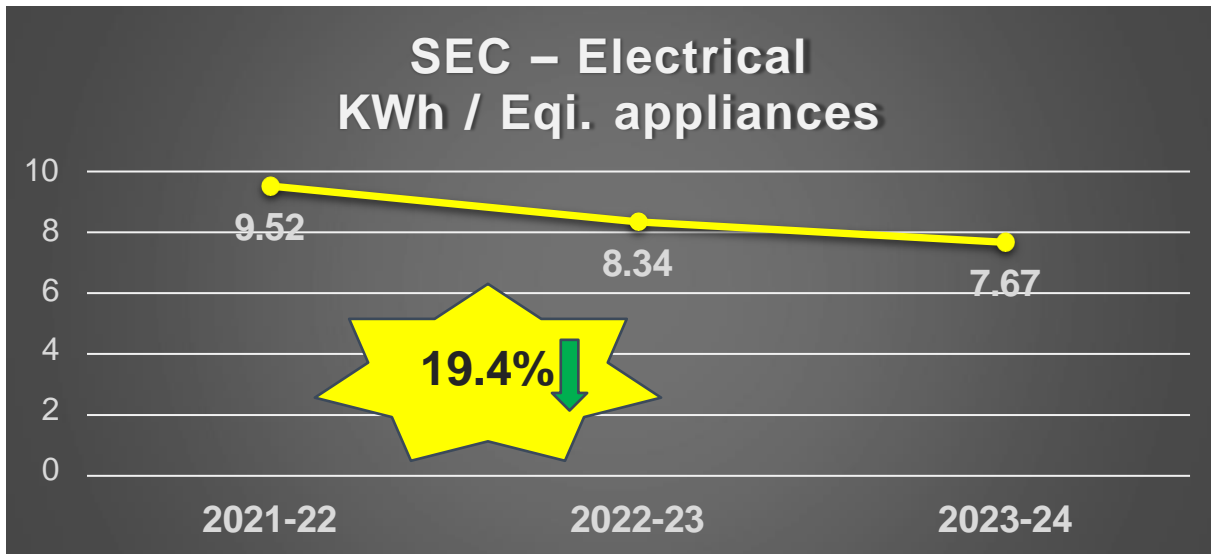


■ Electrical ■ Thermal

## Fix Vs Variable

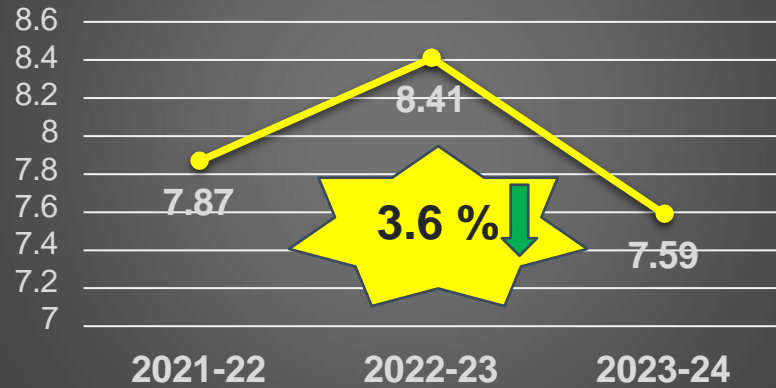


Increase in Fix % for FY23 is due to addition of new plant operations. Took measures in FY24.

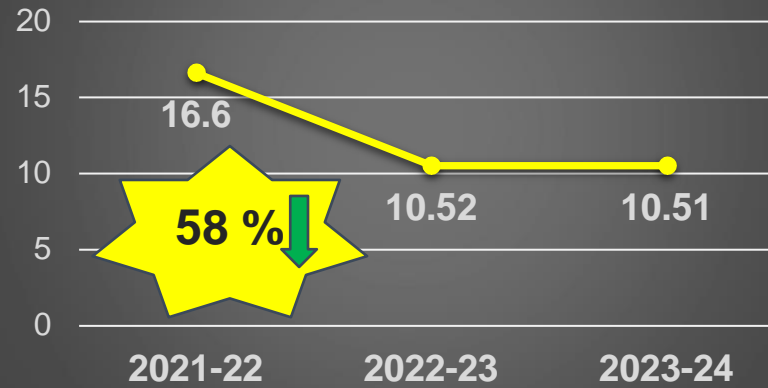


# SEC Cascading – Product & Department wise

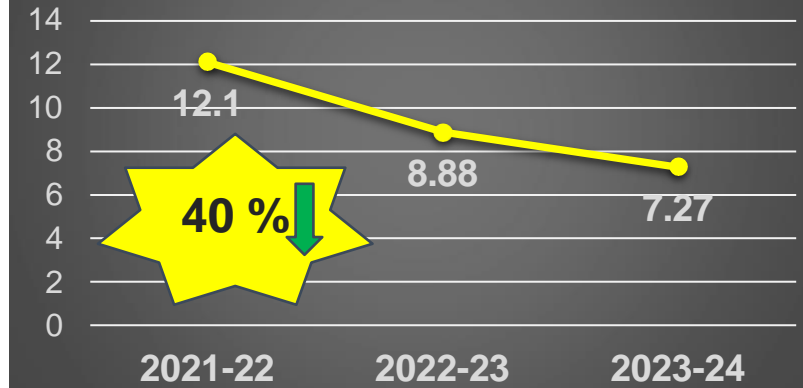
### SEC – Electrical KWh / Eqi. Refrigerator



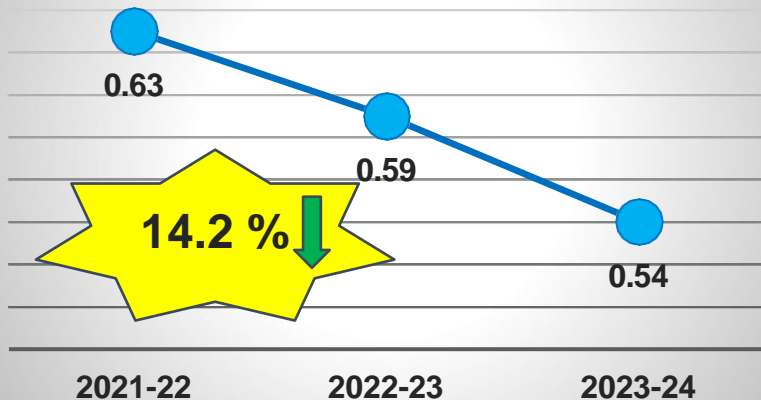
### SEC – Electrical KWh / Washer



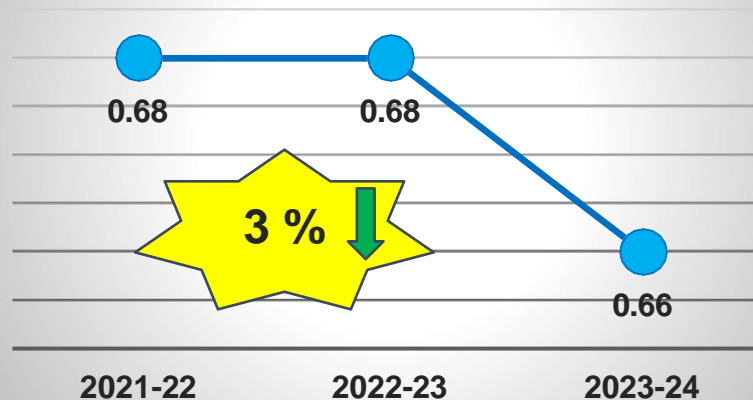
### SEC – Electrical KWh / AC



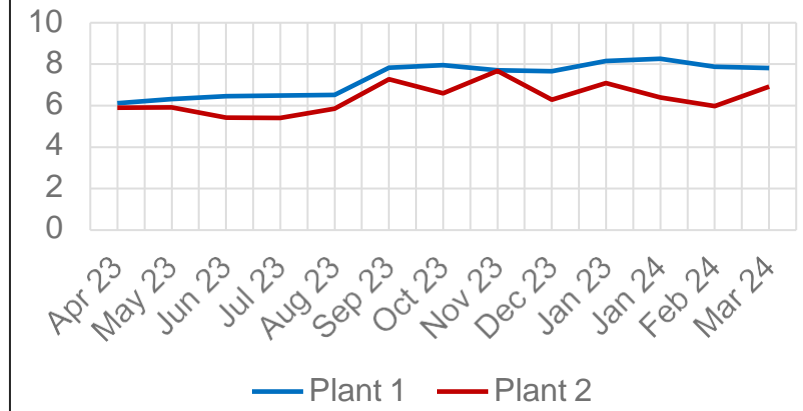
### SEC – Vacuum Forming KWh / Kg.



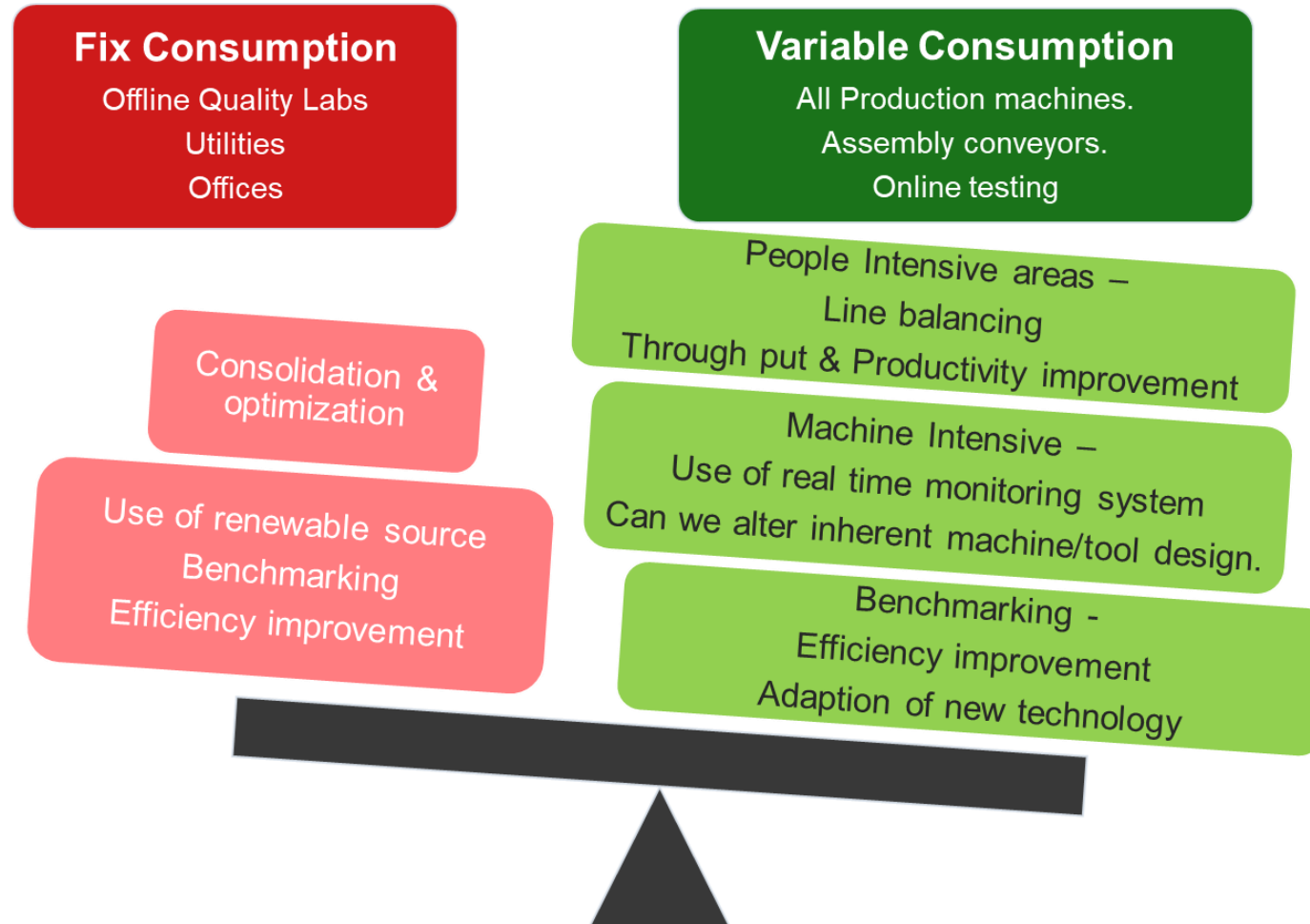
### SEC – Injection Moulding KWh / Kg.



