



# JK Tyre & Industries Ltd Chennai Tyre Plant

**CII - NATIONAL AWARD FOR EXCELLENCE IN ENERGY  
MANAGEMENT 2023**

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# 1. Company Profile

*Chennai Tyre Plant in Tamil Nadu is the 6<sup>th</sup> manufacturing plant of JK Tyre which went on stream on 05<sup>th</sup> February 2012 presently produces 48.5 Lakhs Passenger Car Radial (PCR) tyres and 12.3 Lakhs Truck / Bus Radial (TBR) tyres per annum.*

## *Salient Features of Chennai Tyre Plant*

- ❖ Location Selection – Automobile Hub*
- ❖ Advance manufacturing digital operations with industrial IoT solutions*
- ❖ Equipment Selection for high Energy Efficiency*
- ❖ Environment friendly technology considered during Plant Inception itself*
- ❖ Zero Liquid Discharge Plant – certified by BSI*
- ❖ Single use plastic free plant – certified by CII*
- ❖ Zero waste to land fill – certified by BSI*
- ❖ Usage of Maximum Day lights*
- ❖ Highly optimized WIP material flow*
- ❖ Modular designs for seamless expansion*





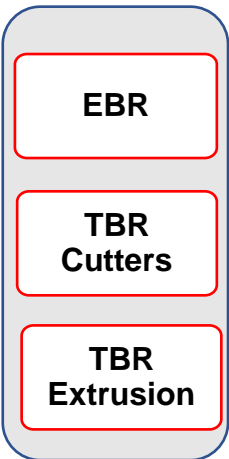


# 2. Manufacturing Process

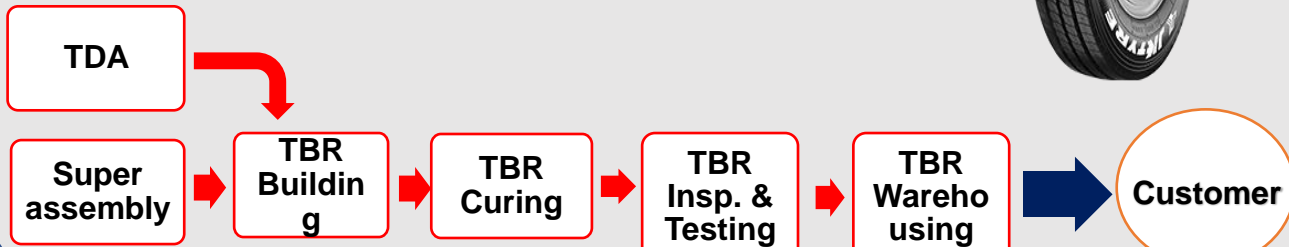
## Common Process



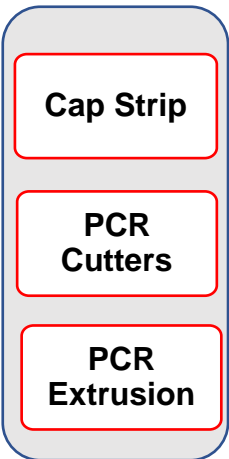
## TBR Stock



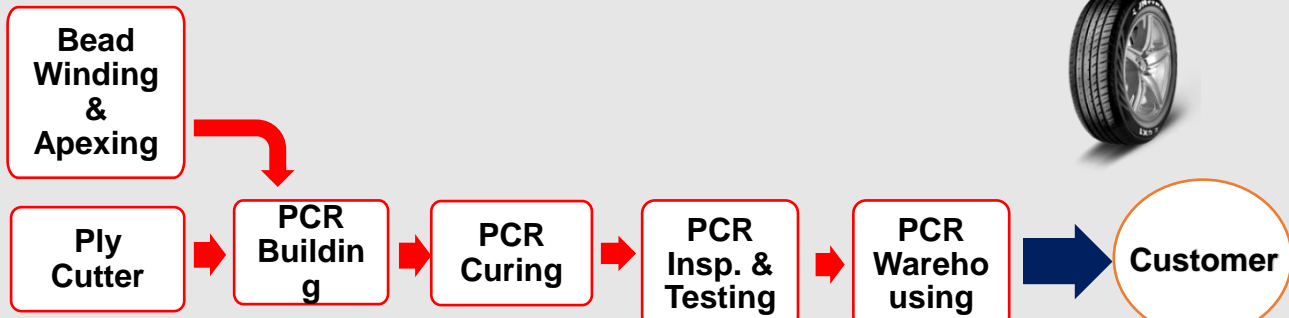
## Truck Bus Radial Tyres - TBR



## PCR Stock



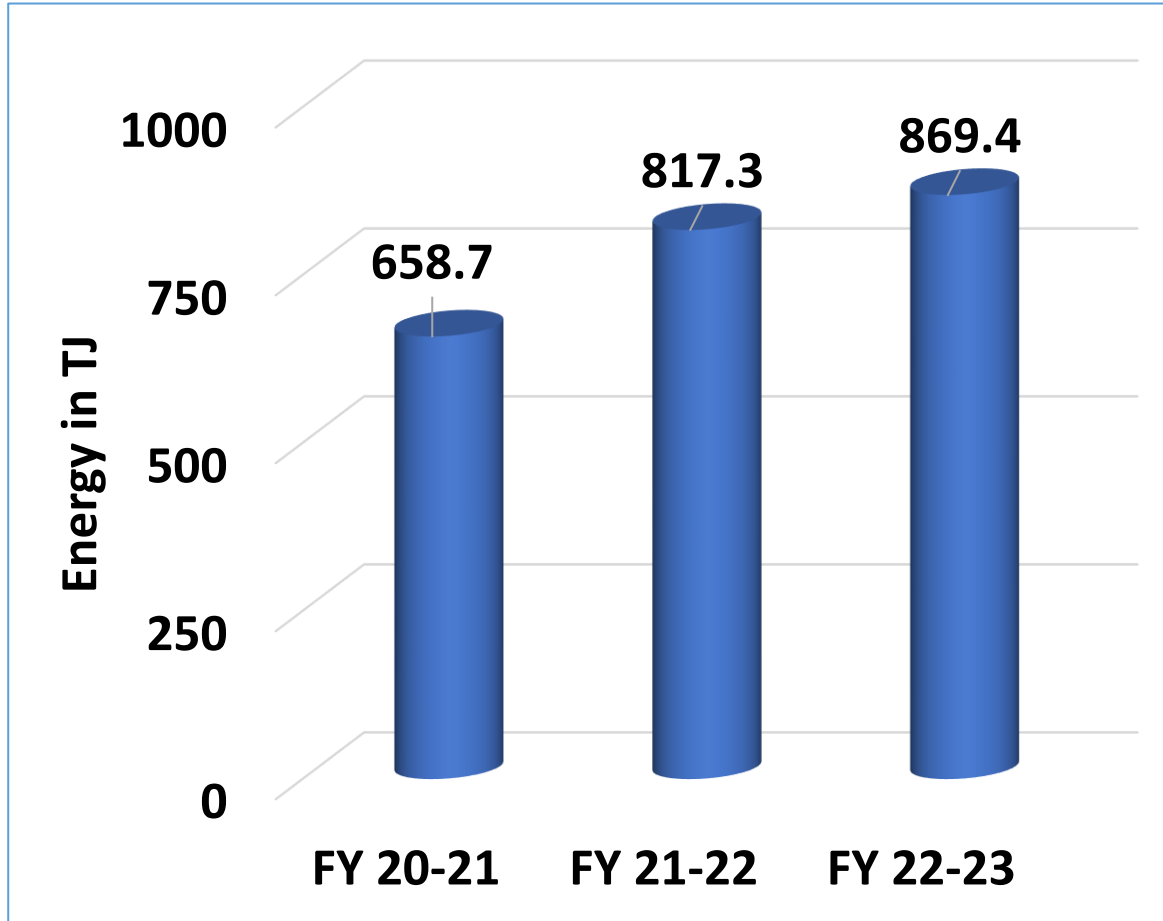
## Passenger Car Radial Tyres - PCR



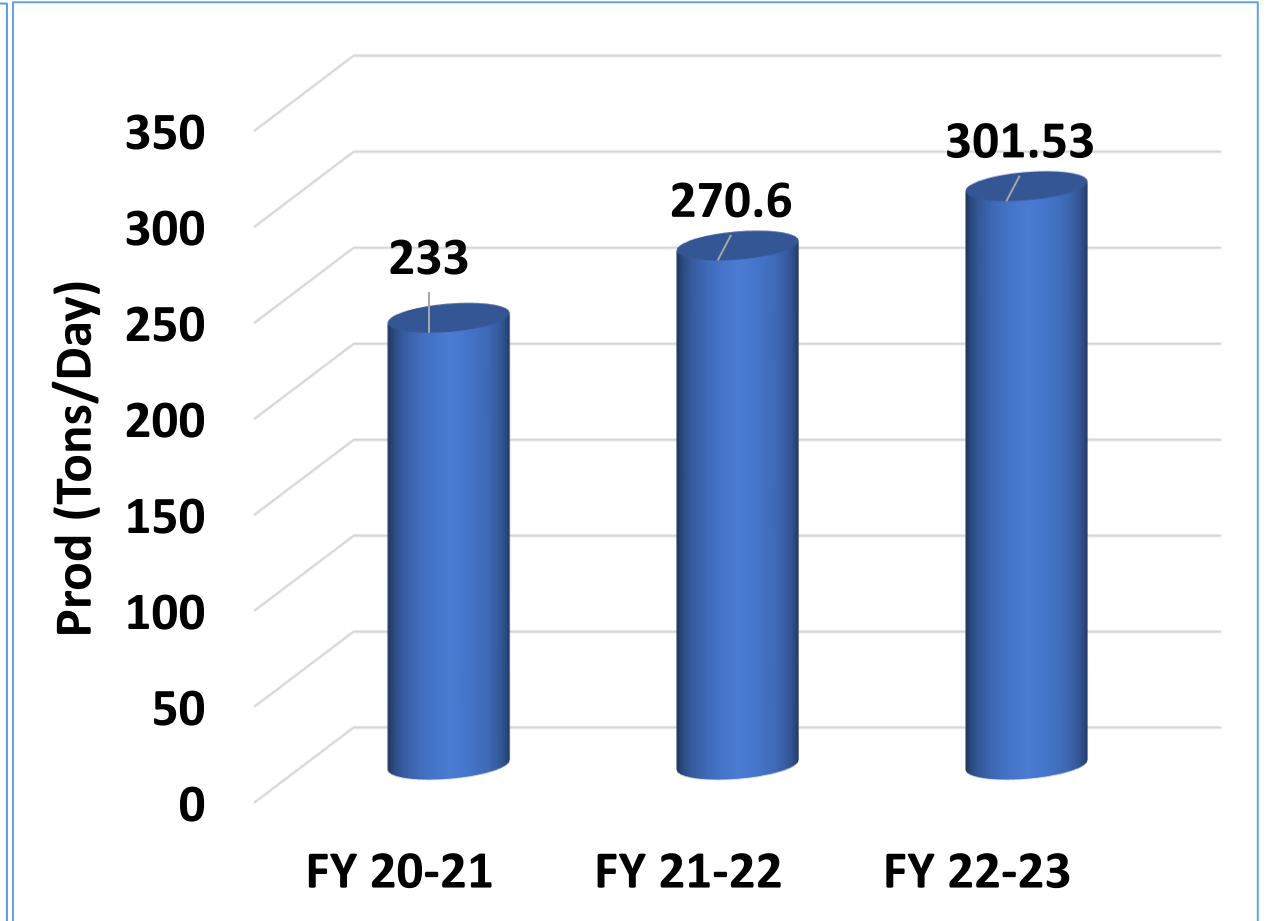


### 3. Sp. Energy Consumption in last 3 years (FY 20-21 to FY 22-23)

Plant absolute Energy consumption (in TJ)



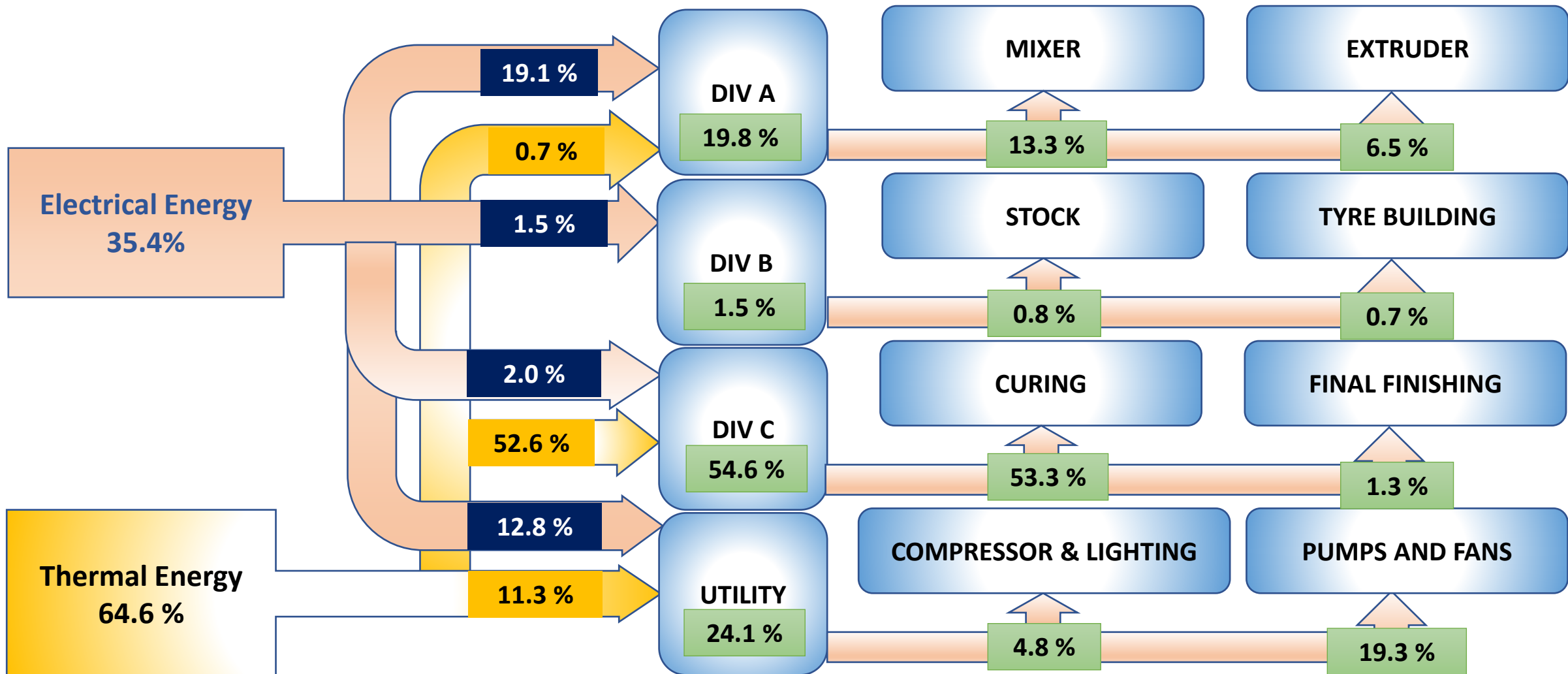
Plant Production (in Tons Per Day)





