



Godrej **interio**

KHALAPUR PLANT

BRIEF INTRODUCTION ON COMPANY/UNIT

OUR BUSINESS UNITS

Godrej Security Solutions



Godrej Electricals & Electronics



Godrej Locking Solutions & Systems



Godrej Lawkim Motors



Godrej Interio



Godrej Vending



Godrej Appliances



Godrej Precision Engineering



Godrej Process Equipment



Godrej Tooling



Godrej Material Handling



Godrej Construction



Godrej Aerospace



Godrej Storage Solutions



Godrej Koerber



**Godrej Interio
Khalapur**

BUSINESS TO BUSINESS

BUSINESS TO CUSTOMER

BUSINESS TO GOVERNMENT

BRIEF INTRODUCTION ON COMPANY/UNIT

PRODUCTS



Home office & storages, Kitchen, Healthcare Labs & OPOS



Bookrack



Optimizer



Wardrobes



Chrysalis



Gynaec Chair



Laboratory- Nucleus



Move Up



Kitchen

FOR SUSTAINABLE BUILD ENVIRONMENT WE DESIGNS AND BUILDS NEW MANUFACTURING FACILITIES AS PER **GREEN FACTORY**

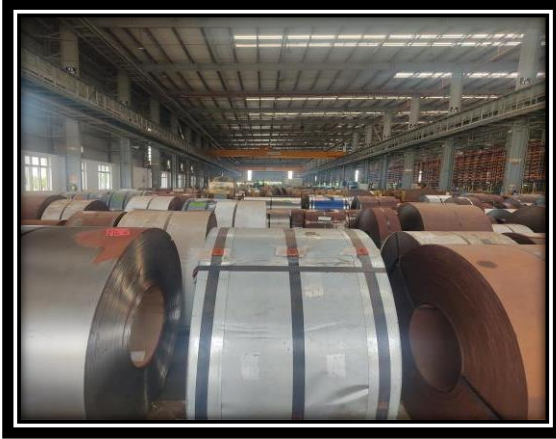
Khalapur Manufacturing Plant



- Best Energy Efficient Motors
- Powder Coating with conversion coating
- Energy Efficient Burners
- Energy efficient machines with latest technologies
- Pumps equipped with VFDs
- 100% LED lighting

MANUFACTURING PROCESS

RM – Steel Coils



Notching dept.



Multifold-MF dept.