### SEC – Air Compressor M3/KWh

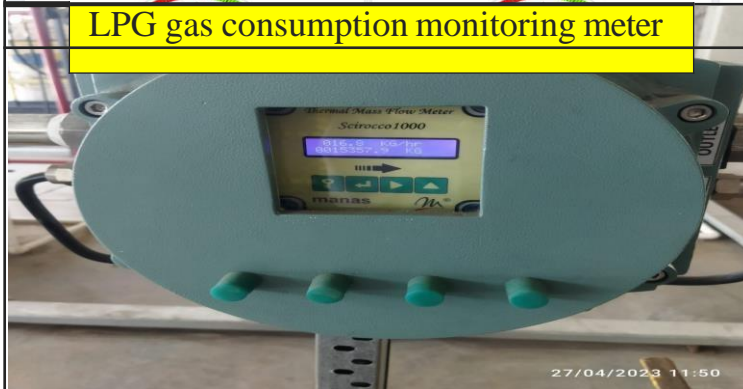
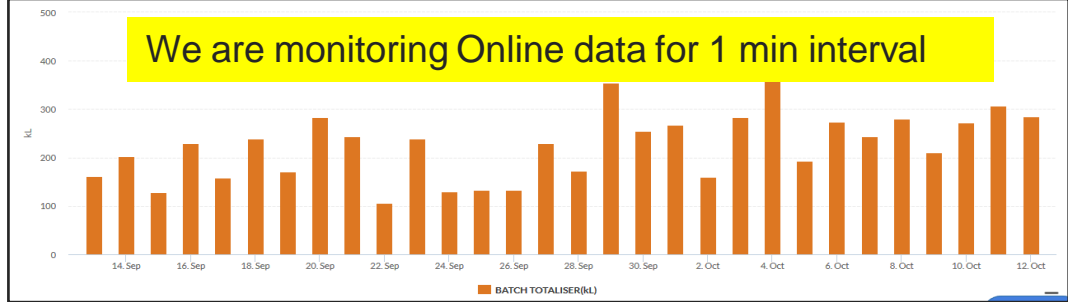
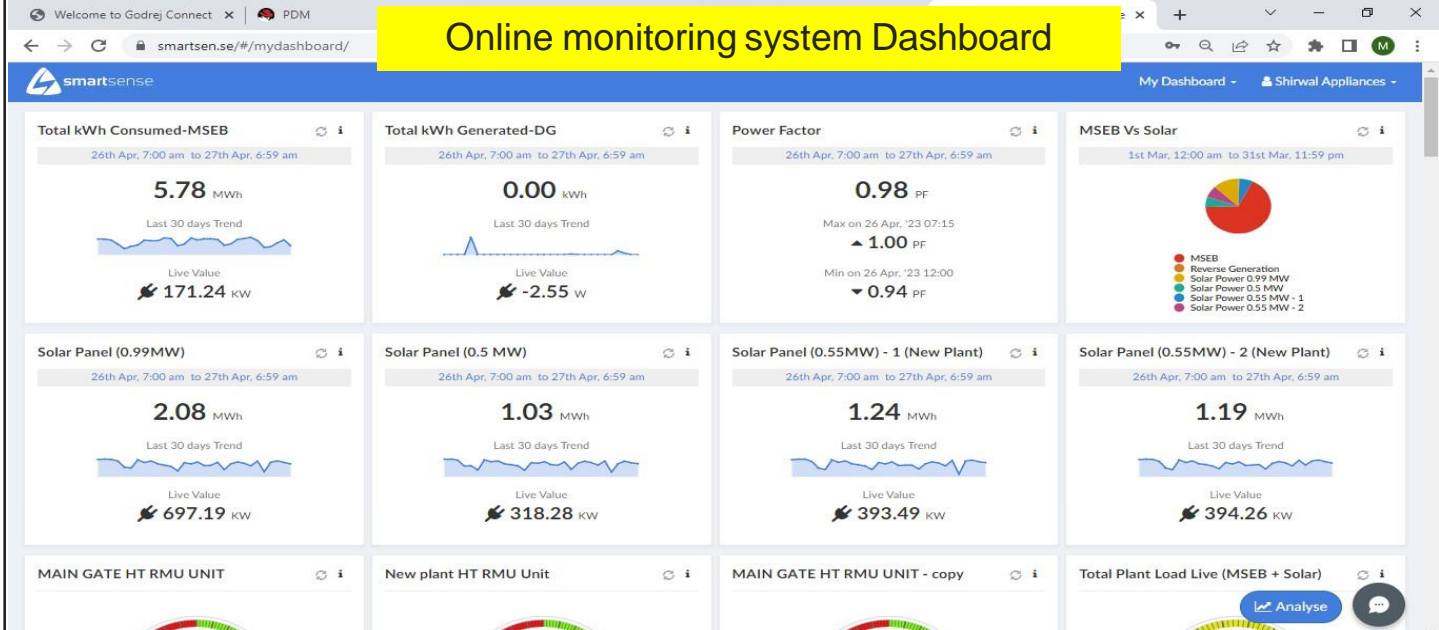
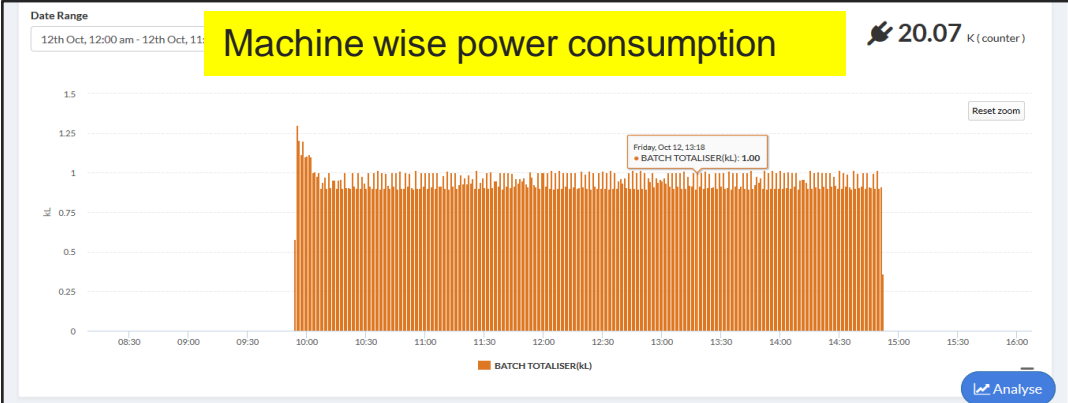


Daily monitoring of High-Power consuming departments for gap analysis



- **Precise measurement, monitoring & analysis.**
- **Continuous working to make consumption variable.**

## Advance Digital Dashboard for Electrical & Thermal Energy monitoring.



**Daily Thermal energy Consumption**

Date	8326.30	301.20	1634.00	1276.00	2910.00	0.104
1-Apr-23	8326.30	301.20	1634.00	1276.00	2910.00	0.104
2-Apr-23	8627.30	124.00	910.00	800.00	1710.00	0.073
3-Apr-23	8751.30	250.00	1810.00	1840.00	3650.00	0.068
4-Apr-23	9001.30	343.30	2270.00	2500.00	4770.00	0.072
5-Apr-23	9344.60	250.30	2406.00	3322.00	5728.00	0.044
6-Apr-23	9594.90	370.30	1598.00	2274.00	3872.00	0.096
7-Apr-23	9965.20	209.10	1882.00	2460.00	4342.00	0.048
8-Apr-23	10174.30	330.20	2100.00	2320.00	4420.00	0.075
9-Apr-23	10500.50	365.30	2365.00	2146.00	4511.00	0.081
11-Apr-23	10860.80	276.60	1538.00	2100.00	3638.00	0.077
12-Apr-23	11189.40	321.33	2100.00	1916.00	4016.00	0.080
13-Apr-23	11450.00	260.70	1924.00	1522.00	3506.00	0.074
15-Apr-23	11757.00	286.40	1570.00	2558.00	3928.00	0.073
26-Apr-23	11997.10	312.90	1830.00	2090.00	3920.00	0.082
27-Apr-23	12310.00	296.76	1760.00	1672.00	3432.00	0.086
28-Apr-23	12606.70	325.50	1428.00	1380.00	2808.00	0.116
29-Apr-23	12932.20	265.80	1724.00	1566.00	3290.00	0.081
30-Apr-23	16198.00	214.30	2008.00	2250.00	4258.00	0.050
	16412.30					
<b>Total</b>		<b>7871.9</b>	<b>52047.00</b>	<b>56668.00</b>	<b>Average</b>	<b>0.118</b>