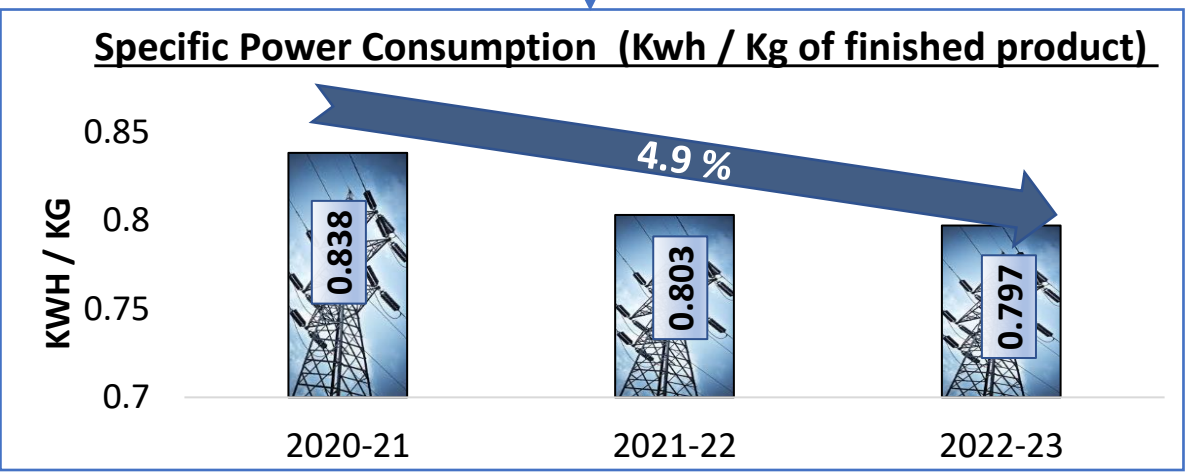
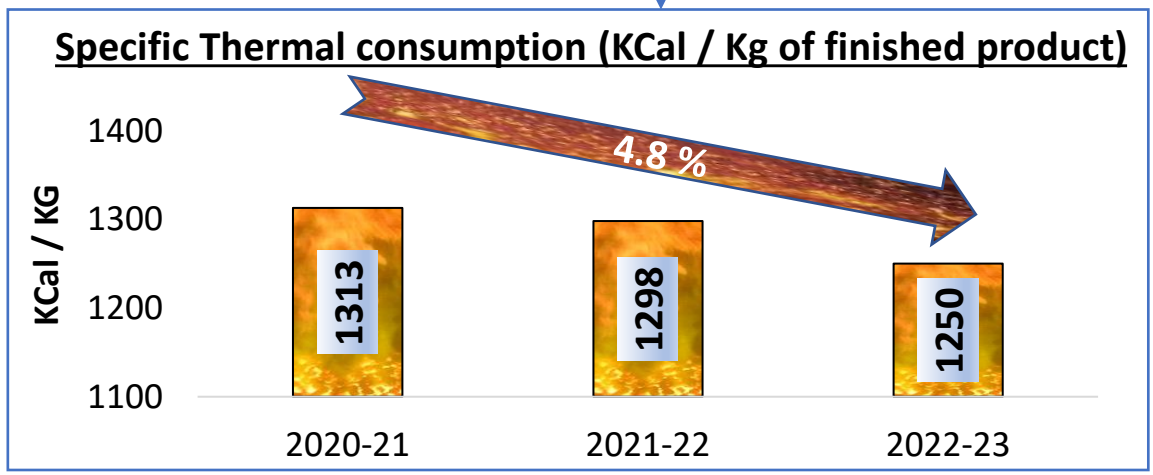
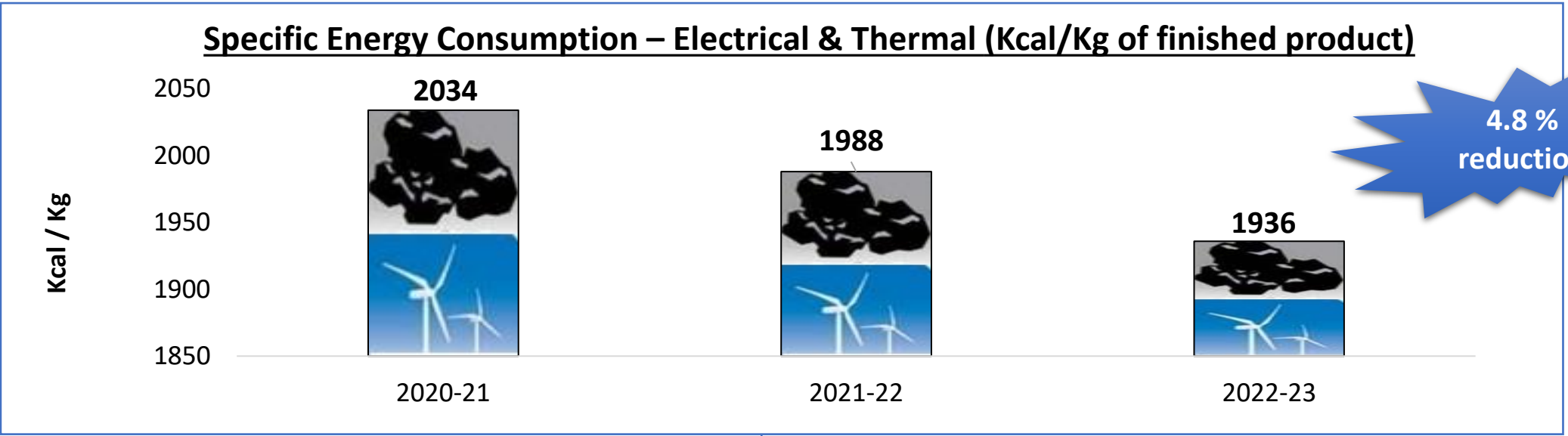
### 3. Sp. Energy Consumption in last 3 years (FY 20-21 to FY 22-23)

Plant Area/Equipment wise Energy consumption (Kcal in %)