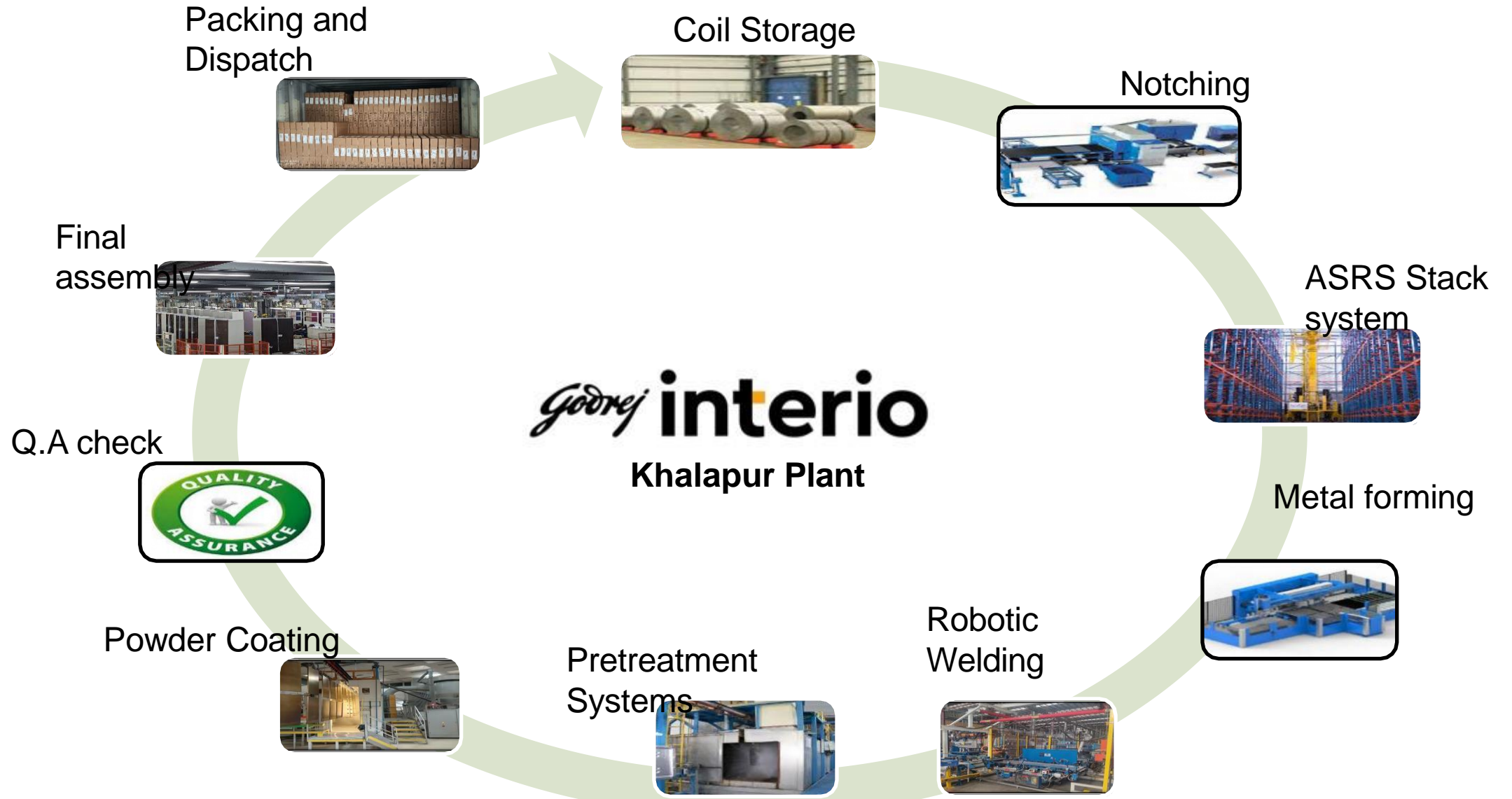


Packing & Dispatch

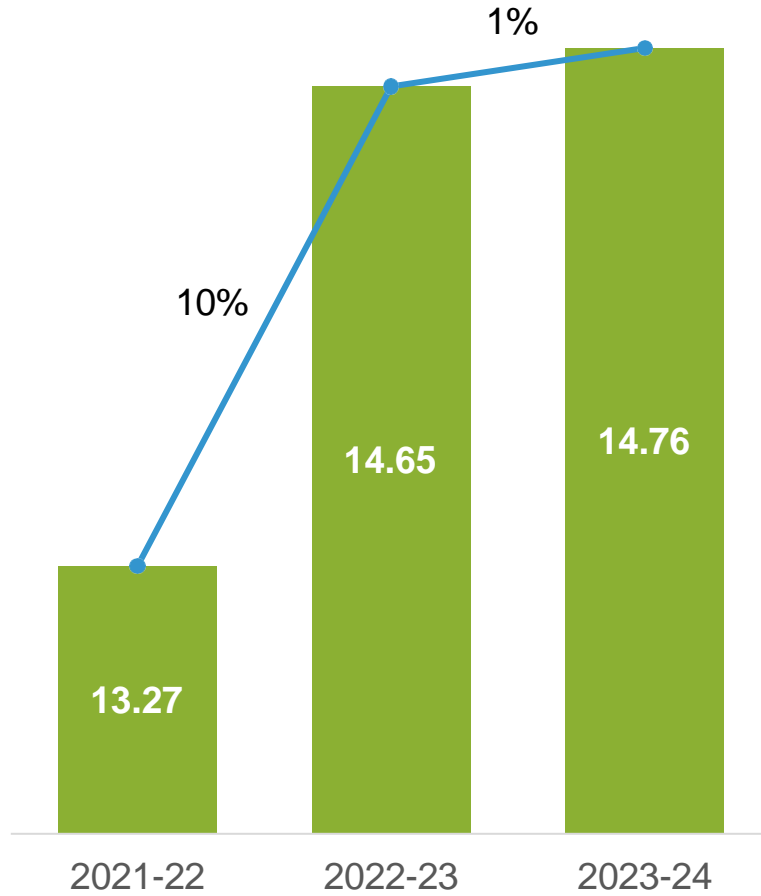
Powder coating

Robotic welding

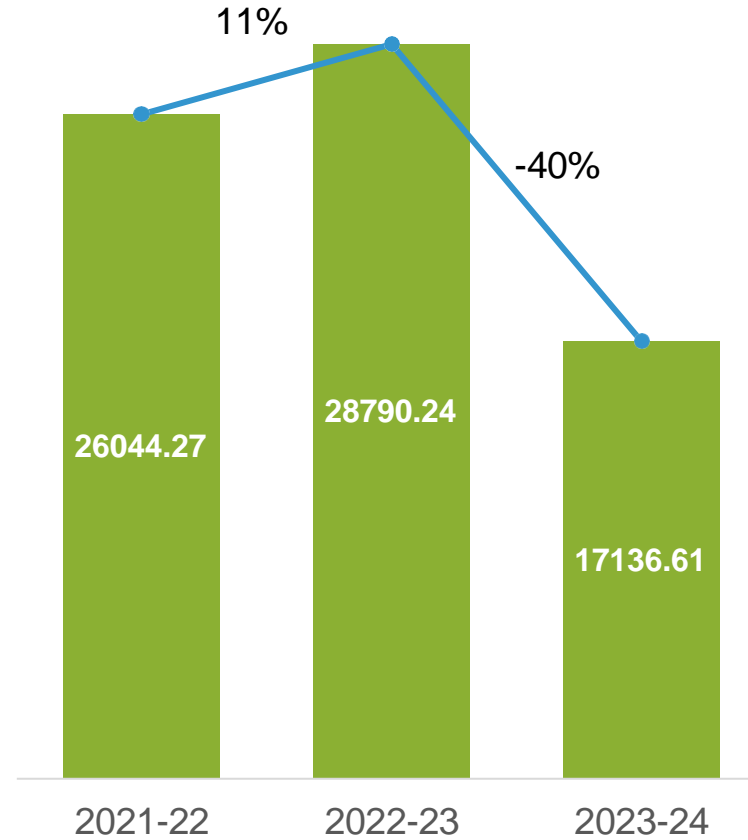
MANUFACTURING PROCESS



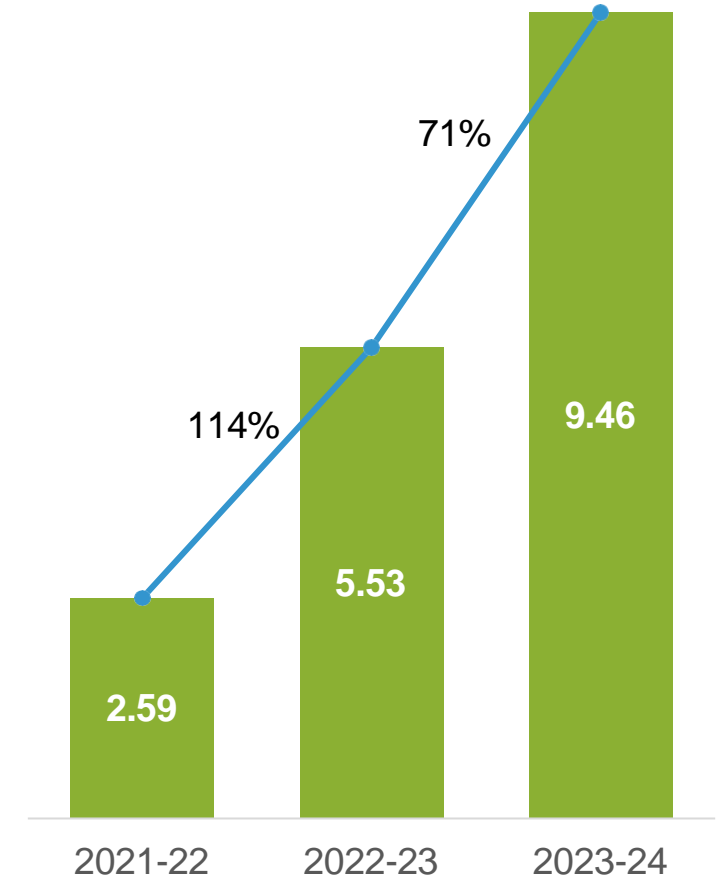
ENERGY CONSUMPTION OVERVIEW IN LAST 3 YEARS (FY21-22 TO FY23-24)



Overall Electrical Consumption (million kWh)

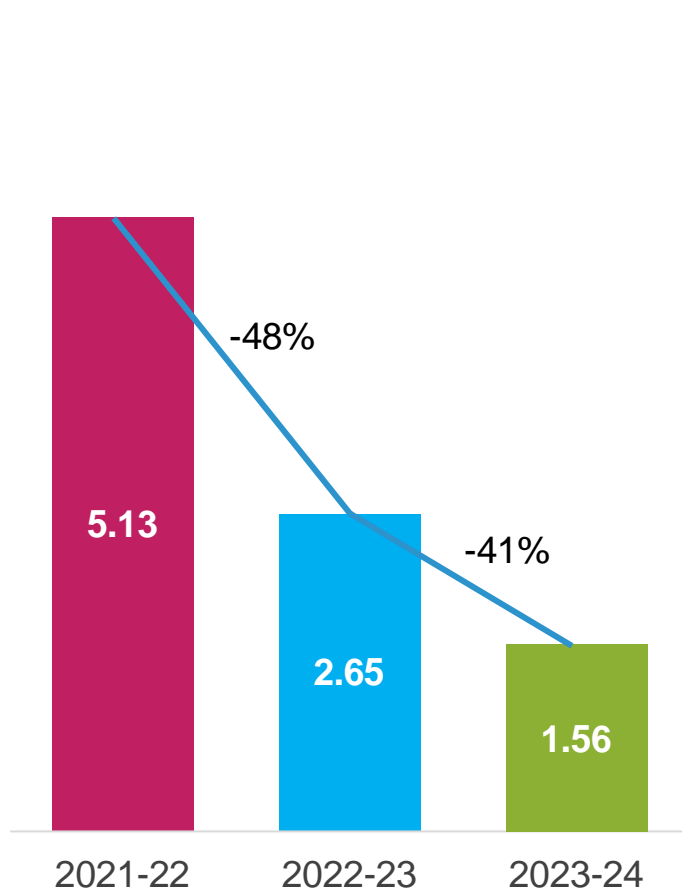


Overall Electrical Consumption (million kCal)

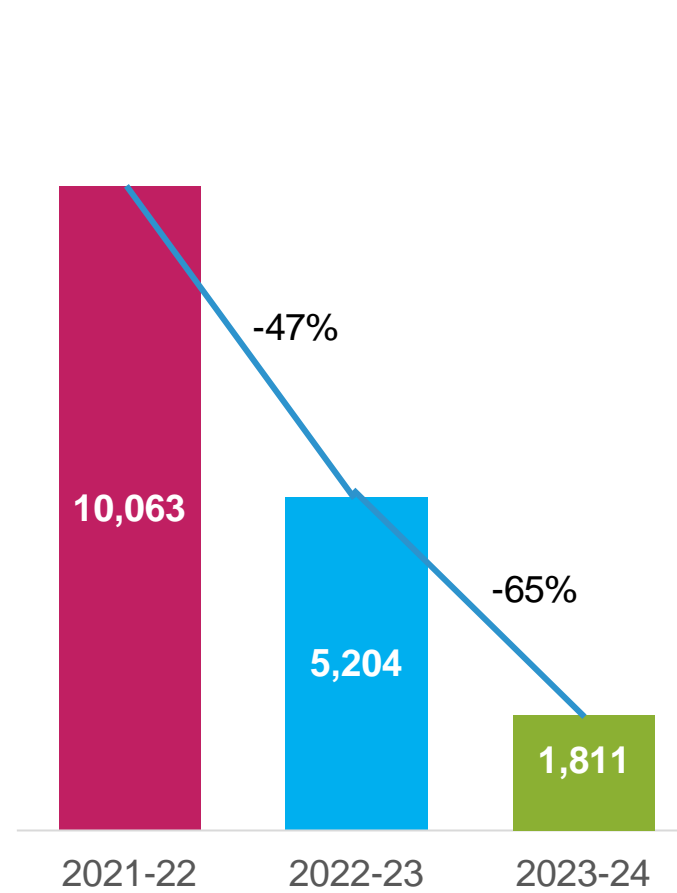


Production (million sqm.)

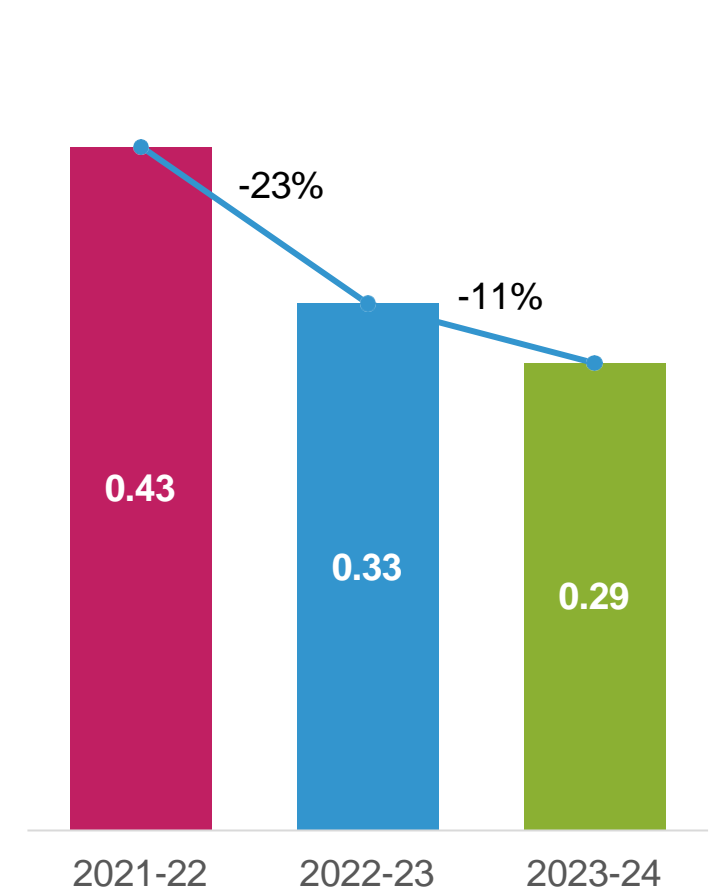
SP. ENERGY CONSUMPTION IN LAST 3 YEARS



Specific Electrical Energy Consumption (kWh/sqm.)