**Mobile Access and its Alerts are generated for respected users**

Alert + GODREJ APPLIANCES

Reports | Sensor Configuration

**Real time data monitoring helps for daily variance analysis**



# Encon Projects - Summary

Year	Title of project/ Comments/ project Details	Annual Electrical Saving (KWH)	Annual Electrical Cost Saving (Rs million)	Total Annual Saving (Rs Million)	Investment in Rs Millions
FY 2021-22	Infrared barrel heater to be used on Italtch 1200T,1600T & 800T-1	30222	0.300	0.300	0.6
	Reducing energy consumption for forklift battery charging by use of smart charger	28889	0.286	0.286	0.85
	New plant Cooling tower Energy optimization by installing electrical actuator valve in heat exchanger water line and automatically Flow controlling by using VFD	16000	0.159	0.159	0.2
	Air dryer Interlocking with Compressor selection to eliminate running of one dryer when demand is low	7200	0.071	0.071	0.05
FY 2022-23	Reducing energy consumption for forklift battery charging by using new smart charger.	20000	0.2066	0.207	0.29
	Install servo motor on Italtch 800T-1 injection molding machine.	25000	0.25825	0.258	1.5
	Reduce Electrical power consumption on Ref. Powder coating Oven.	101365	1.04710045	1.047	0
	Install 250cfm compresor On new plant and eliminating 500cfm compresor runing	106875	1.10401875	1.104	0
	Plant lighting to LED/Induction Lamp at Sheet Lamps	8760	0.0904908	0.090	0.3
	To reduce compressed air consumption by reducing air leakages below 3 % . (tracing and arresting air leakage)	12240	0.1264392	0.126	0
FY 2023-24	Installation of Atlas copco make Screw Vacuum Pumps on QS Liner thermoforming machine to save enrgy	45078	0.498562680	0.499	2.04
	Removed brush motor at Door Foaming machine by modtification in system	24960	0.276057600	0.276	0.065
	VFD installation to vane vacuum pump .	19968	0.220846080	0.221	0.09
	HVLS fans installation (7 Nos)	133000	1.470980000	1.471	1.05

	Numbers	Savings in Lacs KWh	Investment in Rs Millions
Technology Upgradation	13	3.44	5.39
New Equipment Purchase	4	2.34	3.54
Efficiency Improvement	18	5.65	1.98
<b>Total</b>	<b>35</b>	<b>11.43</b>	<b>10.92</b>

# Encon Projects 24-25

Sr.No	Project Name	Machine Name	Estimate Cost(Lacks)	Expected saving in KWh(Year)	Potential Saving(Lacks/Year)	Payback Period
1	Centralised vacuum system.	VF1,VF6 & VF2	25	50400	5.4	4.61
2	Black heater to VF machine.	VF1	20	10920	1.2	17.02
3	Elimination of chiller .	QS Door Panel	15	29000	3.1	4.81
4	Chiller uses optimisation.	QS liner machine	10	72000	7.7	1.29
5	Servo motor VF rotary machine.	VF4	9	3360	0.4	24.89
7	Air booster elimination.	Old QS	3	27648	3.0	
8	Sheet pick up vacuum valve replacement.	Hana Door & Side Panel	3	24000	2.6	
9	Installation of Infra Red temp.sensor	VF08(L4 PDP machine)	3		0.8	
6	Oven room heater modification.		5	5112	0.6	
10	Servo motor installation on Head carriage.			1980	0.2	
11	Servo motor installation on Load/unload carriage.	CF3		1980	0.2	
12	Servo motor provision for hydraulic power pack		8	4500	0.5	
13	Heat pump provision on CF machine.		8	12525	1.3	
14	Servo motor installation for jig up/down		35	10560	1.1	
15	Servo motor installation for Refilling operation on Italtch 1600T & barrel heater by providing the Induction heater in place of ceramic heater	1600T	25	37320	4.0	
16	Servo motor & pump system installation on 200T press	200T press	8	7497.8	0.8	
17	Improved Cooling tower efficiency by changing of Fills	Cooling Tower	5	54000	5.8	
18	Used Cooling tower water for machine hyrdulic oil cooling	QS FAFL machine	4	6600	0.7	
19	To reduce the energy cost of oil cooling Motor by replacing IE1 to IE4 rating	Italtch machine	3.5	15750	1.7	
20	2 Stage Screw Compressor with PMV motor for Efficiency improvement in Compressor Area	Compressor Room	30	56700	6.1	4.92
22	To reduce the energy cost loading Motor by replacing					
24	Use of Adsorbtion Chiller for recovery from air compressor	premix area	4.5	10500	1.1	3.96
25	Wind turbin	Plant 2	4.5	4100	0.4	10.20
			<b>245.7</b>	<b>465629</b>	<b>50.1</b>	<b>4.90</b>

Projects identified for next 5 years

Title of project/ Comments/ project Details	Annual Electrical Saving (KWH)	Investment in Rs Millions
Cooling Tower Efficiency Improvement	24000	1.5
Optimisation of Heater distance in Vacuum Forming for quick heating	65000	0
2 Stage Screw Compressor with PMV motor for Efficiency improvement in Compressor Area	150000	3.5
Installation of Atlas copco make Screw Vacuum Pumps on QS Liner thermoforming machine to save enrgy	45078	2
ServoMOTOR installation at 200 T Press	10000	1.5
HVLS Fans – 7 Number	133000	1.5
ServoMOTOR for refilling operation on 1600T Press	50000	2.00
ServoMOTOR for refilling operation on 1200T Press	40000	2.00
<b>Total</b>	<b>517078</b>	<b>14</b>

Projects identified for FY 24-25

**Budget is allocated in 3 years and annual Business Plan**



Target Setting				
Energy	FY 2023-24	Short Term 2025-26	Mid Term 2028-29	Long Term 2031-32
Electrical (Kwh/Equi Appl.)	7.67	6.90	6.21	5.59
Thermal (kgs/Equi AC.)	701	665	632	600

# Benchmarking

## Internal Benchmarking

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- Within plant, with Mohali plant, with other G&B plants.  
Trend, common applicable projects & best practices.

## External Benchmarking

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- Competitor – Sustainability report, publications, equipment suppliers.  
Other Industries – Best Practices, Utilities, Common processes like injection molding, press shop etc.  
GreenCo EE score – We have benchmark score

## Process & Equipment Benchmarking

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- Efficiency improvement, to know gaps, best in class technology available, new purchases
- **Introduction of Benchmarking score**
- Purpose - Comprehensive evaluation of equipment/process & To make it more objective.
- Easy to understand what is the level of our machine wrt best in class.
- It becomes easy to explain the differences to Senior management & seeking decision.
- We can decide priority for upgradation of equipment / process.

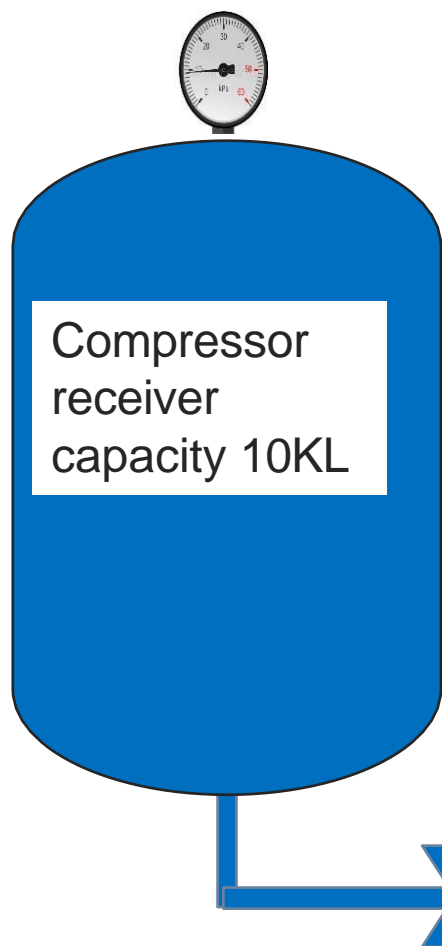
# Benchmarking Score – Vacuum Forming

Sr. No.	Benchmarking parameter	Godrej	Best in Class	Godrej Score (Scale 1-10)	Priority & Remarks
1	Make	QS	QS/Comi/Kiefil	9	
2	Heating elements	Ceramic Infra-red heaters	Black infra-red heaters/Quartz	9	Priority 4, Feasible
3	Heater Controls	PID Control	PID Control	10	
4	Heating stations	Two	Two	10	
5	Hydraulic motors	Induction motors IE3	Servomotors	8	Priority 3, feasible
6	Vacuum Pump	Vane Pump	Screw vacuum Pump	8	Priority 2, Feasible
7	Transfer drive motor	Servo motor	Servo motor	10	
8	Forming station motor	Servo motor	Servo motor	10	
9	Heating and cooling unit	Servo controlled	Servo controlled	10	
10	Balloon Formation	Compressed Air	Vacuum	7	Priority 1, Not feasible
	<b>Total Score</b>			<b>91/100</b>	
	<b>Score in percentage</b>			<b>91%</b>	

**It helps to identify projects & decide priority**

## Air Compressor efficiency monitoring without energy loss

### Before



Drain the main receiver & close the valve



Start the compressor & stopwatch. Measure the power consumption.



Stop the compressor. Check the time & power consumption.



Calculate the CFM of compressor.



Calculate compressor specific power consumption & efficiency.

**Pump down method**  
**Energy Loss:-109 Kwh**

Energy Loss

Energy Loss



### After

Open the valve & insert the probe into the air line port.



Do the probe adjustment as per the line size.



Check the compressor flow reading on display.



Check the power consumption on smart sense device.



Calculate compressor specific power consumption & efficiency.

**Online monitoring**  
**Energy Loss:- 0 Kwh**

# Encon Project - Consolidation

Leak testing



Brazing



Flushing



Inert atm

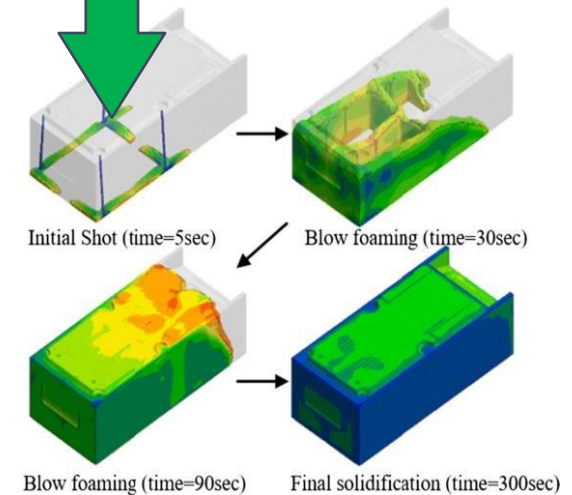
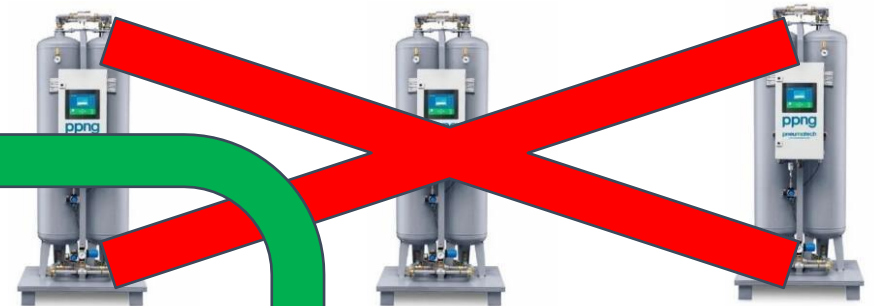