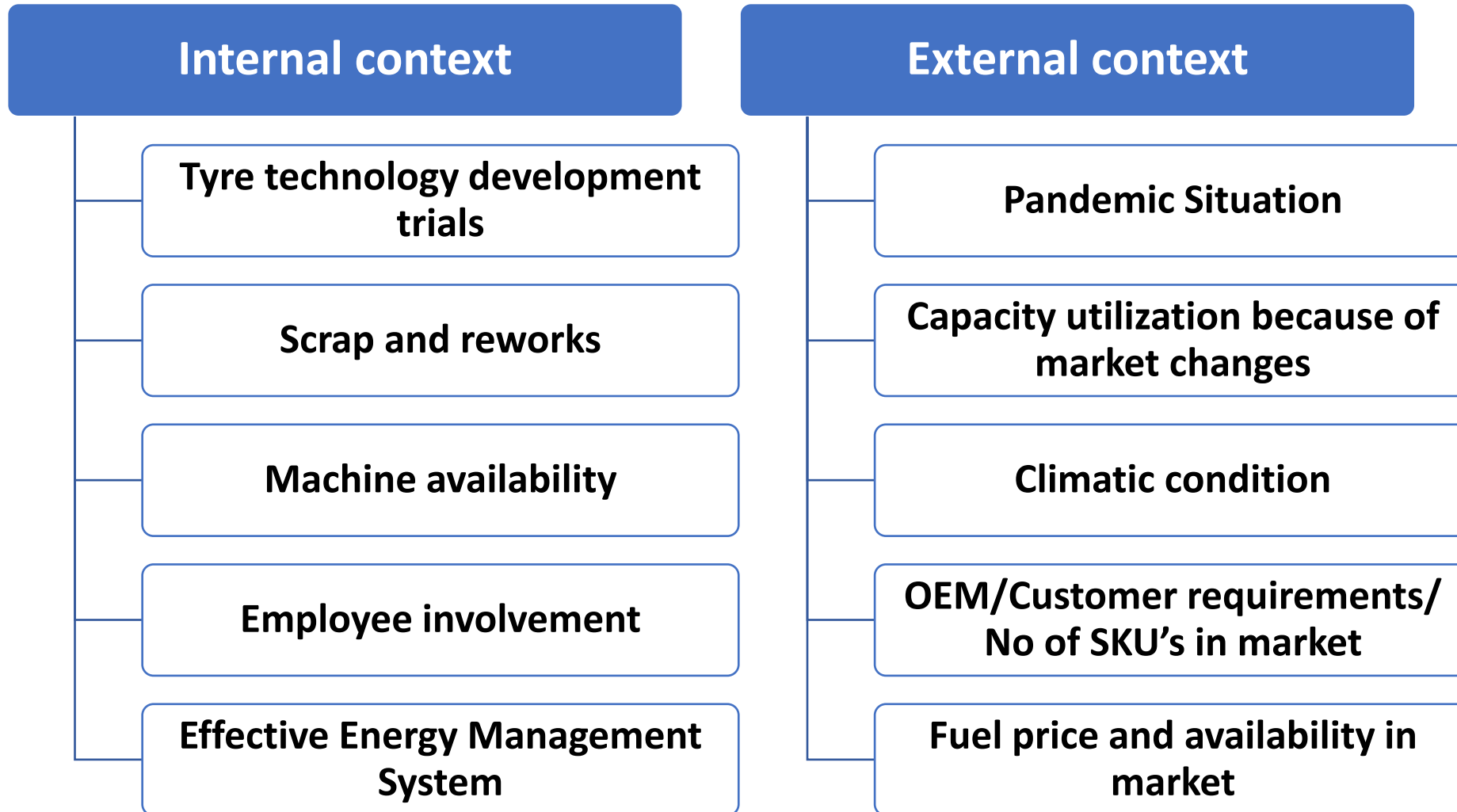
# 3. Sp. Energy Consumption in last 3 years (FY 20-21 to FY 22-23)





### 3. Sp. Energy Consumption in last 3 years (FY 20-21 to FY 22-23)

#### Reasons for SEC variations





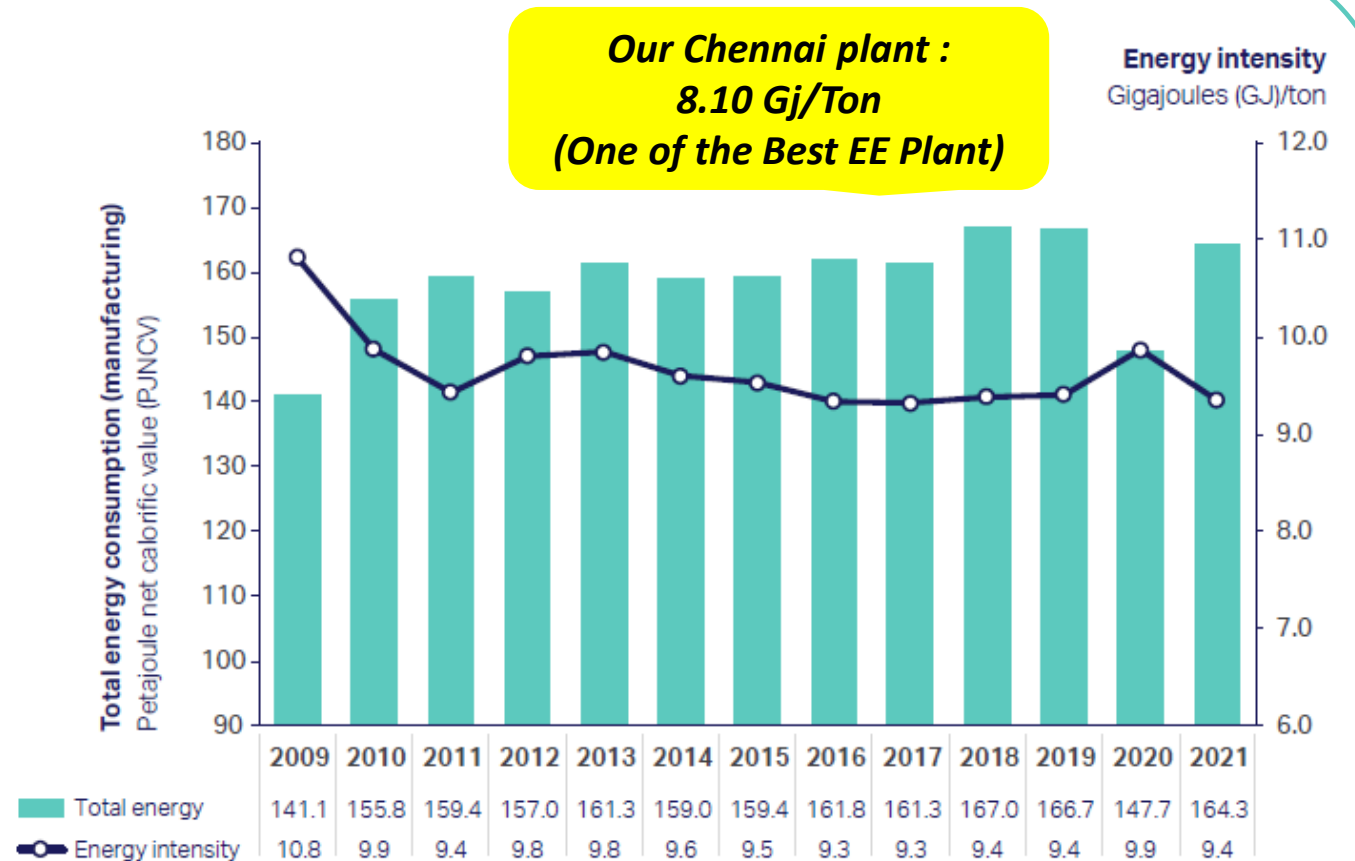
# 4. Information on Competitors, National & Global benchmark

## Global Benchmarking – Energy (Gj/Ton of Finished Product)

Members of the World Business Council for Sustainable Development (WBCSD) Tire Industry Project (10 Tyre companies) has published their weighted average Energy intensity for last 10 years; FY-2021 as 9.4 GJ/Ton

Weighted average energy intensity:

$$= \frac{\text{Total energy consumption for 10 TIP members}}{\text{Total production volume of these companies}}$$