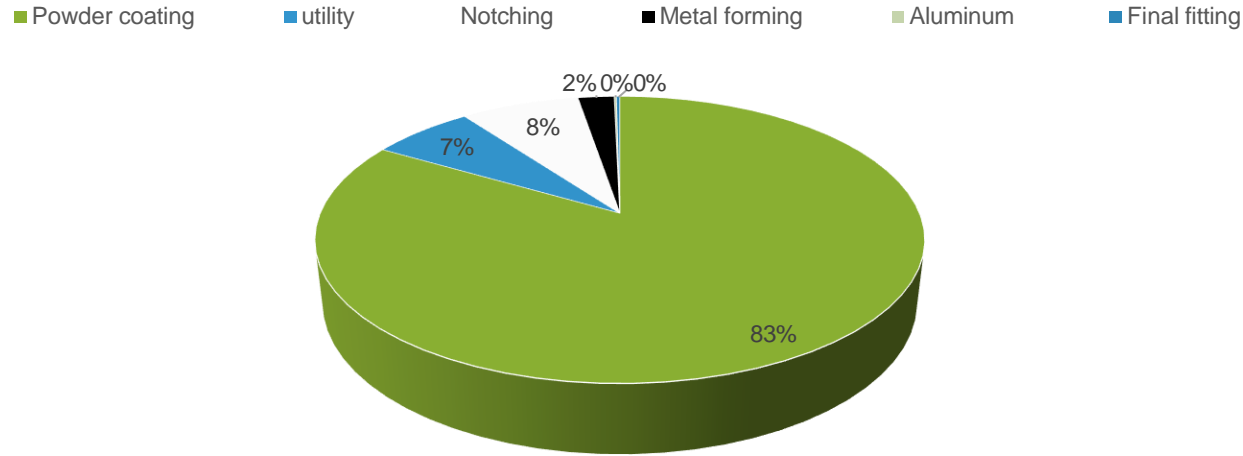
Specific Thermal Energy Consumption (kcal/sqm.)



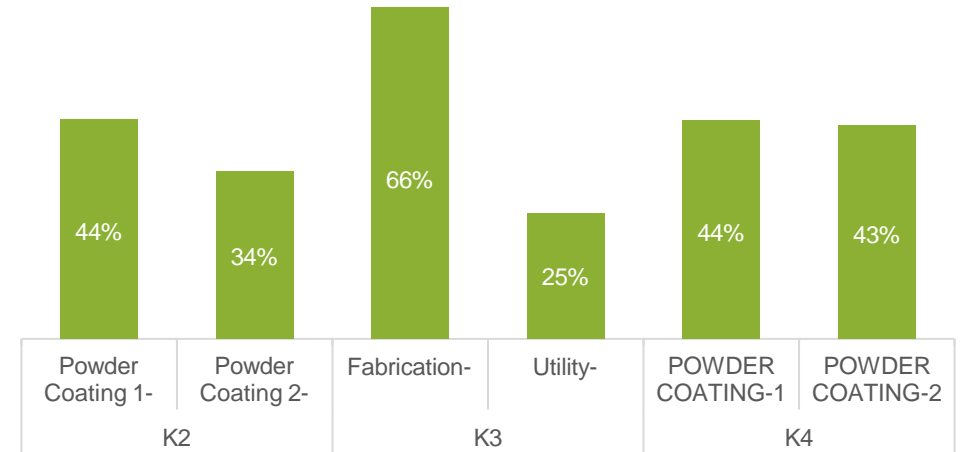
Specific Compressed Air Consumption (kWh/sqm.)

ENERGY CONSUMPTION OVERVIEW PLANT:

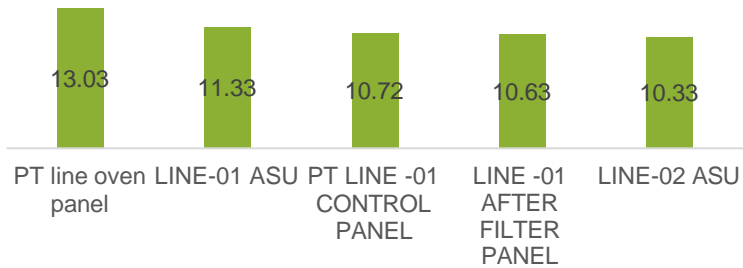
Khalapur Department (FY 2023-24)



Khalapur Plants SEU

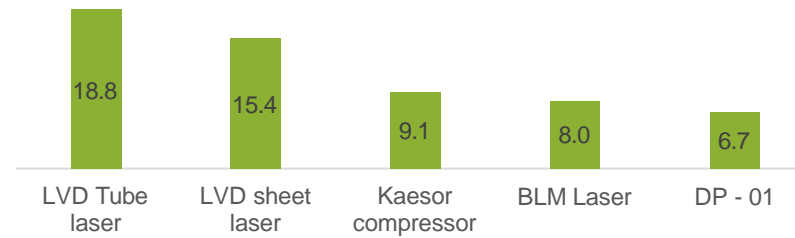


K2 top 5 Energy consumption user



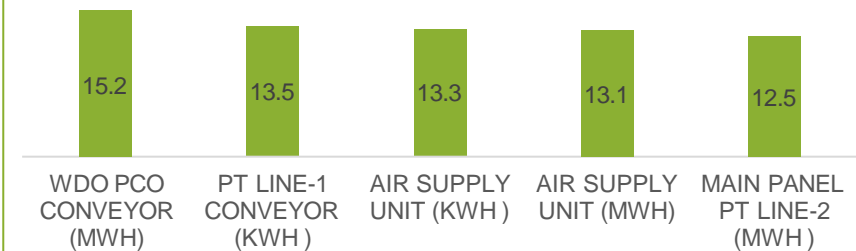
KS2 Departments Energy Consumption FY 2023-24

K3 top 5 Energy consumption user



KS3 Departments Energy Consumption FY 2023-24

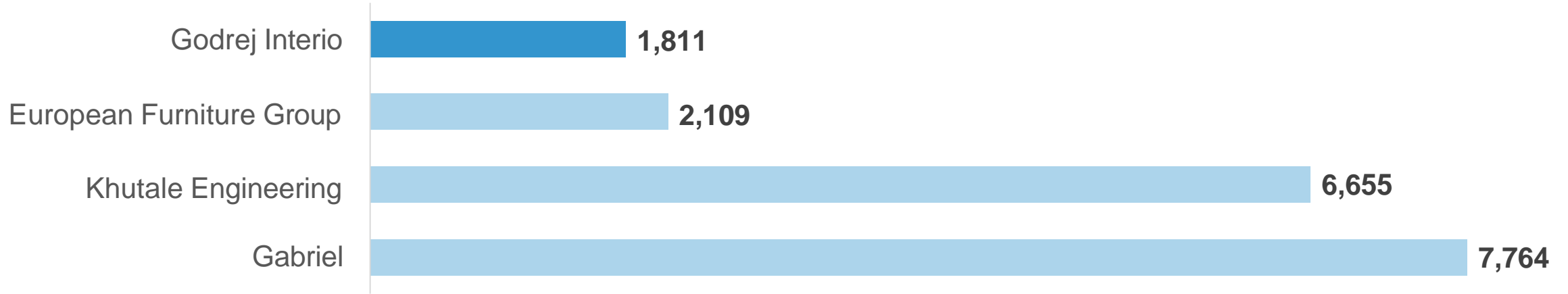
KS4 top 5 Energy consumption user



KS4 Departments Energy Consumption FY 2023-24

NATIONAL & GLOBAL BENCHMARK

Thermal SEC



Electrical SEC



INFORMATION ON COMPETITORS, NATIONAL & GLOBAL BENCHMARK

List of Major Planned Energy Conservation Projects_FY2024-25

Mezzanine Floor Lightning by timer installation.