**N2 Plant for AC mfg.**

1. N2 Plant capacity is 50 m3/hr,
2. Actual consumption is 39 m3/hr.
3. Working principle – Adsorption process.
4. Input is compressed air.
5. Air/N2 ratio is 8.45
6. Designed is 3.5

**Air / Nitrogen ratio – 3.81**

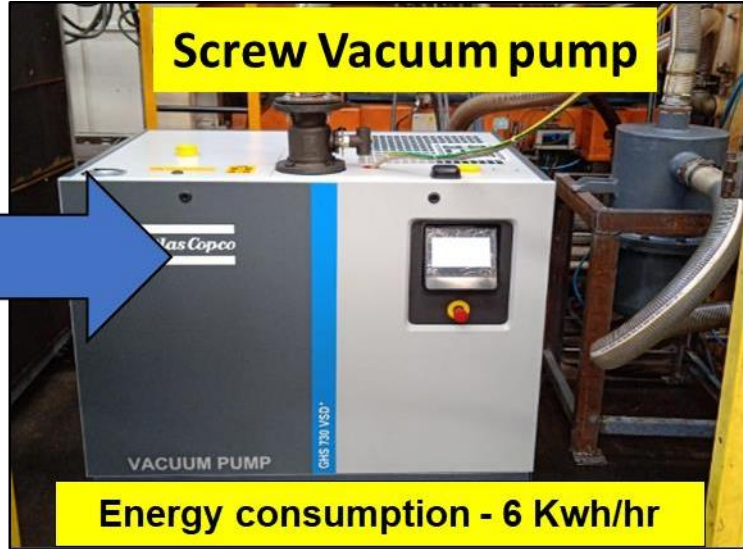
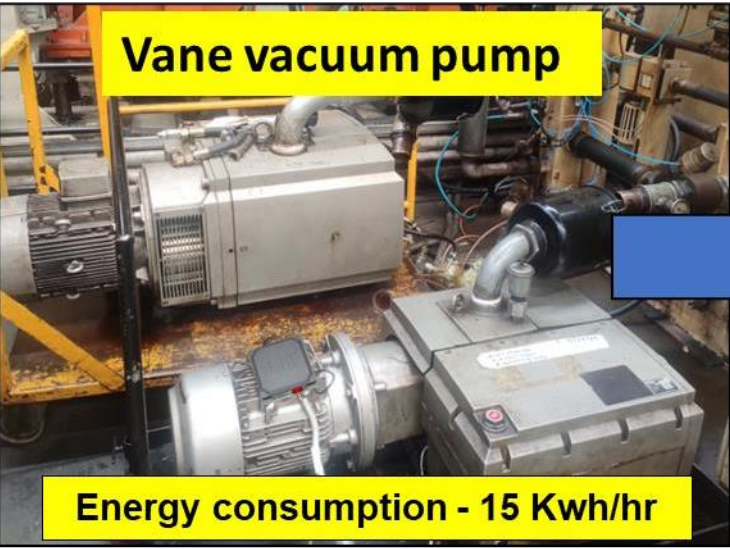
**Three N2 Plants for purging of refrigerator cabinet before foaming**



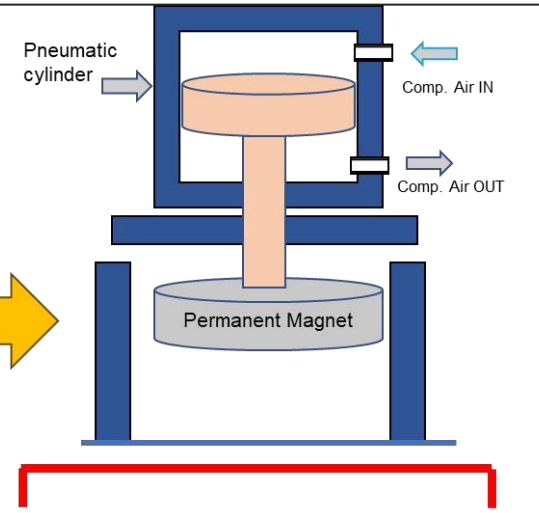
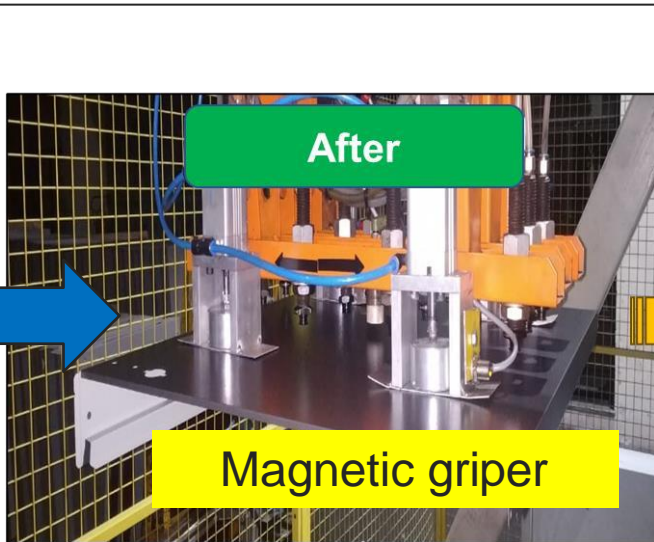
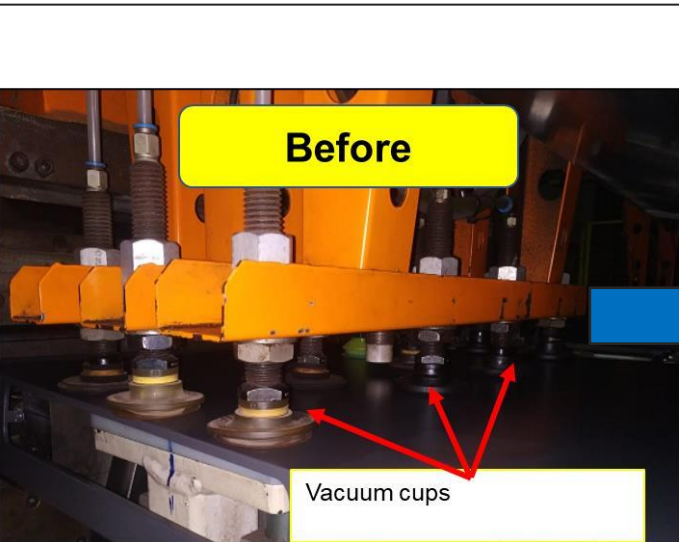
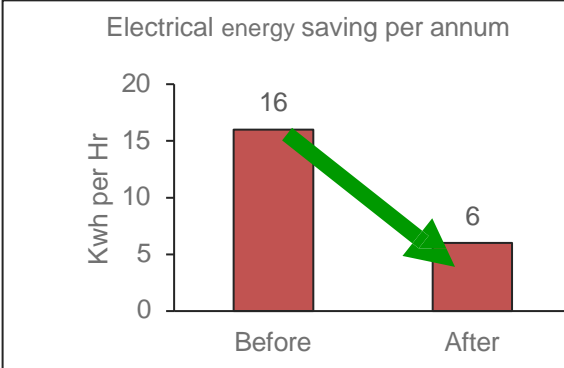
**Every manufacturer keeps some additional buffer**

**Consolidation of processes and remove buffers to improve efficiency**

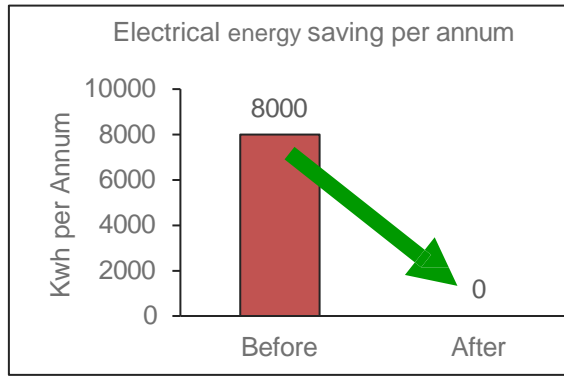
# Encon Project – Technology Upgradation