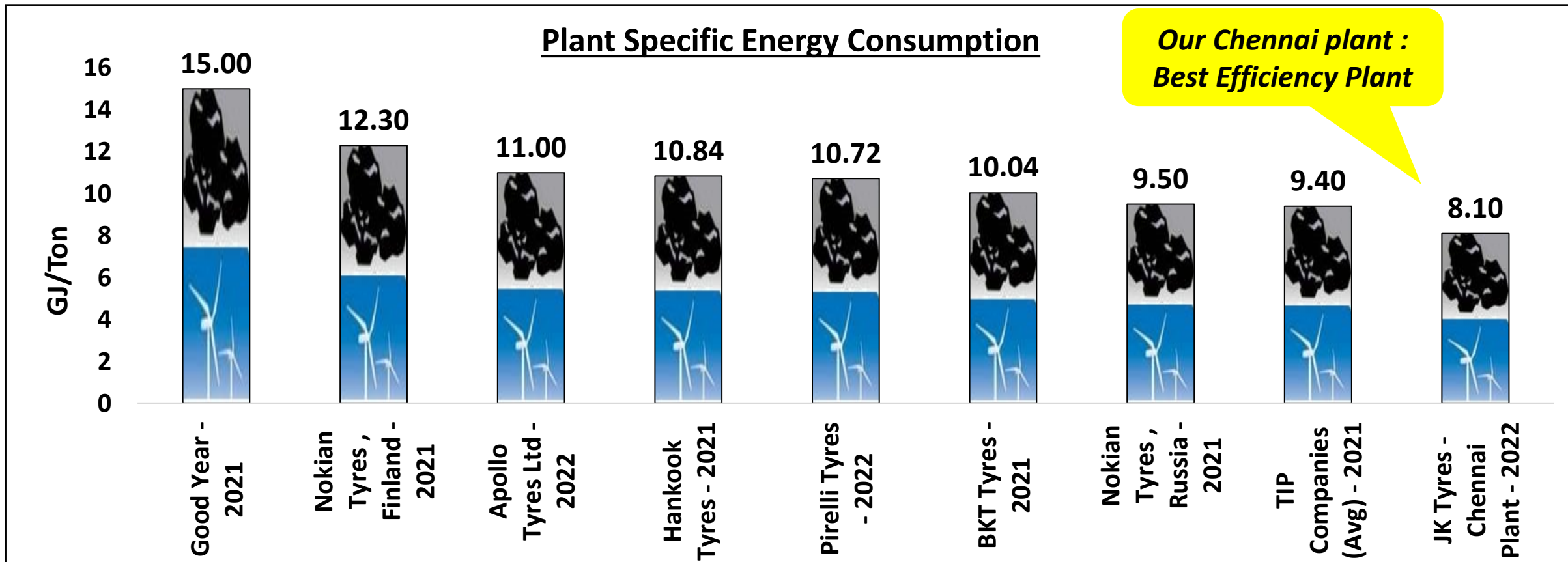
Source : <https://www.wbcds.org/download/file/15553>





# 4. Information on Competitors, National & Global benchmark

## Global Benchmarking – Energy (Gj/Ton of Finished Product)



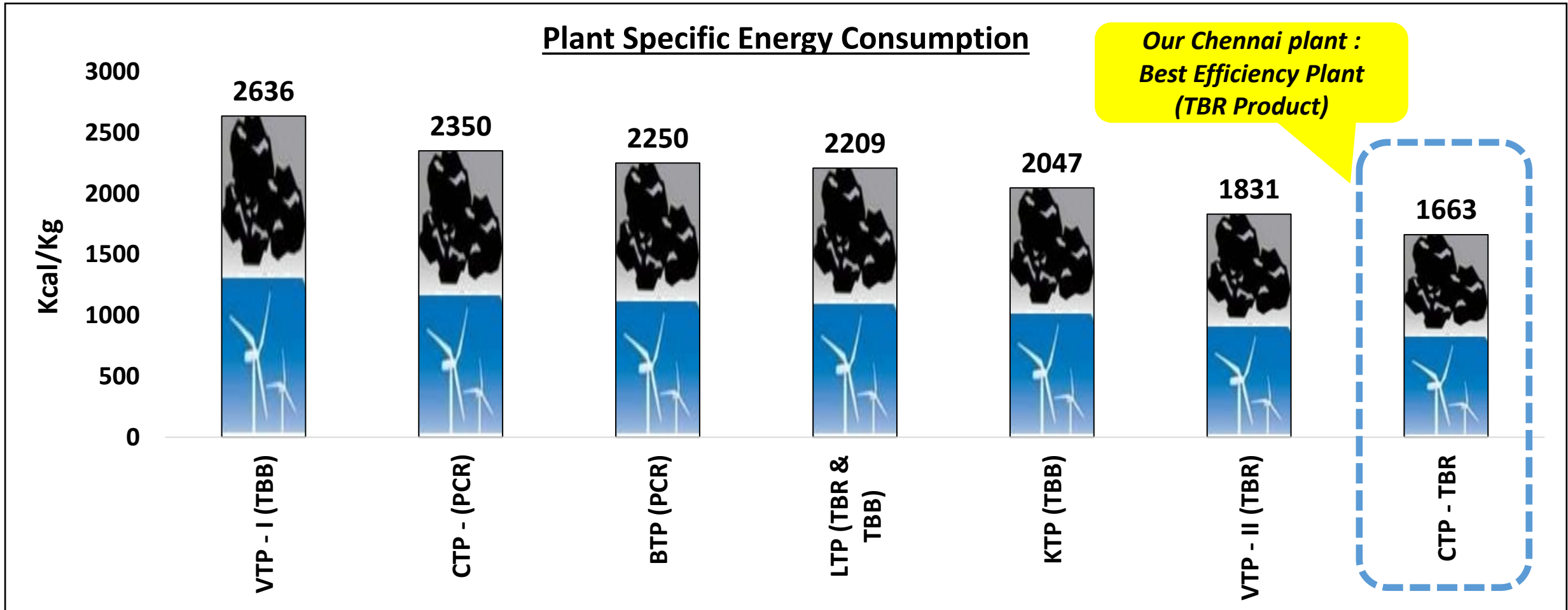
**Our Chennai plant : Best Efficiency Plant**

Chennai Tyre Plant is the one of the most Energy Efficient plant in the World. The Specific Energy values are taken from respective plant Sustainable report published in their web page.