Annual Electrical Saving (Million KWH)-0.034160
 # Investment – 0.01 (Rs million)
 # Payback – 0.36 Month

Pivatic machine vacuum ejector installation

Annual Electrical Saving (Million KWH)-0.016104
 # Investment – 0.064 (Rs million)
 # Payback – 5 Month

Advanced Pneumatic fixtures for efficient compressed air usage

Annual Electrical Saving (Million KWH)-0.019520
 # Investment – 0.020 (Rs million)
 # Payback – 2 Month

K4 Press machine timer installation

Annual Electrical Saving (Million KWH)- 0.002135
 # Investment – 0.005 (Rs million)
 # Payback – 3 Month

Office area AC temp set at 26 ° C

Annual Electrical Saving (Million KWH)-0.020130
 # Investment – 0 (Rs million)
 # Payback – 0 Month

IFC auto pressure reduction on Sunday in 1st shift and auto cut off

Annual Electrical Saving (Million KWH)- 0.007488
 # Investment – 0 (Rs million)
 # Payback – 0 Month

K3 CTLL machine Air blow flow replace with mechanical type

Annual Electrical Saving (Million KWH)- 0.039040
 # Investment – 0.01 (Rs million)
 # Payback – 0.36 Month

Separate high and low pressure compressed air line

Annual Electrical Saving (Million KWH)- 0.3
 # Investment – 6 (Rs million)
 # Payback – 13 Month

ENERGY SAVING PROJECTS IMPLEMENTED IN LAST THREE YEARS

Summary of Project Implemented in Last Three Years

FY	Number of projects implemented	Investments (Rs. Lacs)	Savings (Rs. Lacs)	Savings (KWH)
FY 2021-22	6	56.57	67.90	679007
FY 2022-23	10	57.10	40.33	416209
FY 2023-24	9	5.36	79.17	148392
Total	25	11G.03	187.4	1243608

FY	Number of projects Planned	Investments (Rs Lacs)	Estimated Savings (Rs Lacs)	Estimated Savings (KWH)
FY 2024-25	10	61.09	47.34	488577

Note: CNG to PNG conversion at Khalapur helped to save 95 Lakhs in FY 24, hence total saving in FY 23-24 is Rs. 140 Lakhs.

ENERGY SAVING PROJECTS IMPLEMENTED IN LAST THREE YEARS

List of Major Implemented Energy Conservation Projects FY2021-22



Arresting Compressed Air Leakage

- # Energy Cost Saving – 2.486 Rs Million
- # Total Fuel Saving – 248550 KWH/ Year
- # Investment – 0.01 Rs Million



Elimination of boosters by high pressure compressor

- # Energy Cost Saving – 0.649 Rs Million
- # Total Fuel Saving – 64889 KWH/ Year
- # Investment – 0.9 Rs Million



Installation of IFC

- # Energy Cost Saving – 1.053 Rs Million
- # Total Fuel Saving – 105300 KWH/ Year
- # Investment – 0.632 Rs Million



AHU retorfit with dual-coil to operate DX system in low load conditions

- # Energy Cost Saving – 0.395 Rs Million
- # Total Fuel Saving – 39500 KWH/ Year
- # Investment – 0.625 Rs Million



Installation of energy efficient 2 stage compressor

- # Energy Cost Saving – 1.808 Rs Million
- # Total Fuel Saving – 180768 KWH/ Year
- # Investment – 3 Rs Million



Compressor Auto Close Valve Installation

- # Energy Cost Saving – 0.4 Rs Million
- # Total Fuel Saving – 40000 KWH/ Year
- # Investment – 0.5 Rs Million

ENERGY SAVING PROJECTS IMPLEMENTED IN LAST THREE YEARS

List of Major Implemented Energy Conservation Projects_FY2022-23



Chemical Dosing System for cooling tower

Annual Electrical Saving (KWH)-26000
Investment – 0.6 (Rs million)
Payback – 28.57 Month



Power Saving by installing Timer for Plants Overhead Lights.

Annual Electrical Saving (KWH)-65600.00
Investment – 0.02 (Rs million)
Payback - 0.38 Month



High Efficiency cooling towers

Annual Electrical Saving (KWH)- 20000
Investment – 0.5 (Rs million)
Payback – 30.93 Month



Power Saving optimization with pump pressure.

Annual Electrical Saving (KWH)-10000.00
Investment – 0.016 (Rs million)
Payback – 1.98 Month



Primary Variable HVAC system

Annual Electrical Saving (KWH)- 13500
Investment – 0. (Rs million)
Payback –0 Month



Installation of Smart AHU

air # Annual Electrical Saving (KWH)-26484
Investment –0.85 (Rs million)
Payback – 39.69 Month



Integration of HVAC system with BMS for improved monitoring.

Annual Electrical Saving (KWH)-13125.00
Investment – 0.22. (Rs million)
Payback – 20.79 Month



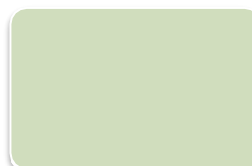
Replacement of conventional air circulator fans with BLDC fans

Annual Electrical Saving (KWH)-12650.00
Investment – 0.25 (Rs million)
Payback – 24.39 Month



Rectification of IFC unit to regulate the compressed air input to K3 plant

Annual Electrical Saving (KWH)-13680.00
Investment – 0.01 (Rs million)
Payback – 0.9 Month



Power Saving by using Temperature Optimization in PT Line

Annual Electrical Saving (KWH)-30000.00
Investment – 0.02 (Rs million)
Payback – 0.82 Month

ENERGY SAVING PROJECTS IMPLEMENTED IN LAST THREE YEARS

List of Major Implemented Energy Conservation Projects_FY2023-24

Power Saving by using Temperature Optimization in PT Line

Annual Electrical Saving (KWH)-30000.00
 # Investment – 0.02 (Rs million)
 # Payback – 0.82 Month



Power Saving by installing Timer for Plants Overhead Lights. (For K3)

Annual Electrical Saving (KWH)-23850.00
 # Investment – 0.06 (Rs million)
 # Payback - 3.12 Month

Install Low Air Venturi for manual blow in paint shop

Maximise your energy efficiency
 by multiplying air supply



Annual Electrical Saving (KWH)22671.00
 # Investment – 0.02 (Rs million)
 # Payback –1.09 Month



Power Saving optimization with pump pressure.

Annual Electrical Saving (KWH)-10000.00
 # Investment – 0.016 (Rs million)
 # Payback – 1.98 Month

Power Saving by Hooking Density Improvement with Load Bar.

Annual Electrical Saving (KWH)-15675.00
 # Investment – 0. (Rs million)
 # Payback – 0 Month



Efficient Pneumatic Vacuum Ejector eliminate the continuous compressed air

Annual Electrical Saving (KWH)-19866.00
 # Investment –0.160(Rs million)
 # Payback – 0.9 Month



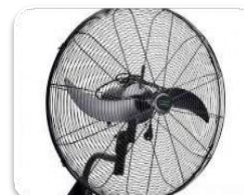
Rectification of IFC unit to regulate the compressed air input to K3 plant

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 # Investment – 0.01 (Rs million)
 # Payback – 0.9 Month



Replacement of conventional air circulator fans with BLDC fans

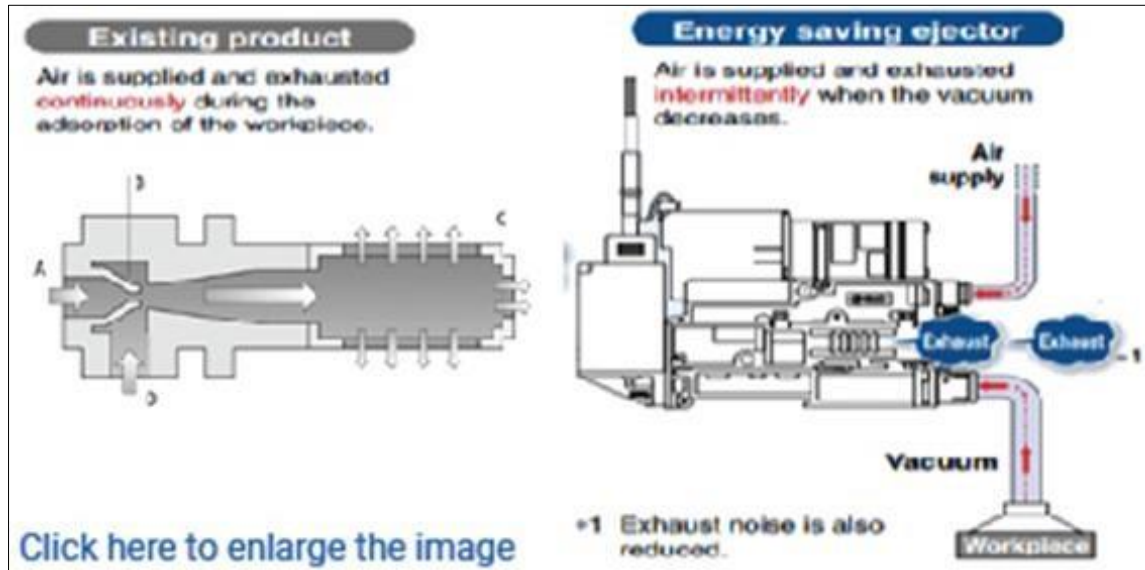
Annual Electrical Saving (KWH)-12650.00
 # Investment – 0.25 (Rs million)
 # Payback – 24.39 Month



ENERGY SAVING PROJECTS IMPLEMENTED IN LAST THREE YEARS

Energy efficient Vacuum Ejector to reduce compressed air demand in pick and place application