## Adaption of new technology

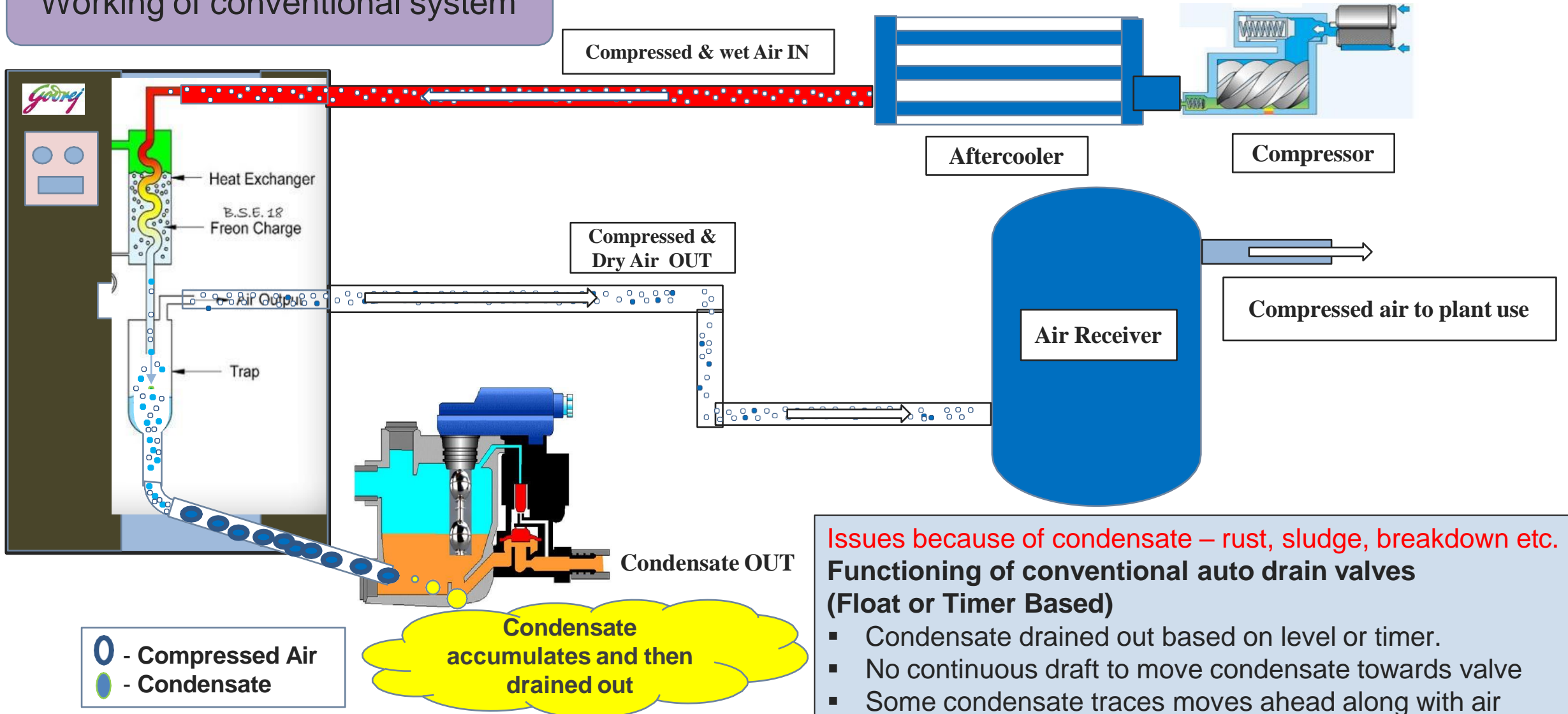


## Inhouse development





## Working of conventional system



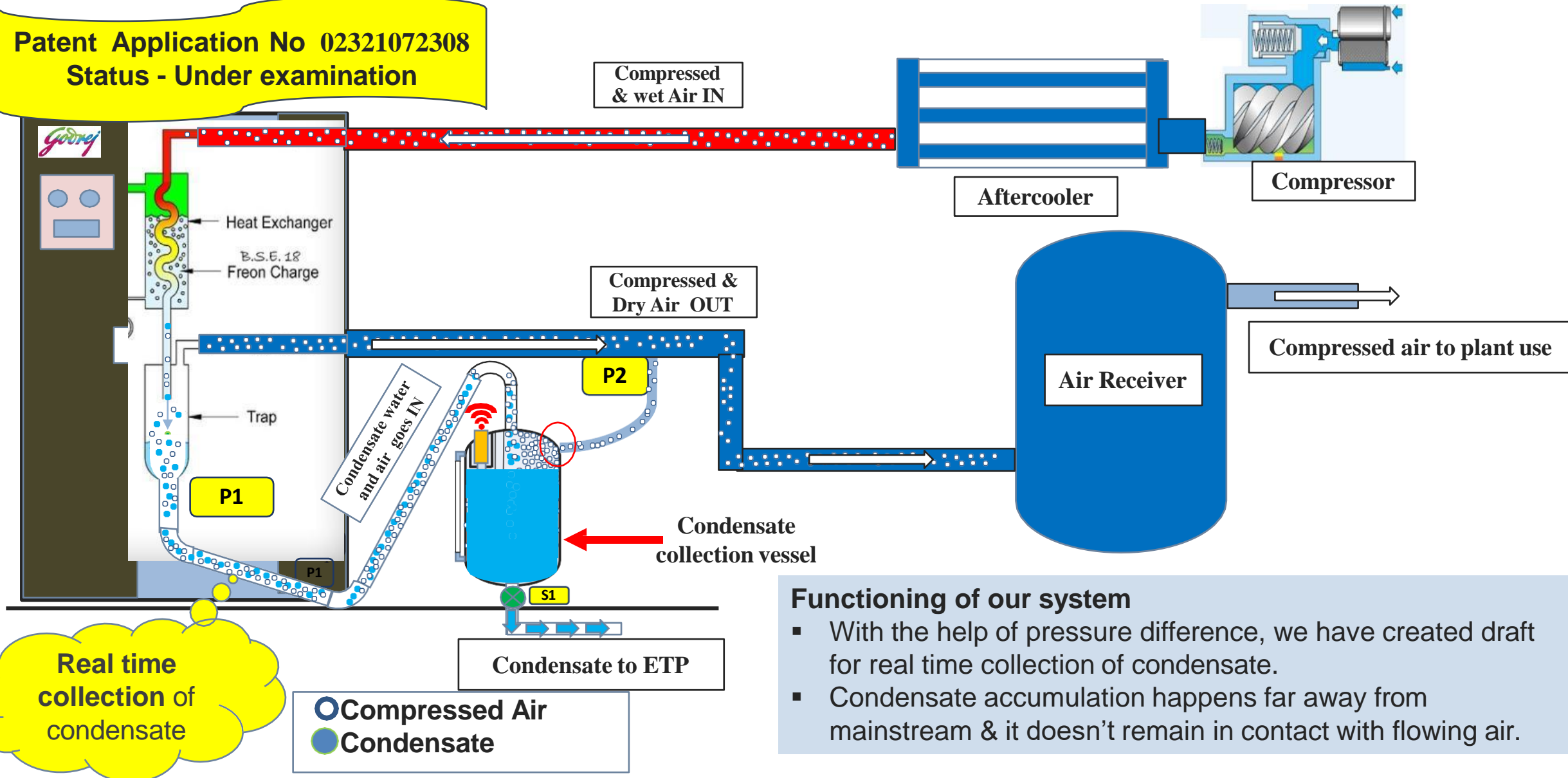
Issues because of condensate – rust, sludge, breakdown etc.

### Functioning of conventional auto drain valves (Float or Timer Based)

- Condensate drained out based on level or timer.
- No continuous draft to move condensate towards valve
- Some condensate traces moves ahead along with air

# Zero air loss condensate drain system

Patent Application No 02321072308  
Status - Under examination



## Functioning of our system

- With the help of pressure difference, we have created draft for real time collection of condensate.
- Condensate accumulation happens far away from mainstream & it doesn't remain in contact with flowing air.

# Uniqueness & Benefits

Low Cost  
Highly Reliable  
No Moving Parts

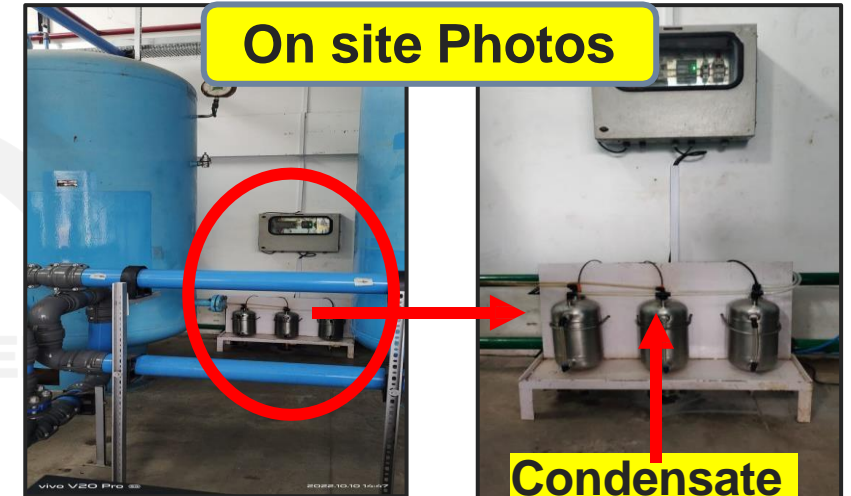
Uniqueness Of  
Solution

Real time collection &  
removal of condensate

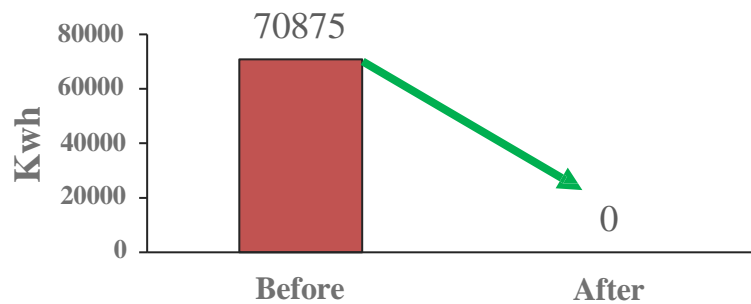
Improved  
Dew Point -9 °C to -28 °C

Patent Application No  
02321072308  
Status - Under examination

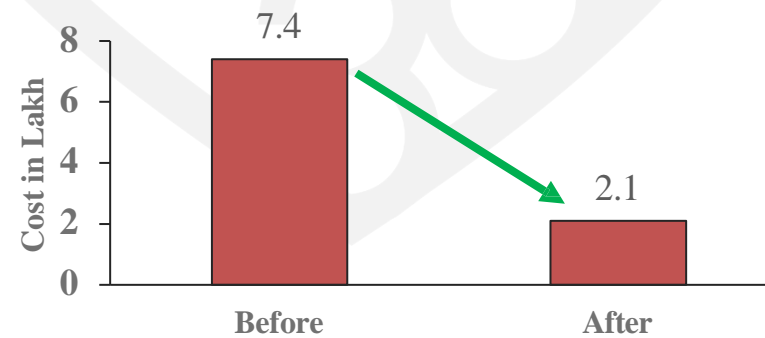
Results



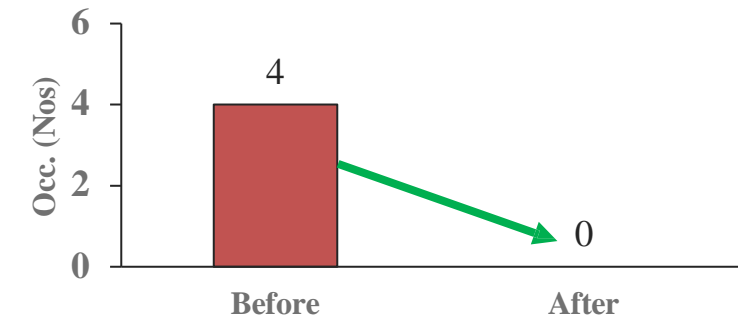
Electrical unit wastage per Annual



Pneumatics spares cost per Annual



Average Breakdown occurrences per month



Replicability is very high across all industries & easily adoptable in existing set up

# Utilisation of RE sources

Internal



**Total Capacity –  
2.6 MW.  
RE Share 24 %**



**Structural steps**



**Walkway along all panels for  
Panel Cleaning**

Effective solar panel cleaning and safe operation



**Life Line for Safety Belt anchoring**



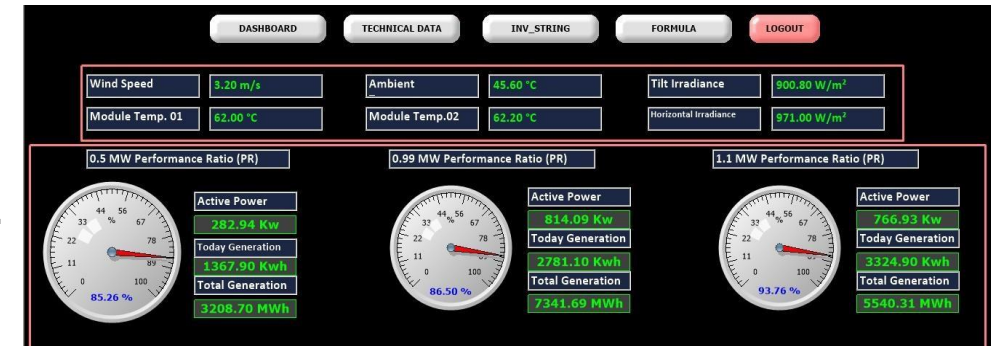
**Safety Belt anchoring**

**Safety & Easiness for cleaning ensures effectiveness**

# Beyond Generation Monitoring

## Online Monitoring system features

- Site specific plant performance calculation.
- Theoretical generation is calculated considering actual irradiance.
- Going deeper for generation monitoring – Inverter wise to string wise.
- Location of panels on roof is mentioned on the screen. Helps in Quick troubleshooting & higher generation.