# 4. Information on Competitors, National & Global benchmark

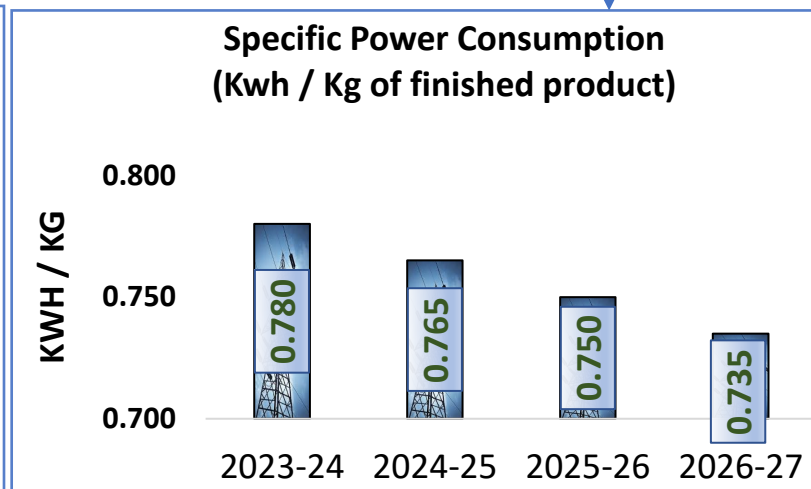
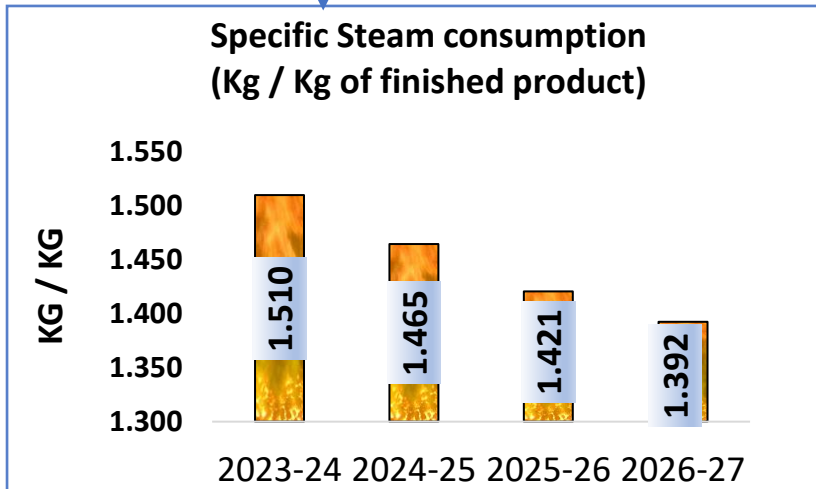
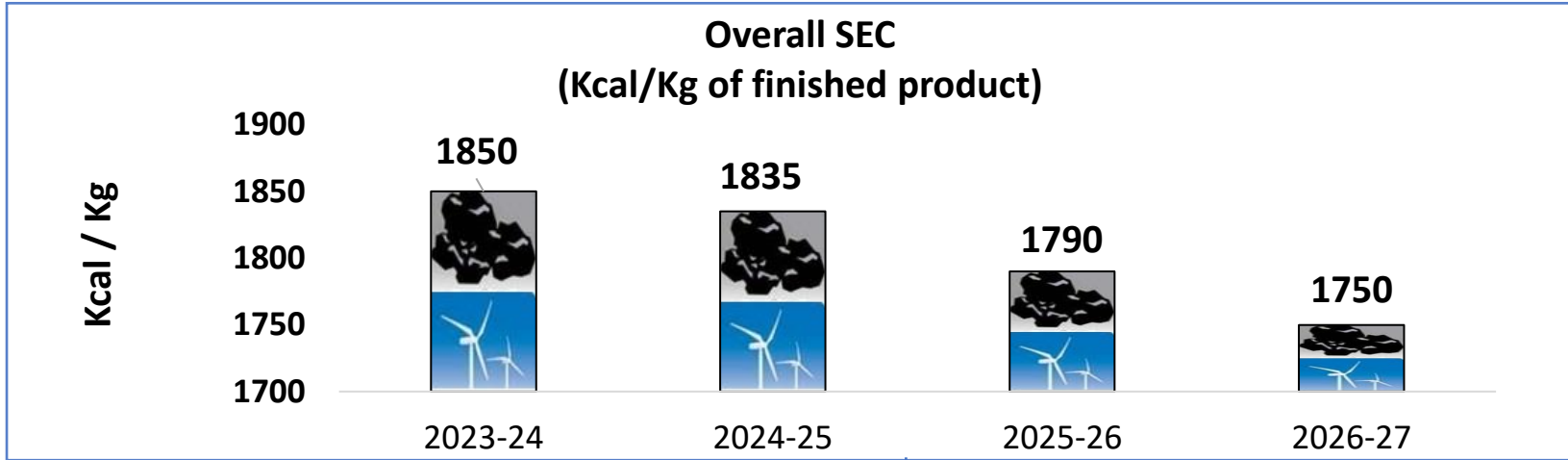
## Internal Benchmarking – Energy (Kcal/Kg of Finished Product)





# 4. Information on Competitors, National & Global benchmark

## Target setting and Road map to achieve the target



### Short term Targets

- Energy reduction @ pumping system, ventilation, Cooling & Compressors
- Nitrogen recovery and substitution to compressed air / PCI application.
- PCR Tires 100% Nitrogen curing

### Medium Term Targets

- AHU Axial fan conversion – 16 Nos of fans
- Hot Nitrogen system in place of steam - internal curing process.

### Long term targets

- 100% Biomass fuel mix-up with coal @ boilers
- Increasing Renewable Power substitution to 100%



# 4. Information on Competitors, National & Global benchmark

## List of Major Encon project planned in FY 2023-24

### LIST OF ENCON PROJECTS PLANNED FY 23-24

S.No.	Title of Project	Year	Annual Electrical Saving, Million kWh	Annual Electrical Cost Saving, Rs Million	Annual Thermal Saving, Million kcal	Annual Thermal Saving, Rs Million	Total Annual Savings, Million Rs	Investment Made (Rs million)	Payback months
1	Platen insulation for TBR curing presses	2023-24	0.00	0.000	1206.3	2.93	2.93	2.30	9
2	Fresh Air ventilation units energy performance improvement by replacing belt driven centrifugal type blowers with direct copled, high efficiency axial fans with VFD control - 30 Nos	2022-23	1.30	9.87	0.00		9.87	42.2	51
3	ETP RO 2 VFD Installation	2023-24	0.01	0.081	0.00		0.08	0.15	22
4	ETP & STP Blower replace by Submersible Jet Aerator	2023-24	0.10	0.774	0.00		0.77	0.74	11
5	Slab Feeder knife heater purging control for Non sheeted compound recipes	2023-24	0.04	0.322	0.00		0.32	0.15	6
6	Air recovery from TBR Testing Machines for using in LP System/ cleaning	2023-24	0.30	2.247	0.00		2.25	3.40	18
7	Provide Active Harmonic Filter at the Distribution Transformer (7 Nos) LT side to mitigate the current harmonics.	2023-24	0.00	0.000	0.00	0.00	0.00	10.4	
8	VAM to Vapour compression chiller	2023-24	0.00	0.000	8106.2	5.47	5.47	8.2	18
9	Retrofit of Pumps	2023-24	0.71	5.348	0.00		5.35	15.5	35
10	AHUs Fan Retrofit	2023-24	1.12	8.451	0.00		8.45	26.2	37
11	Shed Provide in TS-2 & TS-3 substation Distribution transformers to reduce transformer losses (5 nos)	2023-24	0.04	0.269	0.00		0.27	1.0	45
12	Providing flow meters in HP lines - area wise	2023-24	0.09	0.672	0.00		0.67	1.20	21
13	Dust collector air purging leak detection system to avoid wastage of air consumption	2023-24	0.02	0.14	0.00		0.14	0.25	21
TOTAL			3.72	28.17	9312.45	8.40	36.58	111.59	36.6





## 5. Energy Saving projects implemented in last three years

### Summary of Encon projects implemented in Last 3 Years

2022-23	DESCRIPTION	ZERO INVESTMENT	WITH INVESTMENT	TOTAL
	Projects in (Nos)	0	9	9
	Electrical savings in (Million Kwh)		1.1	
	Thermal savings in (Million Kcal)		7682	
	Total Investment in (Million Rs)		39.6	
	Payback in (Months)		15	

2021-22	DESCRIPTION	ZERO INVESTMENT	WITH INVESTMENT	TOTAL
	Projects in (Nos)	0	7	7
	Electrical savings in (Million Kwh)		1.0	
	Thermal savings in (Million Kcal)		2042	
	Total Investment in (Million Rs)		10.0	
	Payback in (Months)		9	

2020-21	DESCRIPTION	ZERO INVESTMENT	WITH INVESTMENT	TOTAL
	Projects in (Nos)	5	4	9
	Electrical savings in (Million Kwh)		2.0	
	Thermal savings in (Million Kcal)		2620	
	Total Investment in (Million Rs)		6.4	
	Payback in (Months)		5	