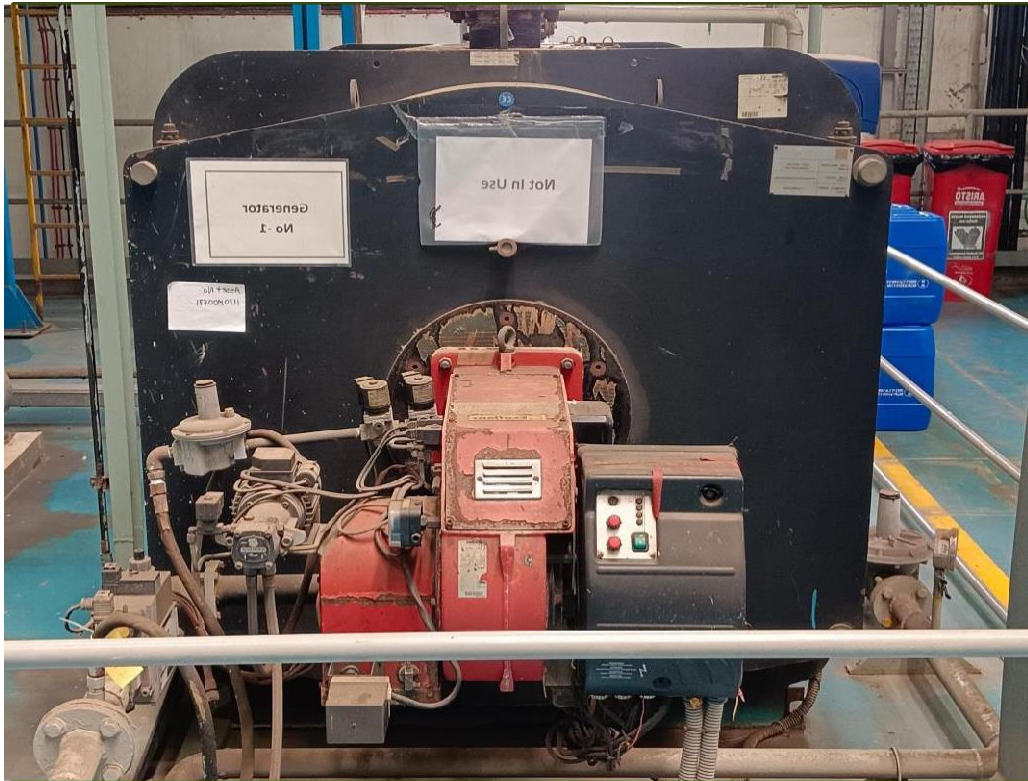
Project Summary (For 10 Units):



Project Location	Khalapur
Energy Saving	19866 KWH/annum
Investment	160000 INR
Cost Saving	178800 INR/annum
Payback Period	13 month
Carbon Offset	14.11 tCO ₂ e/annum

INNOVATIVE PROJECTS IMPLEMENTED

Transition to Room Temperature Chemicals to reduce thermal energy consumption



❑ Why Innovative –

Implementation of room temperature chemicals in pretreatment line of paint booth to reduce heating requirement and thereby PNG consumption

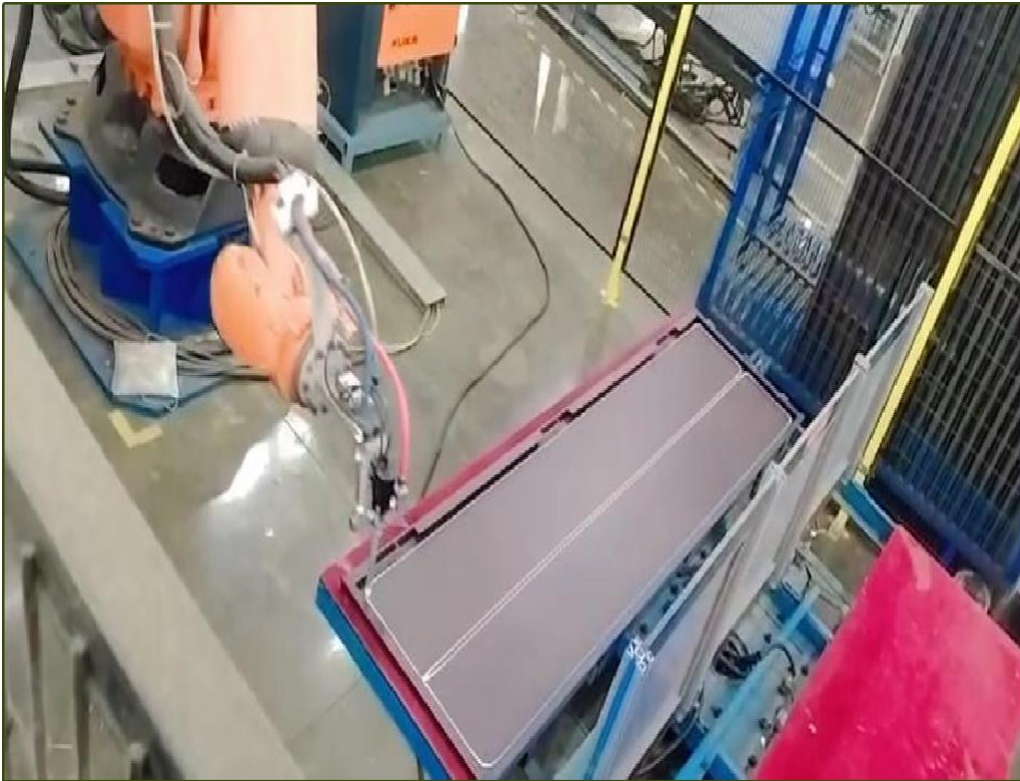
❑ **Impact on SEC –** 46% reduction

❑ **Annual Savings -** 67 Rs. Lakhs

❑ **Investment –** 0 Rs. Lakhs

INNOVATIVE PROJECTS IMPLEMENTED

Usage of Adhesives eliminating welding in storage products



❑ Why Innovative –

This was a first of its kind application of available technologies involving usage of innovative adhesive enabling us to eliminate welding in cabinet assembly

❑ **Impact on SEC** – 4% reduction

❑ **Annual Savings** - 4 Rs. Lakhs

❑ **Investment** – 0.3 Rs. Lakhs

INNOVATIVE PROJECTS IMPLEMENTED

Powder Coating Process



❑ Why Innovative –

- Use of powder coating eliminates voc emissions.
- Our powder coating has zero emission in use phase.
- Also, it reduces sludge generation in mfg. Because we use the zirconium-based powder coating. So, our powder coating is lead and hexavalent chrome free process. HZD & toxic chemicals are not use.

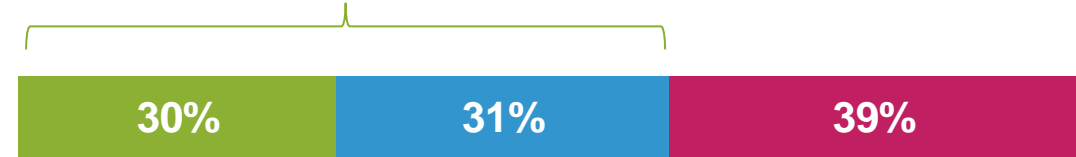
UTILISATION OF RENEWABLE ENERGY SOURCES (ONSITE & OFFSITE)

OFFSITE RENEWABLE ENERGY

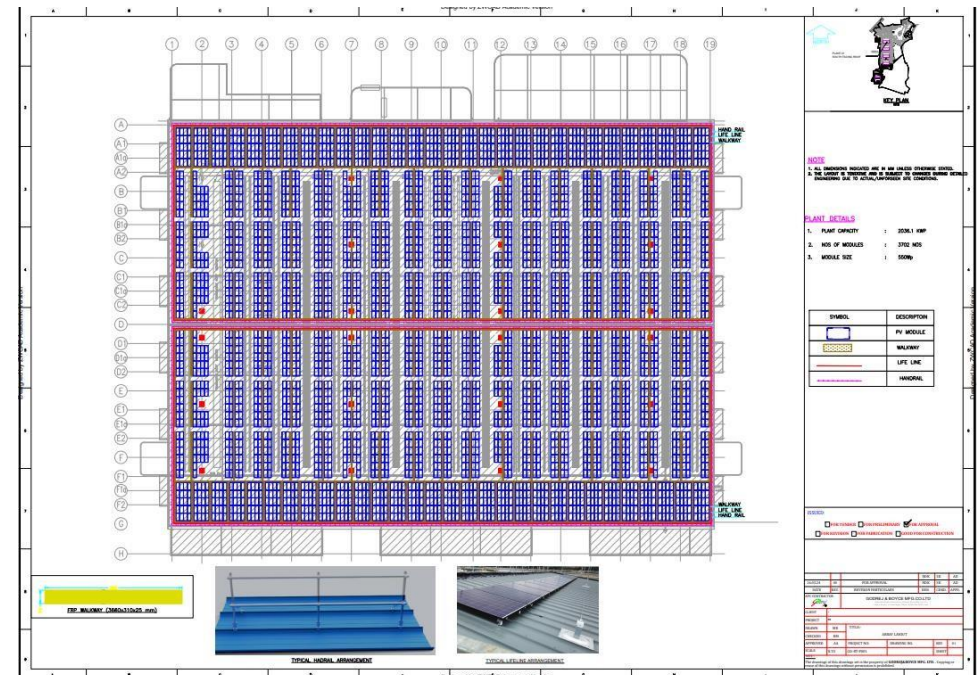
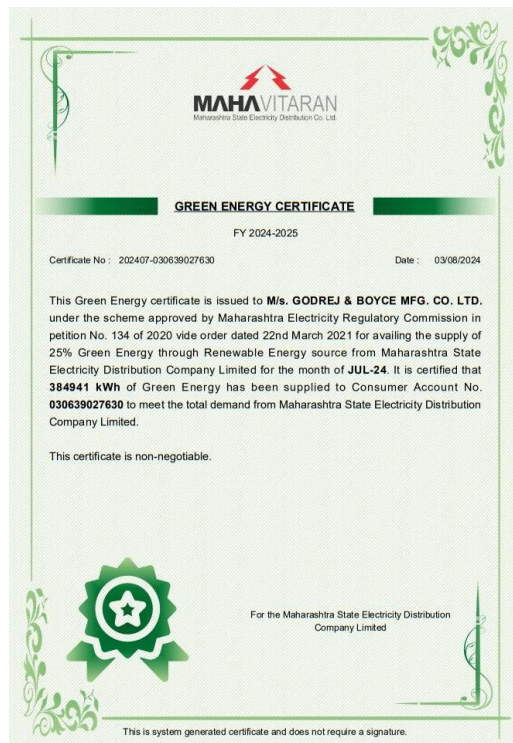
FY	Technology	Consumption (kWh)	% Contribution
2023-24	Solar – Green Tariff	4171680	31.2%