1.1 MWp PLANT "INVERTER 01 to 10 STRING DATA" (153 Solar Panel / Inverter & 17 Solar panel / String)

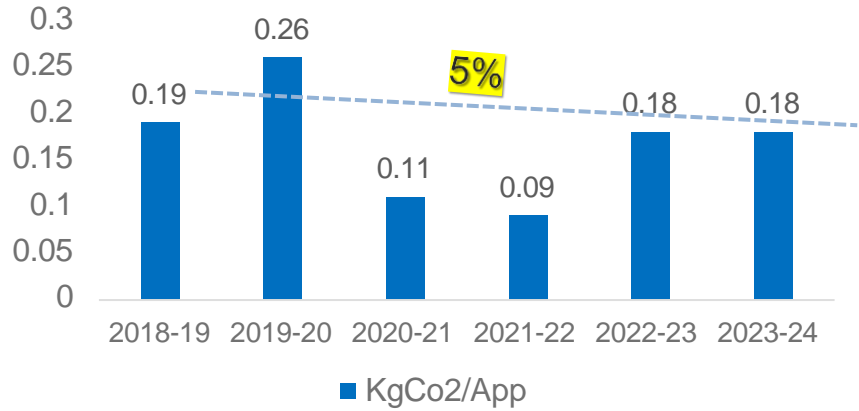
String	INV - 1	INV - 2	INV - 3	INV - 4	INV - 5	INV - 6	INV - 7	INV - 8	INV - 9	INV - 10
STRING 1	2.40 A	2.20 A	1.70 A	2.00 A	1.60 A	1.70 A	1.80 A	1.70 A	2.00 A	2.00 A
STRING 2	2.50 A	2.20 A	2.20 A	1.80 A	1.70 A	1.90 A	1.90 A	2.00 A	2.40 A	2.40 A
STRING 3	2.40 A	2.20 A	2.30 A	1.80 A	1.80 A	1.70 A	2.00 A	1.90 A	2.00 A	2.40 A
STRING 4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STRING 5	2.20 A	2.50 A	2.10 A	2.00 A	2.00 A	1.60 A	1.50 A	1.90 A	1.30 A	2.30 A
STRING 6	2.50 A	2.20 A	2.40 A	2.00 A	1.80 A	1.70 A	1.80 A	1.60 A	2.40 A	2.40 A
STRING 7	2.30 A	2.20 A	2.20 A	1.90 A	2.00 A	1.70 A	1.90 A	2.20 A	2.30 A	2.30 A
STRING 8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STRING 9	1.80 A	2.00 A	1.60 A	2.10 A	1.50 A	1.50 A	1.80 A	2.10 A	2.00 A	2.00 A
STRING 10	2.30 A	2.30 A	2.00 A	1.90 A	1.70 A	1.60 A	1.90 A	1.70 A	2.20 A	2.30 A
STRING 11	2.40 A	2.10 A	1.90 A	1.80 A	NA	1.70 A	1.80 A	1.80 A	2.30 A	NA
STRING 12	NA	NA	NA	NA	1.60 A	NA	NA	NA	NA	2.40 A
Total Current	22.30 A	21.00 A	20.00 A	17.20 A	17.30 A	16.10 A	17.40 A	16.70 A	19.70 A	21.90 A
Day Generation	193.00 Kwh	181.80 Kwh	182.20 Kwh	166.30 Kwh	171.60 Kwh	160.00 Kwh	168.30 Kwh	163.00 Kwh	178.80 Kwh	178.10 Kwh



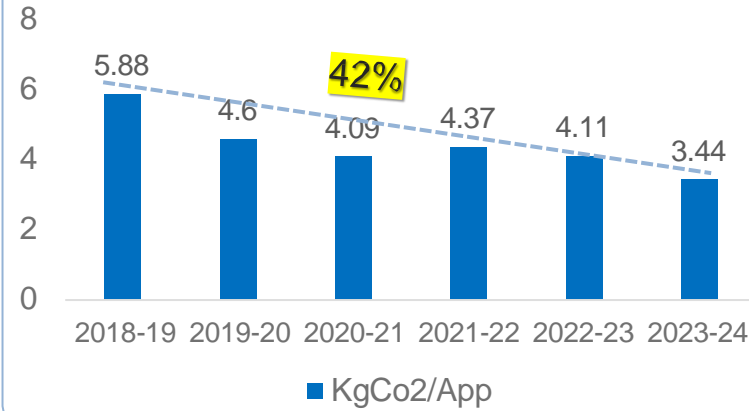
Solar Plant Performance is 90%

# GHG Intensity & Benchmarking

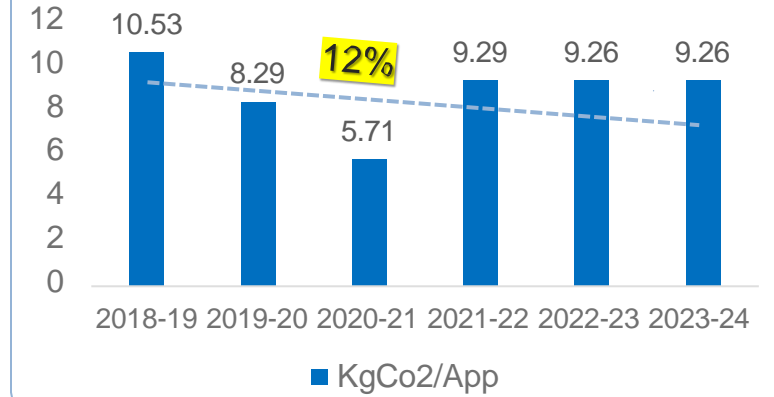
### Scope 1 Intensity



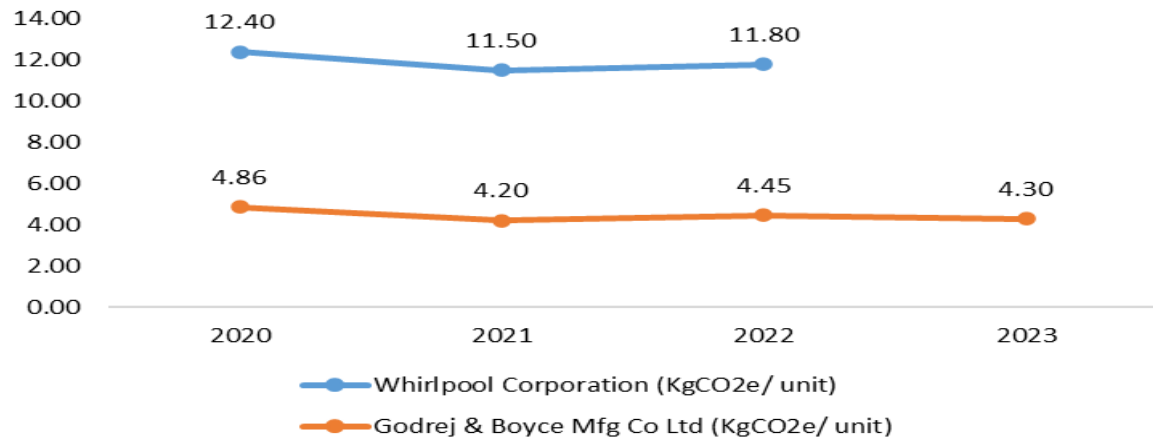
### Scope 2 Intensity



### Scope 3 Intensity



### GHG Emissions Under Scope 1 & 2



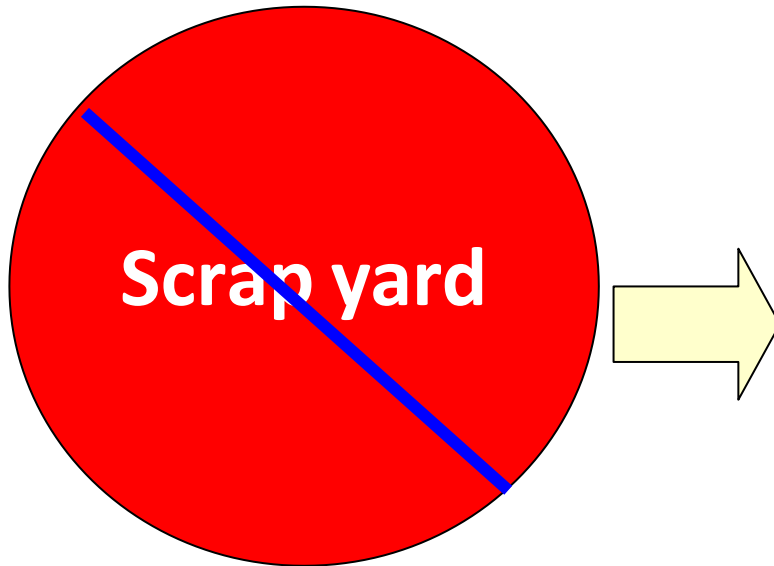
- ☐ References : Sustainability reports 2022 of Competitor.
- ☐ Data and parameters used may not be directly comparable due to location-specific differences.

# Target Setting – Short Term & Long Term <sup>Internal</sup>

				Short Term Targets		Mid term Targets	Long Term Targets
Indicator	Corporate Target 2032	GAD Target 2032	2023-24 Achievement	2024-25	2025-26	2027-28	2031-32
Scope 1 & 2 (kg / Appl )	1.78	1.78	3.66	3.6	3.5	2.89	1.78
% Reduction plan on base year 2022-23	60%	60%	17%	19%	21%	35%	60%
Scope 3 (kg / Appl )	-	6.50	9.2	9.01	8.73	7.80	6.50
% Reduction on base year 2022-23	-	30%	1%	2%	6%	16%	30%

- Target to achieve 60% percentage reduction in specific GHG emission till 2031-32 under scope 1 & 2 .
- An aggressive target of 30% reduction at GAD level in Scope 3 by year 2032.
- Achievements against Targets are monitored on monthly basis and Targets are reviewed every year.
- Action Plans rolled out to align with the short term, mid term and long term targets.