## 5. Energy Saving projects implemented in last three years

### List of Major Encon projects implemented in FY 2020-21

#### LIST OF ENCON PROJECTS COMPLETED FY 20-21

S.No.	Title of Project	Year	Annual Electrical Saving, Million kWh	Annual Electrical Cost Saving, Rs Million	Annual Thermal Saving, Million kcal	Annual Thermal Saving, Rs Million	Total Annual Savings, Million Rs	Investment Made (Rs million)	Payback months
1	Air handling units operation optimization based on machine sceduling and manpower occupation	2020-21	0.37	2.42			2.42	0	0
2	Reduction of power consumption in in WTP & ETP by using TTRO water	2020-21	0.32	2.11			2.11	0	0
3	35TPH Boiler fan system performance improvement by leak arresting and improving the draft pressure	2020-21	0.30	1.98			1.98	0	0
4	Quintoplex/Quadraplex/Triplex cooling water circuit elimination project	2020-21	0.24	1.57			1.57	0	0
5	VAM fixed energy consumption reduction plan by operational optimization / machine schedule (FY 20-21)	2020-21	0.10	0.64			0.64	0	0
6	One Process Cooling Tower Stoppage,Mixer cooling water flow cutoff while mixer in idle condition, thereby saving PCT pump energy	2020-21	0.62	4.07			4.07	0.50	1
7	Separating the headers for PCR curing hydraulic and ejector circuits, the Ejector pressure can be maintained at 16 Kg/cm2, where as the Hydr requirement can be separately maintained for 22 Kg/cm2.	2020-21	0.07	0.47			0.47	0.60	15
8	Introducing Thermo compressor in Low Pressure steam (LPS) line by using flash steam for reducing LPS steam consumption	2020-21	0.00	0.00	437	0.37	0.37	0.50	16
9	Vapour compression chillers (VCC) for Extruders in place of VAM Chillers, 300TR Capacity	2020-21	0.00	0.00	2183	2.40	2.40	4.80	24
		<b>Total</b>	<b>2.02</b>	<b>13.26</b>	<b>2619.90</b>	<b>2.77</b>	<b>16.03</b>	<b>6.40</b>	<b>5</b>



# 6. Innovative Projects implemented

## Innovative Project 1

**Project Name:** To detect bladder failure (Leakage) during curing cycle and stop the press for further loading using humidity measurement concept.

### Problem/Present status :

- Tyre scrap due to Bladder Leakage is high (7.4%)
- Bladder Leakage Tyre scrap identify by the Visual Inspector and stop the particular press. By this time Press produce around 4 to 6 tyres (Depends on the Traffic on the conveyor) which is on transfer in the surge/Trench conveyor
- No early detection system for bladder failure at curing press during curing process

### Solution:

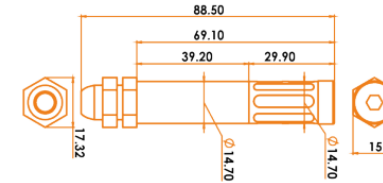
To provide bladder leak detection system in the curing press which will detect & stop further loading on curing press.



Housing Aluminium Grade 6xxx series



PTFE Sintered Porous Filter (Replacement provided)