ONSITE RENEWABLE ENERGY

~60% Renewable

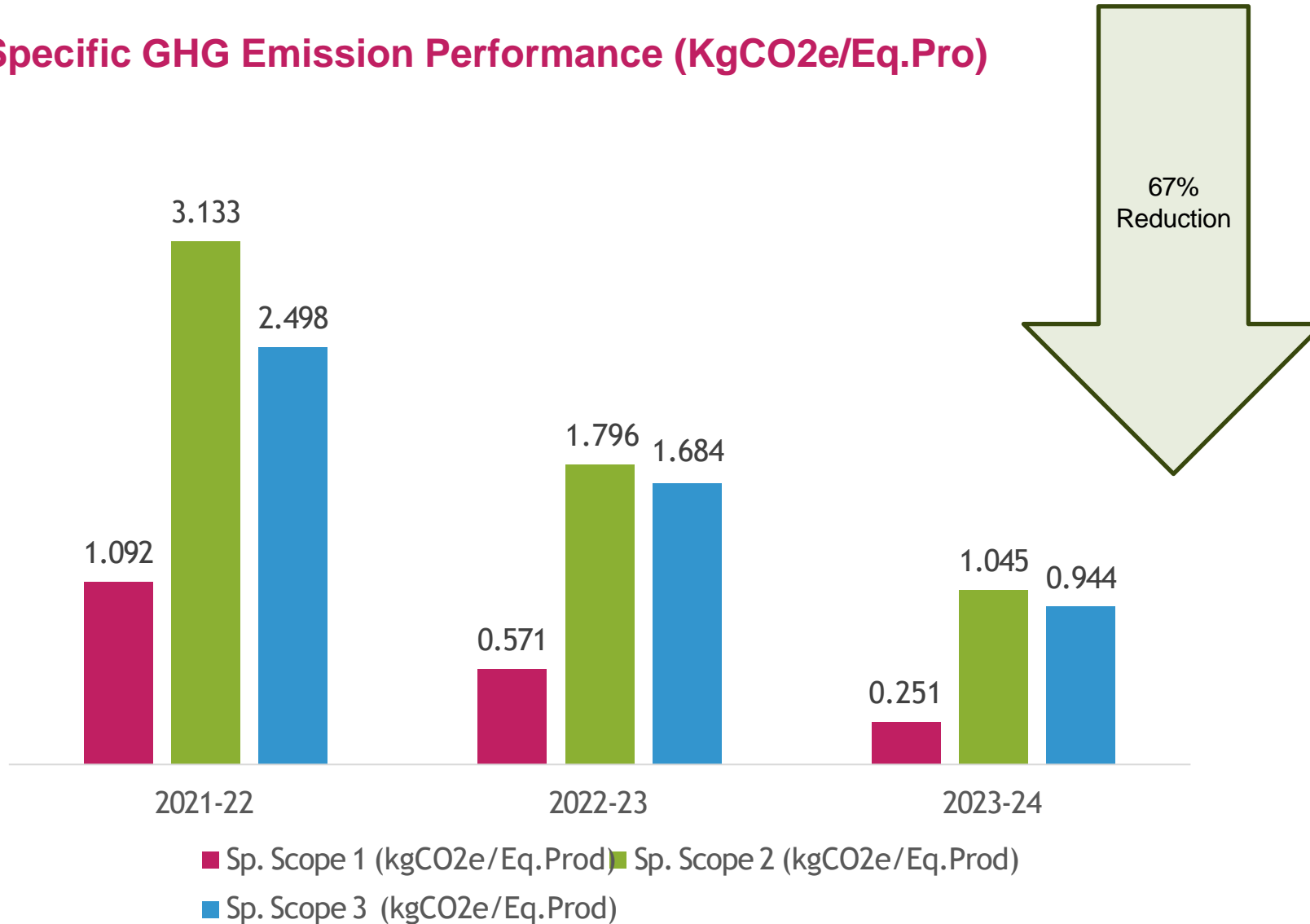


Existing Green Tariff Addition of 3.5MW Rooftop Solar



GHG INVENTORISATION

Specific GHG Emission Performance (KgCO₂e/Eq.Pro)



Scope	Emission Sources Considered
Scope 1	Emission from diesel, PNG/ CNG.
Scope 2	Purchased Electricity excluding renewable energy
Scope 3	<ul style="list-style-type: none"> 1 - Purchased Goods and Services 3 - Fuel-and-energy-related activities (not included in S1 OR S2) 4 - Upstream Transportation and Distribution 5 - Waste Generated in Operations 6 - Business Travel 9 - Downstream Transportation and Distribution

GHG INVENTORISATION

Short term and long term GHG emission reduction plan

Under the Good & Green philosophy we started strategically working towards improving our environmental dimensions from 2010 up to 2021. As the way forward, in 2021 we undertook even stringent targets for 2032.



Creating a Greener India

135%

Increase in energy productivity

135%

Decrease in carbon intensity

40%

Renewable energy use

80%

Domestic sourcing from Green suppliers

100%

Net-Zero Buildings
 All non-manufacturing



Good & Green products


50%

Revenue generated from Good & Green products

WASTE UTILIZATION AND MANAGEMENT

No.	Type of waste generated	Quantity of waste generated Kg/ Equi. Product)			Disposal method
		2021-2022	2022-2023	2023-2024	
1	Waste/Residue containing Oil, (Cotton/Gloves)	0.001	0.002	0.001	Incineration as directed by State pollution control Board
2	ETP Sludge	0.003	0.002	0.003	Landfill
3	Chip boards / PLB / MDF scrap	0.012	0.006	0.006	Recycling
4	Mixed & Miscellaneous Scrap	0.401	0.269	0.299	Recycling
5	Old Used Corrugated Box	0.015	0.013	0.014	Recycling
Total		0.431	0.291	0.323	-

WASTE UTILIZATION AND MANAGEMENT – PLASTIC EPR



Central Pollution Control Board
(Ministry Of Environment, Forest and Climate Change, Govt. of India)
Parvesh Bhawan, East Arjun Nagar
Delhi-110032

Regn. No.
BO-24-000-05-AAACG1395D-22

Date:
01/06/2022 05:58 PM


REGISTRATION CERTIFICATE FOR BRAND OWNER
(Under Rule-13(2) of the Plastic Waste Management Rules, 2016, as amended)

To,
Godrej And Boyce Mfg Co Ltd,
Pirojshanagar, Vikhroli,
Mumbai - 400079

With reference to the application dated **12/05/2022** regarding registration as a **Brand Owner**, this is to inform that your application has been processed and found in order. Now, therefore, Central Pollution Control Board Board is pleased to grant the registration in favour of **Godrej And Boyce Mfg Co Ltd**, vide registered office address **Pirojshanagar, Vikhroli, Mumbai - 400079**, as a Brand Owner, for disposal of MLP & other plastic waste generated due to their products as per the EPR Action Plan given below:


Sl. No	Financial Year		2022-23			
	State/UT		Cat-I	Cat-II	Cat-III	Cat-IV
1	CPCB		0.00	1962.51	11.45	0.00
TOTAL			0.00	1962.51	11.45	0.00
Grand Total			1973.96 TPA			

This certificate of registration shall be valid for a period of **one year** from the date of issue of the letter unless revoked, suspended or cancelled. The Registration is granted subject to the following terms & conditions: -



Signed
by: Divya Sinha
Date:
2022.06.01
17:59:50
+05:30

1 of 2



Central Pollution Control Board
(Ministry Of Environment, Forest and Climate Change, Govt. of India)
Parvesh Bhawan, East Arjun Nagar
Delhi-110032

Regn. No.
IM-26-000-09-AAACG1395D-22

Date:
26-09-2022 11:45 AM

REGISTRATION CERTIFICATE FOR IMPORTER
(Under Rule-13(2) of the Plastic Waste Management Rules, 2016, as amended)


To,
GODREJ AND BOYCE MFG CO LTD (Legal Name)
(Trade Name: **GODREJ AND BOYCE MFG CO LTD**),
Pirojshanagar, Vikhroli,
Mumbai - 400079

With reference to the application dated **29-08-2022** regarding registration as a **Importer**, this is to inform that your application has been processed and found in order. Now, therefore, Central Pollution Control Board is pleased to grant the registration in favour of **Godrej And Boyce Mfg Co Ltd**, vide registered office address **Pirojshanagar, Vikhroli, Mumbai - 400079**, as a Importer, for disposal of MLP & other plastic waste generated due to their products as per the EPR Action Plan given below:

Sl. No	Financial Year		2022-23			
	State/UT		Cat-I	Cat-II	Cat-III	Cat-IV
1	CPCB		0.0000	-0.0035	0.0000	0.0000
TOTAL			0.0000	-0.0035	0.0000	0.0000
Grand Total			-0.0035			

This certificate of registration shall be valid for a period of **One Year**. The Registration is granted subject to the following terms & conditions: -

- The Importer shall fulfil the categorize EPR Targets for the year 2022-23 as



Signed
By: Divya Sinha
Date:
2022.09.26
11:46:08

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GREEN SUPPLY CHAIN MANAGEMENT

MAY 2019

SUSTAINABLE SOURCING POLICY

GODREJ & BOYCE MFG. CO. LTD.