## Change in mindset

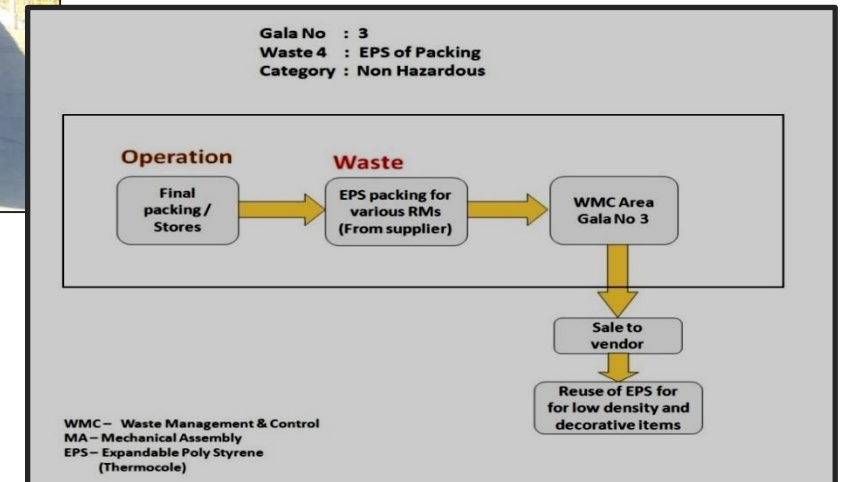


## Waste Management & Control



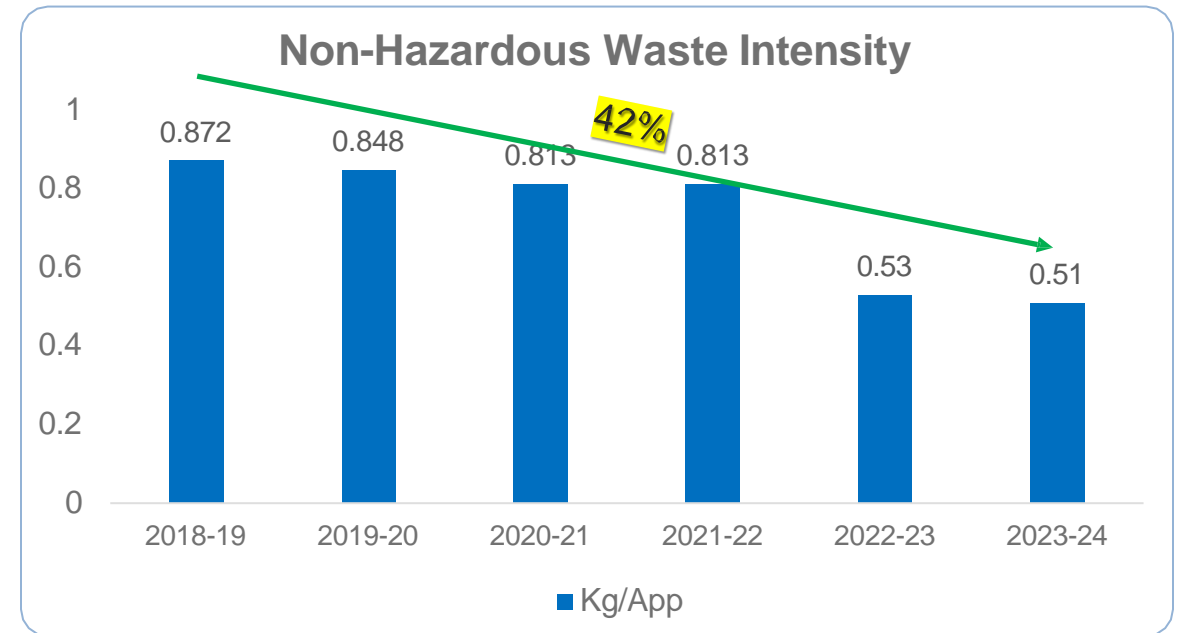
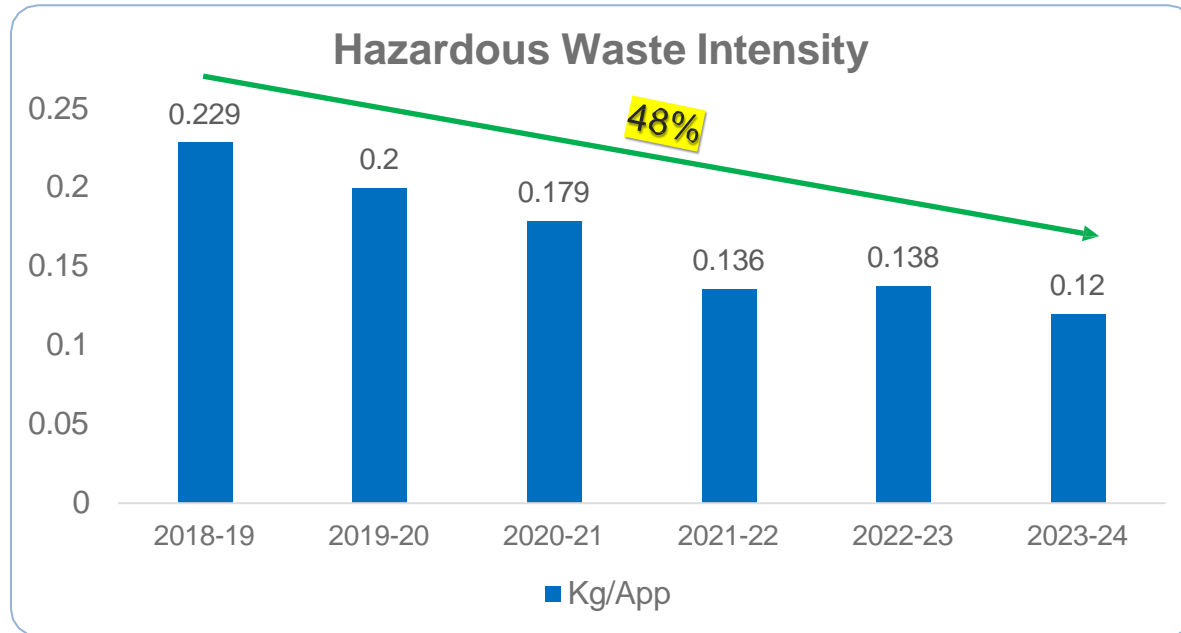
- Mindset change
- Professional view
- Departmental Approach – Mini workshop
- KRAs & Goals for respective supervisor
- Many recycling projects initiated because of this approach

Change of mindset from Scrap Yard to waste management area enhance the people orientation towards waste handling





# Waste Intensity Reduction



## Approach

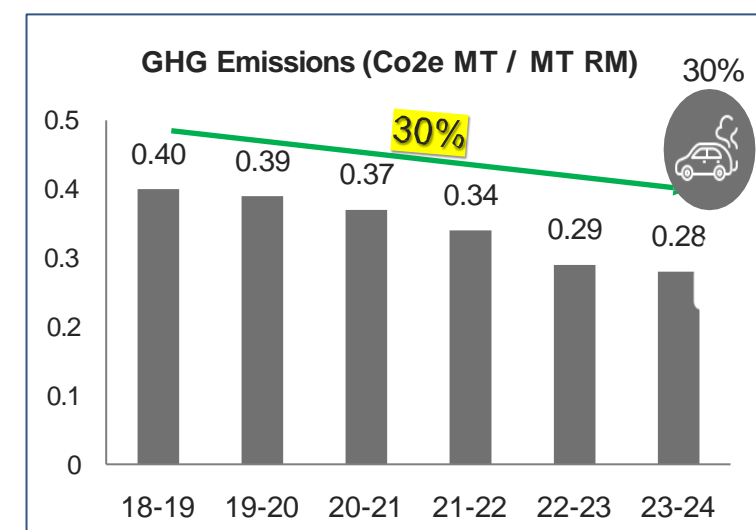
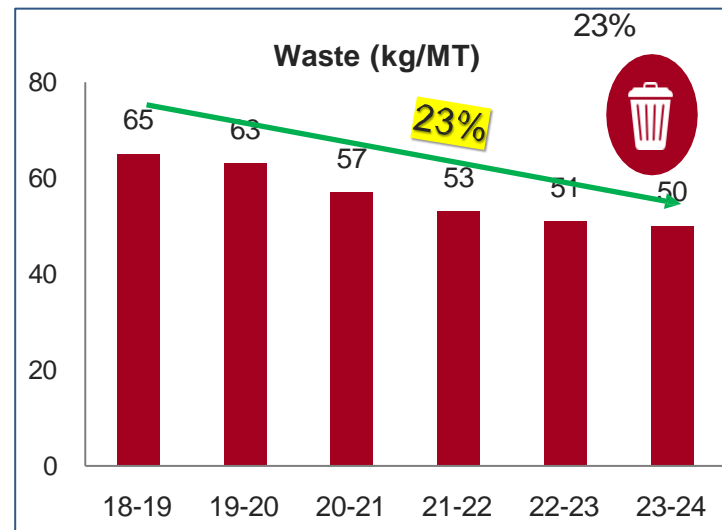
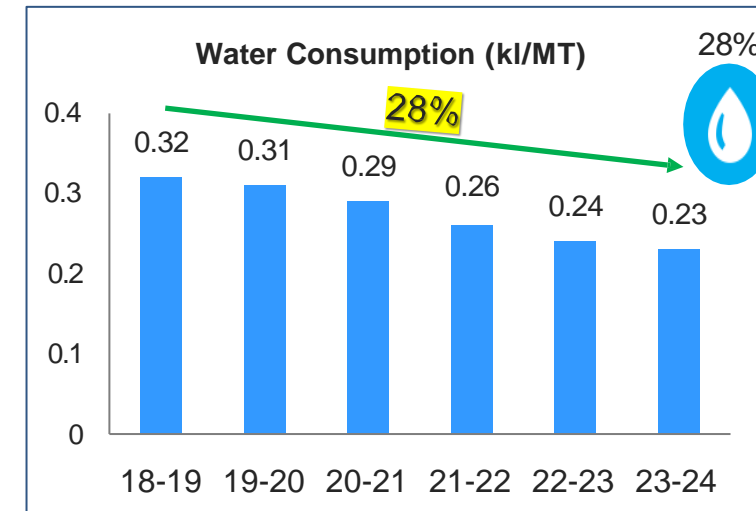
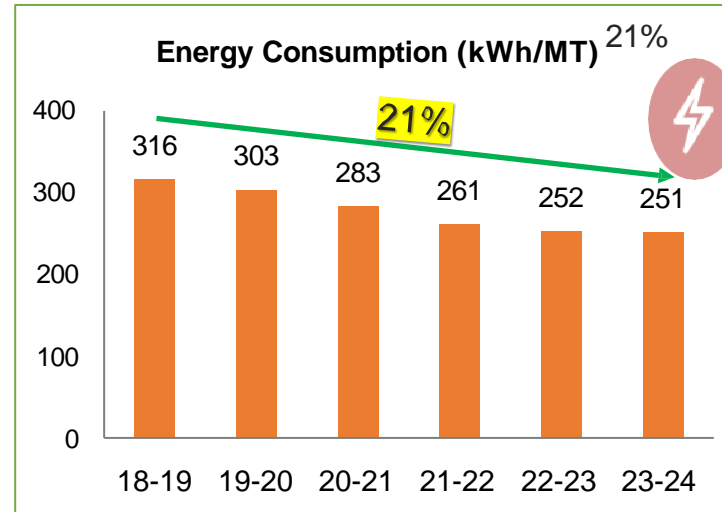
1. Mind set change from Scrap yard to Waste Management & Control
2. 3R Principle – Reduce, Reuse, Recycle
3. Zero Waste to Landfill
4. Use of digitisation to reduce waste generation