PIROJSHANAGAR, VIKHROLI
MUMBAI 400079.



**SUSTAINABLE
SOURCING
POLICY**

Objective

The objective of the Sustainable Sourcing Policy (SSP) is to define sustainable sourcing in the context of Godrej and Boyce Mfg. Co. Ltd. (hereafter referred to as the 'Company') and to clarify the roles and responsibilities of both, suppliers as well as relevant personnel of the Company, so that sourcing decisions reflect responsible choices from a societal and an environmental perspective.

The SSP is integrated into the overall sustainability vision of Godrej & Boyce and is a part of the overall sustainability policy of the company.

Godrej and Boyce Mfg. Co. Ltd., hereafter referred to as the 'Company' prefers to work with people and organizations who share its enthusiasm and commitment towards sustainable business operations. The SSP and the Supplier Code of Conduct (SCC) provide clear guidelines for all suppliers to adopt in accordance with their business context and within the regulatory framework of the region in which they operate.

Sustainable Sourcing Policy (SSP)

The bedrock of the SSP rests on five tenets, namely, Good Corporate Governance, Care for Environment, Respect for People, Contribution to Community we operate in, and taking an ecosystem view of the supply chain. Given below are the details regarding the same.

The Five Tenets of Sustainable Sourcing:

1. Good Corporate Governance, Business Conduct and Ethics:

Godrej & Boyce regards corporate governance as being of critical importance to all its stakeholders and strives to ensure that the company meets the highest standards of governance across its operations.

Godrej & Boyce expects its suppliers to also strive towards this ideal across all operations, particularly in the areas of Corruption & Bribery, Conflicts of Interest, Protection of Intellectual Property and International trade norms.

2. Care for Environment:

One of the core values of Godrej & Boyce is Respect for the Environment. The Company aims to follow best practices towards environment conservation, and as part of its supply chain, expects its suppliers to comply with environment regulations, adopt relevant environment management standards, and, over time, evolve to establish best practices.

3. Respect for People:

Godrej & Boyce believes in creating and supporting a culture and work environment in which people feel valued and have equal opportunities to do their best work. It actively promotes a culture of dignity, respect, health, safety & learning and has a policy of 'Zero tolerance' for child labour, harassment and discrimination of any form. The Company expects all suppliers to adhere fully to all the above tenets, and further, encourage development of an employee friendly workplace.

4. Contribution to Community:

Godrej & Boyce aims to make significant contributions to the community-at-large through various initiatives in and around its areas of operations. The Company encourages its suppliers to make significant, relevant and sustainable efforts for the betterment of living standards in their local communities.

GREEN SUPPLY CHAIN MANAGEMENT

CASE STUDY OF SUSTAINABLE SUPPLIER

ENVIRONMENT

Sustainable Supplier Base

Testimonial



Mr. Sandeep Agrawal
Managing Director,
Corru Cartons (I) Pvt. Ltd.

"I am proud to share the sustainable practices that our company has been following and privileged to have **GreenCo Gold** Certification for our unit located at Palghar. Thanks to Godrej for continuous support, guidance, motivation and inspiration. The replica of Green Practices at Palghar Plant has been horizontally deployed from the start of our new unit at Harneri, Khalapur. Godrej plays a vital role and is the driving force for our company to be an **Eco-friendly** one!"

A GREEN START.....

Corru Cartons Pvt. Ltd. is one of the key suppliers providing the Corrugated Cartons to Godrej Interio Vikhroli facility. The Palghar plant has taken various initiatives for energy reduction, Renewable energy, Biodiversity enhancement and achieved GreenCo Gold rating. Considering the Godrej Interio expansion activities at Khalapur location, Corru Cartons has set up a new additional manufacturing facility at Harneri near Pali, Sudhagad.

While setting up the new facility, Corru Cartons has considered the green features starting from the Design of the facility. Following are the green features of the facility -

- 100% of Roof area is connected to Rain Water Harvesting system.
- The roofs are coated with heat reflective paints which lead to lower the shopfloor ambient temperature by 4 Degree Celsius.
- Maximum use of natural light for day time operations.
- 100% LED lights installation for shop floor and office lighting.
- While procurement of new machines, energy efficiency of all equipment was considered. All

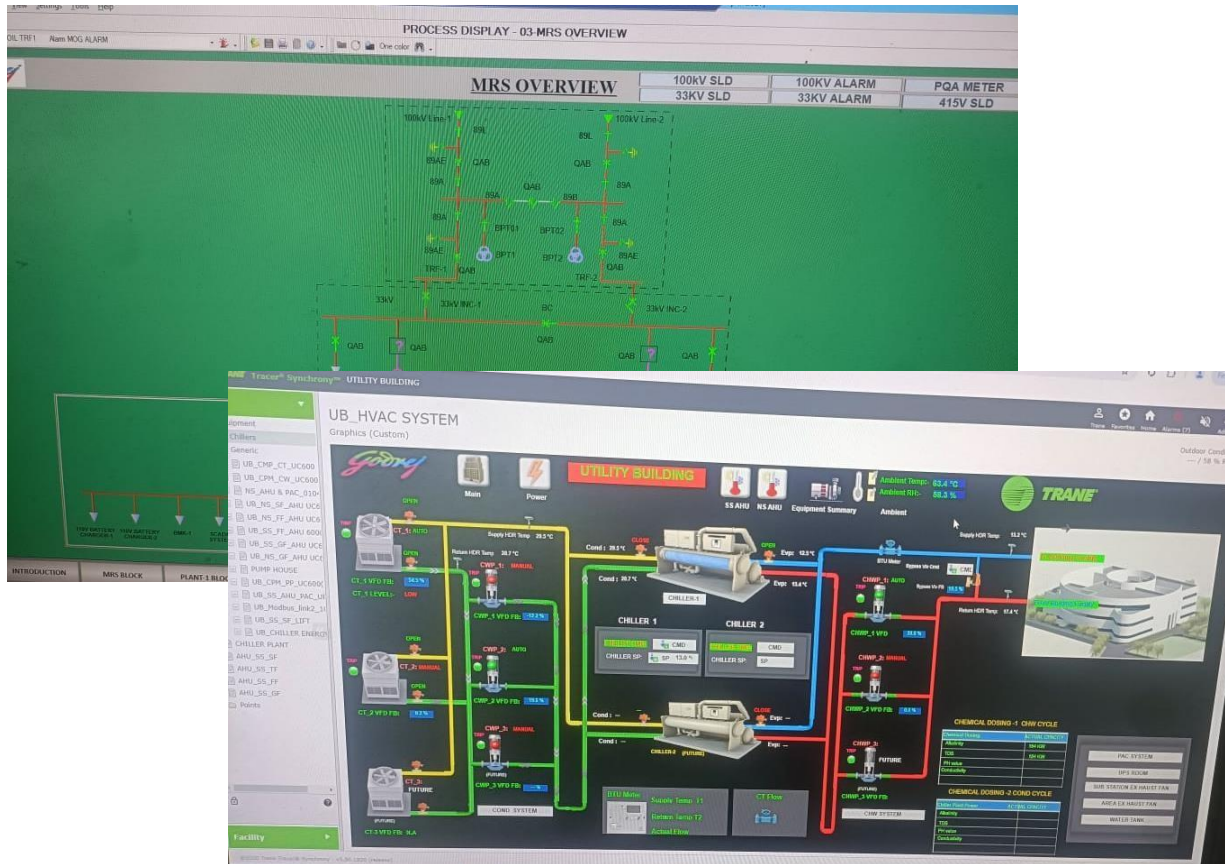
new motors have IE3 efficiency with VFD for Corrugation Machine.

- For Corrugation process, the direct Natural Gas fired heating system is used instead of conventional Diesel fired boilers, saving the GHG emissions significantly.
- 100% of the taps in facility are water efficient Push Taps.
- The sprinkler system is set up for gardening purpose.

Due to set up of this facility near Khalapur plant, the transportation distance has been reduced by 150 kms per one side trip. This has led to save Scope 3 GHG emissions of Approx. 81 Tons of CO₂ equivalent. The Specific Energy consumption (KWH/Kg of Raw material processed) of the plant has improved by around 20 to 23% as compared to existing facility at Palghar.