# Green Supply Chain

## Uniqueness & Guiding Principles

Uniqueness	Guiding Principle
<p>No external consultants hired</p>	<p>Treat suppliers as extension of our own manufacturing facilities</p>
<p>A separate vertical created – Supplier Improvement Team</p>	<p>Share &amp; disseminate the learning's from Godrej Operational Excellence</p>
<p>Implementation of Lean Manufacturing Techniques at SME plants</p>	<p>Cluster philosophy</p>
<p>Aimed at up gradation of SMEs</p>	<p><i>Coming Together.... Learning Together.... Practicing Together.... Progressing Together....</i></p>

## Environmental Performance of Critical Suppliers



ROADMAP FOR GODREJ SUPPLIER CLUSTER		DELIVERABLES
SMED Cellular manufacturing Multi-tasking	<b>PRODUCTIVITY IMPROVEMENT</b>	Reduction in c/o time Reduction in throughput time Improvement in labour productivity
CTQ mapping Concept of 100% inspection Quality Alert boards 7 QC tools + QC story CPI/CPK studies Poka Yoke Calibration SOP creation	<b>QUALITY</b>	Reduction in rework (in-process) Zero defects at customer end Measure cost of Poor Quality
Mapping and monitoring efficiency of- Energy Water Waste Toxicity	<b>GREEN</b>	Reduction in Energy consumption Reduction in Water consumption Reduction in all type of Waste RoHS compliant products and processes
Step 0 to 2	<b>MY MACHINE</b>	Breakdown reduction trend
1S / 2S Red Tag campaign Fixed point photography Jogging track Safety	<b>5 S</b>	1S score worksheet Zero red tag items Before / after photos Boundary walls clear Department Safety Score (DSS), Frequency / Severity rate, No. of accident free days
Time in Months:	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	

# Green Supply Chain

## Key Strategies for Leadership Development

### Enhancing Leadership in Green Supply Chain Development



#### Embedding Sustainability into Programs

Integrate eco-friendly practices into leadership training to align with green supply chain goals.

#### Supplier Engagement Program

- Continuous improvement
- Build robust systems at supplier end



#### Promoting Transformational Leadership

Encourage leaders to inspire positive change towards sustainable strategies and innovation.

#### Supplier Cluster Program

- For Inculcate culture of operational excellence
- For Balance manufacturing growth & clean environment



#### Leveraging Digital Tools for Transparency

Utilize technology for real-time monitoring of environmental impacts and transparent decision-making..

#### Education Material on Supplier e-Buy Portal

- Perform & maintain end to end supply chain transaction : ERP - INFOR LN
- Buy Portal for suppliers to view important information on various parameters



#### Incorporating GreenCo Metrics in Evaluations

Assess leadership based on Environmental, Social, and Governance metrics to drive sustainable actions.

#### GreenCo Certification

- GreenCo implementation emphasis on reduce resource intensity
- Enhance the Green Image & competitiveness



#### Encouraging Continuous Learning

Foster a culture of adaptability and ongoing education to keep pace with evolving sustainability practices.

#### Participation in External Forums

Encourage suppliers to attend events, conferences & participate in external competitions

**CLIMATE GROUP EP100**

In partnership with **ALLIANCE TO SAVE ENERGY**

EP100 is led by the climate group in partnership with the alliance to save energy, as part of the we mean business coalition

Company Name: **Godrej & Boyce Mfg.Co.Ltd**

agrees to join EP100 a global leadership initiative bringing together companies committed to using energy more productively.

Our pledge is to double our baseline energy productivity (EP).

**Chosen EP metric:**

Economic output, e.g. revenue:	Manufactured Value Add in INR (Factory Conversion Cost)
Energy input, e.g. BTUs or gigawatt-hours:	kWh
Baseline year (must be 2005 or later):	FY-2017 (April 16 to March 17)

Climate Group – EP100

**Godrej & Boyce Mfg. Co. Ltd.**  
 Regd. Office: Pirojzenagar, Vileparle, Mumbai 400 075, India  
 Tel: +91-22-6796-1700 / 1800 info@godrej.com  
 www.godrej.com  
 CIN U29993MH1992PLCO01828

**IGBC** Confederation of Indian Industry **WORLD GREEN BUILDING COUNCIL**

**IGBC Mission on Net Zero**

**Vision:**  
 India to become one of the foremost countries in transforming to 'Net Zero' by 2050

We hereby pledge to work towards achieving IGBC 'Net Zero' vision by 2050 and achieve India's commitment on Climate Change:

1. Develop road map within my organization towards achieving Net Zero; Set intermediary targets for every five years starting from 2025
2. Design and construct all new buildings & built-environment so as to become Net Zero by 2030
3. Transform all buildings, new and existing, to become Net Zero by 2050
4. Monitor & Verify, Report achievements and inspire other stakeholders to go Net Zero
5. Collaborate with Government of India to facilitate Advocacy, Policies and Investments in advancing Net Zero as a National movement.

Supported by

Signatories

Yes, we are glad to join the IGBC's Net Zero Mission

Signature:

Name & Designation: Mr. Jamshyd N. Godrej, Chairman & Managing Director

Name of Organisation: Godrej & Boyce Mfg. Co. Ltd.

Signed Net Zero Mission

**INDIA PLASTICS PACT**

**MEMBER SIGN-UP FORM**

By 2050, The India Plastics Pact aims to change the way plastic products and packaging are designed, used and recycled in India to ensure that plastics are valued and never become waste.

The signatories to the Pact will achieve this by working towards the following four targets by 2050:

- Define a list of unnecessary or problematic plastic packaging and items and take measures to address them through redesign and innovation.
- 100% of plastic packaging to be reusable or recyclable.
- 50% of plastic packaging to be effectively recycled.
- 25% average recycled content across all plastic packaging.

As a signatory to the India Plastics Pact, your organization commits working towards achieving these targets by:

- Taking action on unnecessary and problematic packaging and plastic products.
- Ensuring plastic packaging is effectively recycled in India.
- Using recycled plastic in your packaging and products where possible.

All businesses signing up to the India Plastics Pact contribute to funding the Secretariat. Membership Fees\* will be based on annual turnover of members and the activities required to deliver on this initiative.

Sign up now and help us lead the change

Signature:

\* The Membership Fee structure is subject to change and will be reviewed on an annual basis by the Advisory Committee.

Signatory to The India Plastic Pact

**Greener India Targets (wrt Base Year FY21-22)**

INDICATOR	TARGETS (2031-32)
Energy Productivity (EP100 aligned)	+60 % (mva/kwh) (In line with Carbon Intensity Reduction Plan)
Specific Water (all sources)	-25 % (kl/mva)
Water Positivity	2 x
Specific Mnfg waste generation (for each Hazardous & Non-hazardous)	-25 % (mt/mva)
Zero Waste to Landfill (Hazardous & Non-Hazardous)	ZERO
Carbon Intensity	+60 % (mva/tco2e)
Renewable Energy Share in Total Energy	40 %
Net Zero Buildings (Non-Manufacturing - New or Retro fitting)	100 %
Green Supply Chain – GreenCo / SBTi (by Buy Value)	80% Value (Domestic)

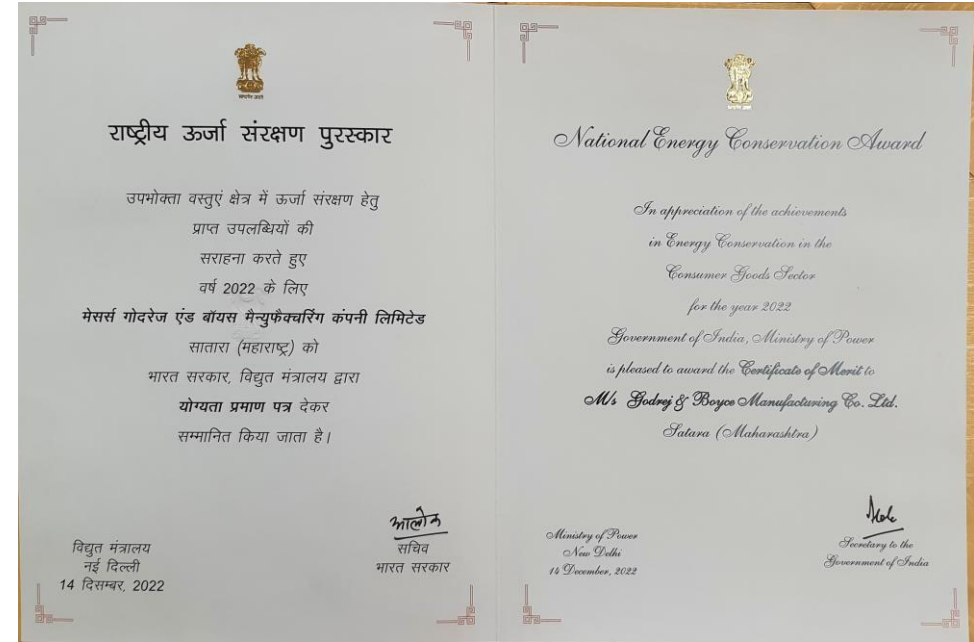
(1) All Targets aligned to Global Initiatives signed into (EP100, SBTi, Net Zero etc...)  
 (2) All G&B Mfg. Locations to be 'GreenCo' certified and Key Suppliers either GreenCo or SBTi signatories  
 (3) Internal Carbon Price at \$5/tCO2

- Focus on Long term gains along with Short term gains.
- Be Proactive than Reactive.
- Improvement in employee capability.
- Innovation is the key to break the status quo.
- Cultural improvement in the plant.

**Green Makes Business Sense**

# Awards & Recognition

## National Energy Conservation Award 2022



- The only company from Appliances Manufacturing sector to receive award.
- Various awards from CII, MEDA, BEE.
- State level Awards - 5 Awards from Maharashtra Energy Development Agency. Three consecutive awards in the competition from MEDA.
- National level Awards - 8 Awards from BEE & CII

**Thank You**