EMS SYSTEM AND OTHER REQUIREMENTS



Existing monitoring system - BMS System



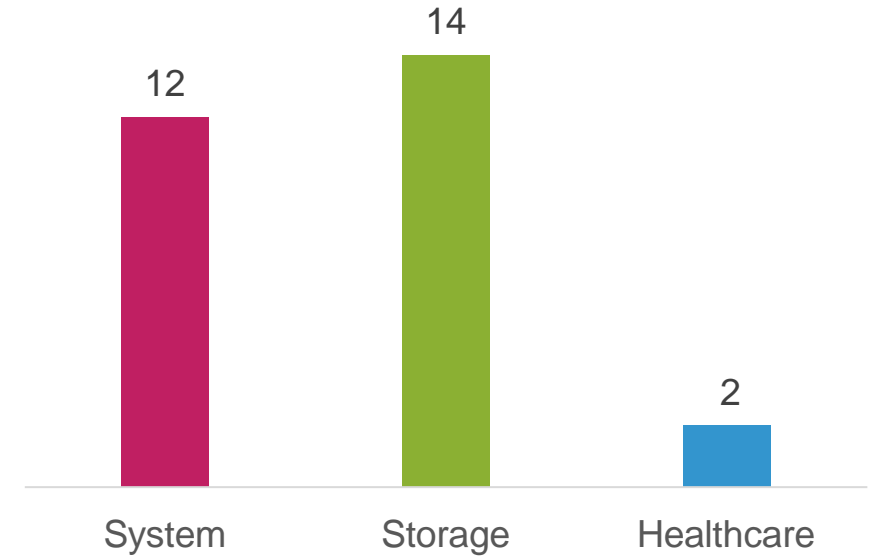
GREEN CERTIFICATION
ISO 50001 : ENERGY MANAGEMENT SYSTEM

EMS SYSTEM AND OTHER REQUIREMENTS

Planning for GreenCo Certificate Implementation

GreenCo Rating CFT Framework (as per version 4.0)

S.no	Parameter	Points	CII-CFT Representative
1	Management System	75	Kiran chavan
2	Energy Management	150	Roshan Shah
3	Carbon Management	150	Kapil Jadhav
4	Water Management	125	Roshan Shah
5	Material Resource Management	125	Vaibhav Saple
6	Green Supply Chain	100	Vivek Katdare
7	Product Stewardship and Life Cycle Approach	125	Kiran Gopale
8	Innovation for Environment	50	Alpesh Kheratkar
9	Green Built Environment and others	100	Sarjerao Thorawat
	Total	1000	-

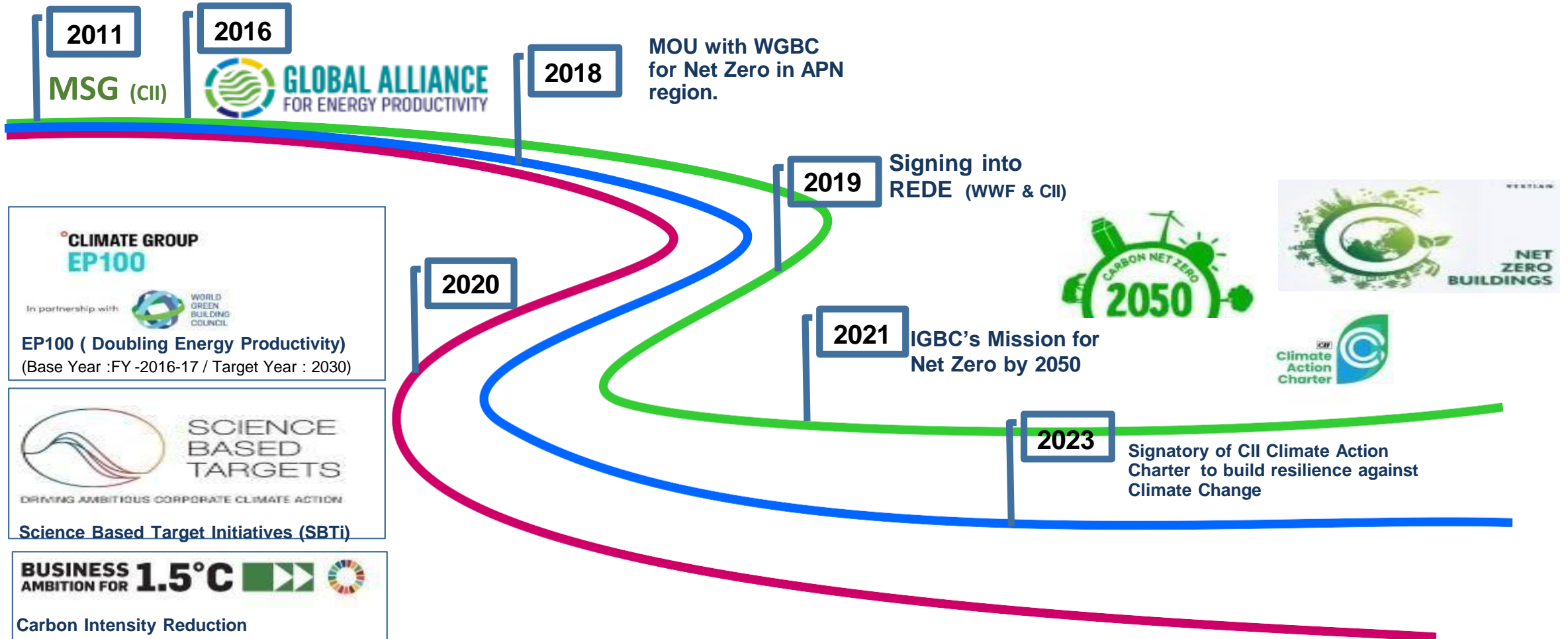


LCA of products conducted



NET ZERO COMMITMENT

GODREJ'S CLIMATE ACTION JOURNEY SO FAR



RECENT COMMITMENTS

1. **Global Alliance on Energy Productivity**
2. **Advancing Net Zero Building with World Green Building Council** - New Building by 2030 Existing Building by 2050
3. **Business Ambition for 1.5 degrees** centigrade
4. **EP100 Initiative** with the Climate Group
5. **Double our Energy Productivity Implementation** of EnMS (ISO 50001:2018)
6. **Renewable Energy Demand Enhancement (REDE) Initiative** for Corporate Buyers in India
7. India Wetlands Coalition
8. India Plastic Pact

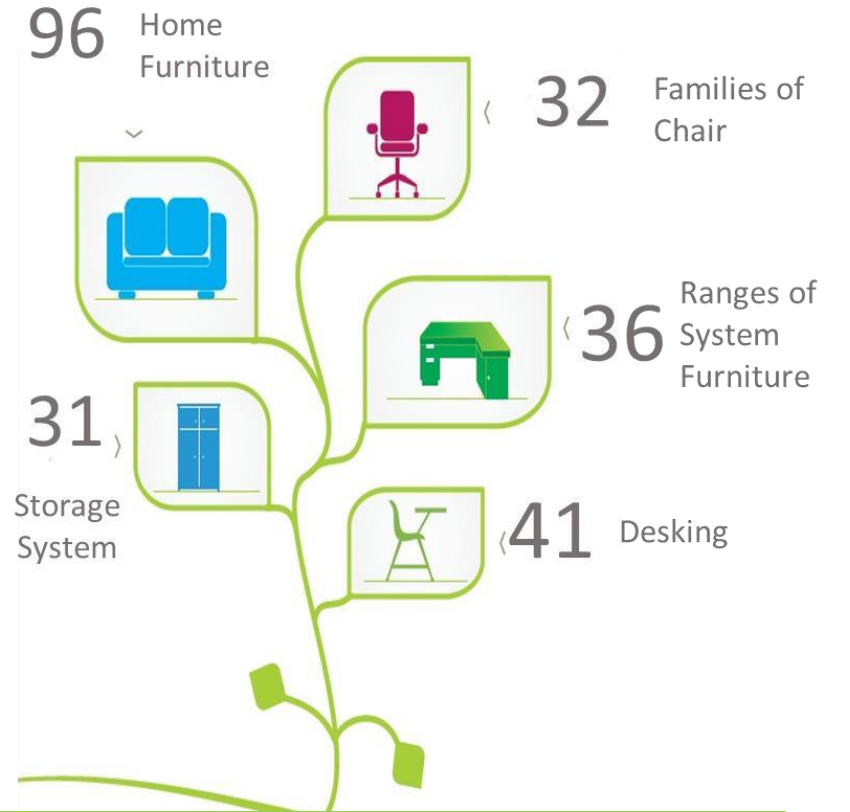


ANY OTHER RELEVANT INFORMATION



Received Award as Best Sustainability Practices Partner by M/S Volvo
: A testament to our commitment to Sustainability

GOOD & GREEN PRODUCTS



Total 236 product in Green Basket

LARGEST PORTFOLIO OF CERTIFIED PRODUCTS



188+ GreenPro



89+ Greenguard



41+ Greenguard Gold



64+ GRIHA



42+ BIFMA Level 2



125+ SCS Indoor Advantage Gold

These are some sustainability initiatives that we have been working on for years

**Thank you
Please include your email/phone number**