Dimension 88.5 x 17.3 mm in Small Foot Prints



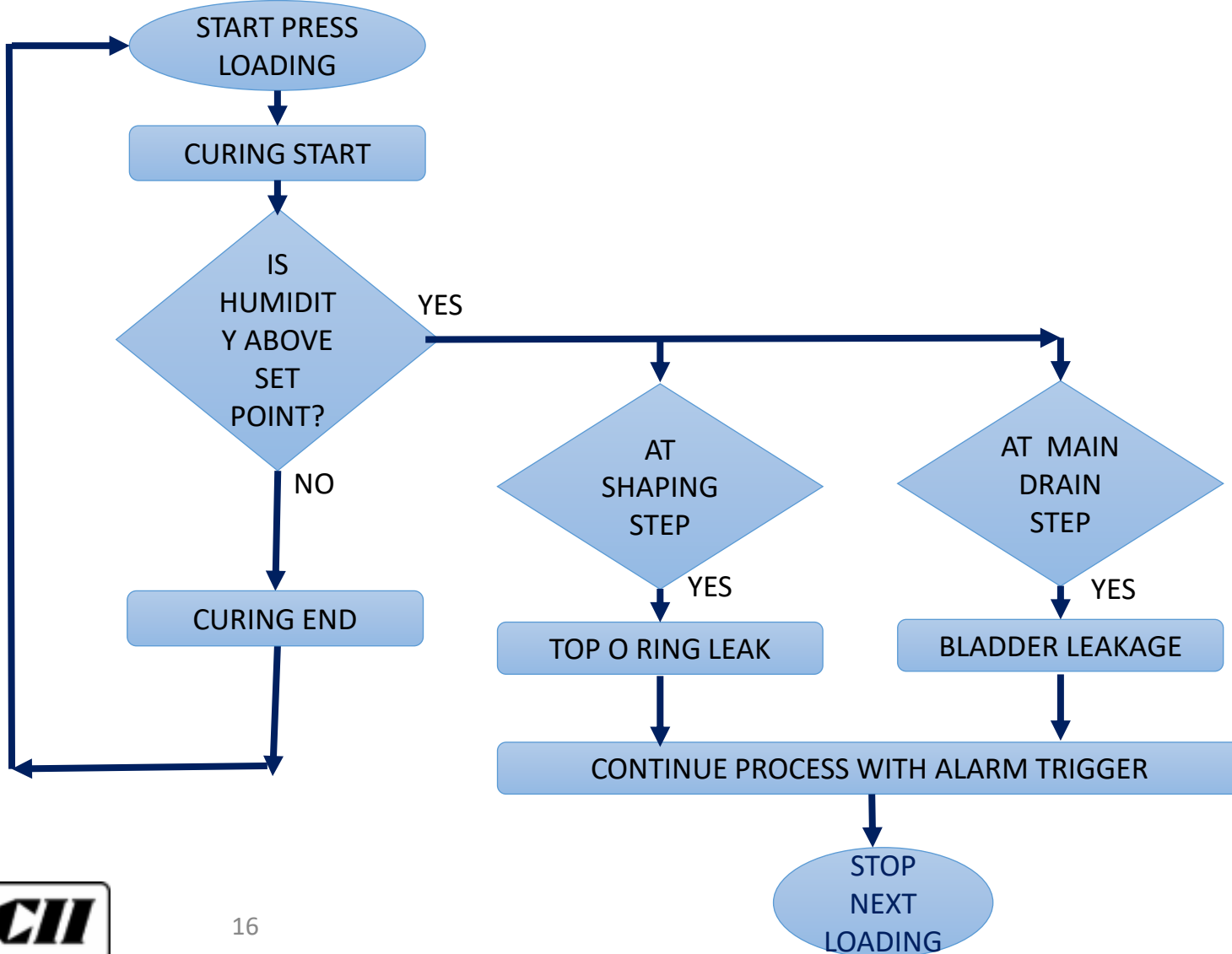
### HUMIDITY SENSOR DETAIL





# 6. Innovative Projects implemented

## Working Flowchart



## Why Innovative?

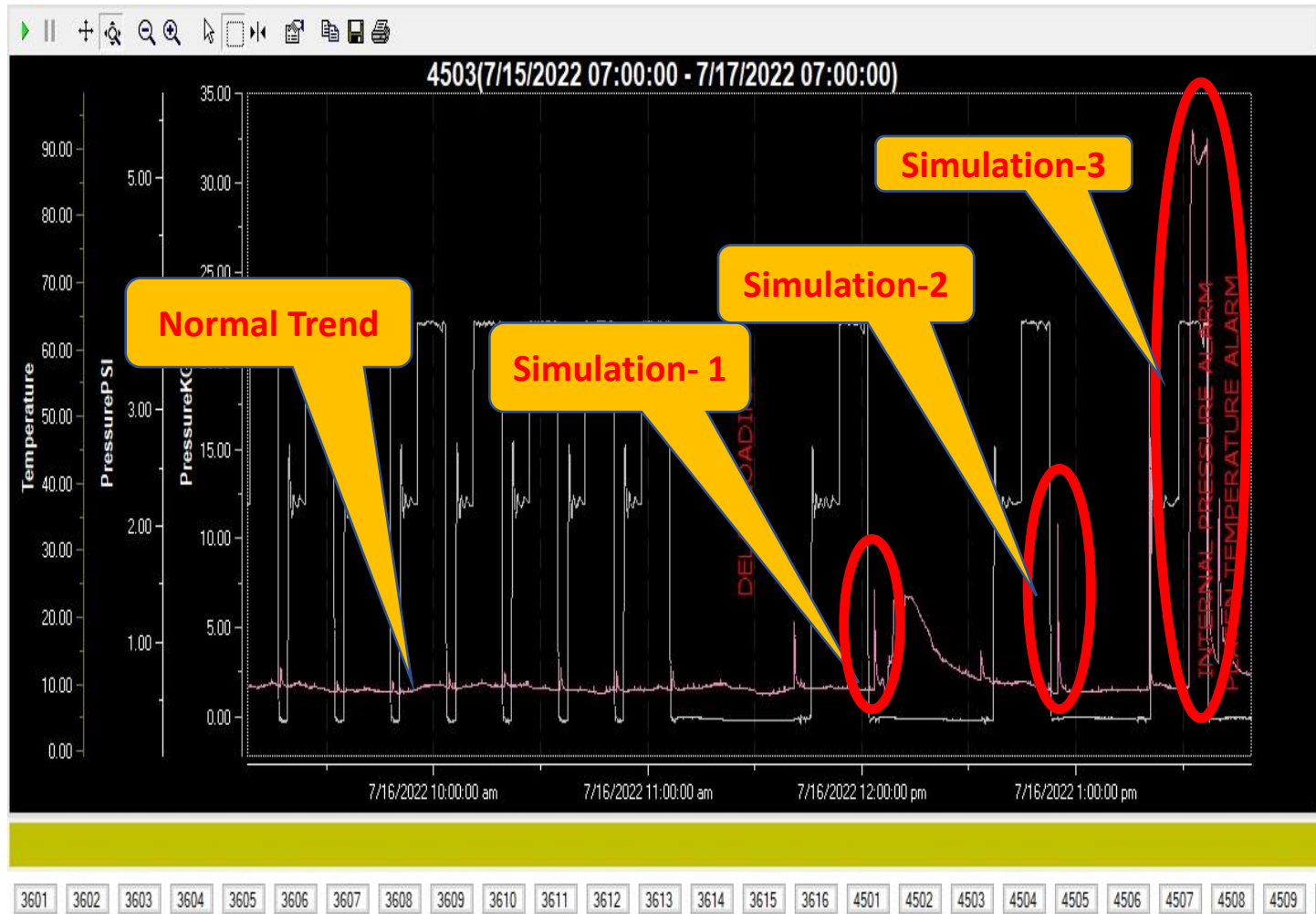
This is coming under category C - New concept (risks taken/self driven/beyond OEM) which includes major modifications in the existing equipment setup beyond OEM design





## 6. Innovative Projects implemented

### Simulation Result



### Benefits

- The project cost is Rs. 27.0 Lacs, invested and implemented in curing presses.
- Saved 1109 Tyres per annum (Equivalent to 51.82 GJ per Annum)
- This shall be horizontally deployed to all TBR curing presses also (Feasibility check in Progress).

3601 3602 3603 3604 3605 3606 3607 3608 3609 3610 3611 3612 3613 3614 3615 3616 4501 4502 4503 4504 4505 4506 4507 4508 4509



## 6. Innovative Projects implemented

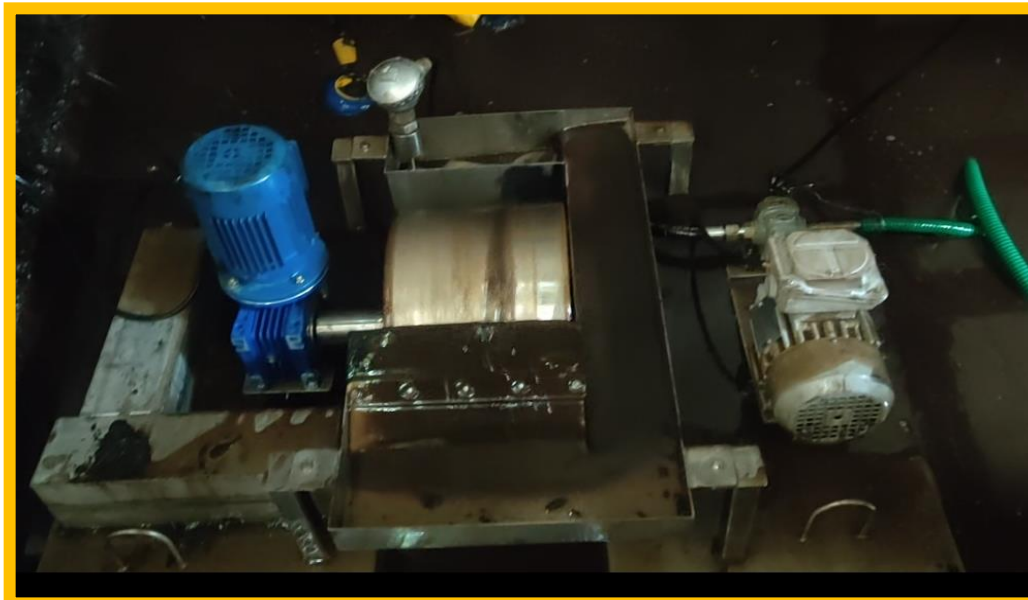
### Innovative Project 2

**Project Name:** ETP running time reduction by introducing oil skimmer and filtration system in curing drain water pit

#### **Problem / Present status :**

- From our curing process there will be the gravity drain with the oil contamination is collecting in the pit and being sent to the ETP for recycle.
- For this water recycling we need to run the ETP with Multiple Effect Evaporator for 5 hours additional in a day, Which impacts in increase of power and steam consumption.

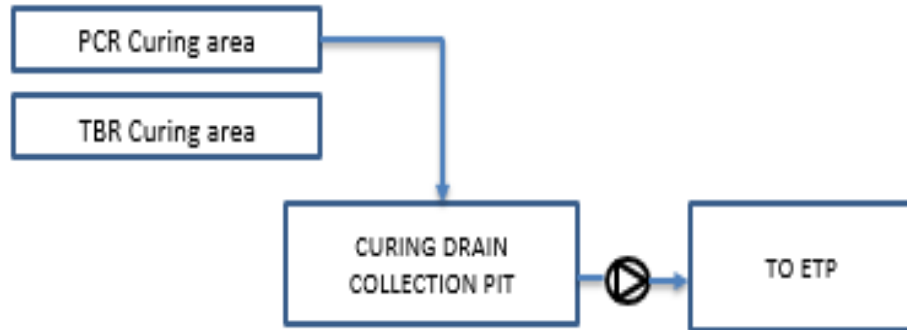
**Solution :** Introducing oil skimmer(in house made) & sand filtration system in the curing drain water to extract the layer oil contamination from the drain water  
Outlet connected to sand filter to reduce the turbidity of water and can be used for cooling tower make up.





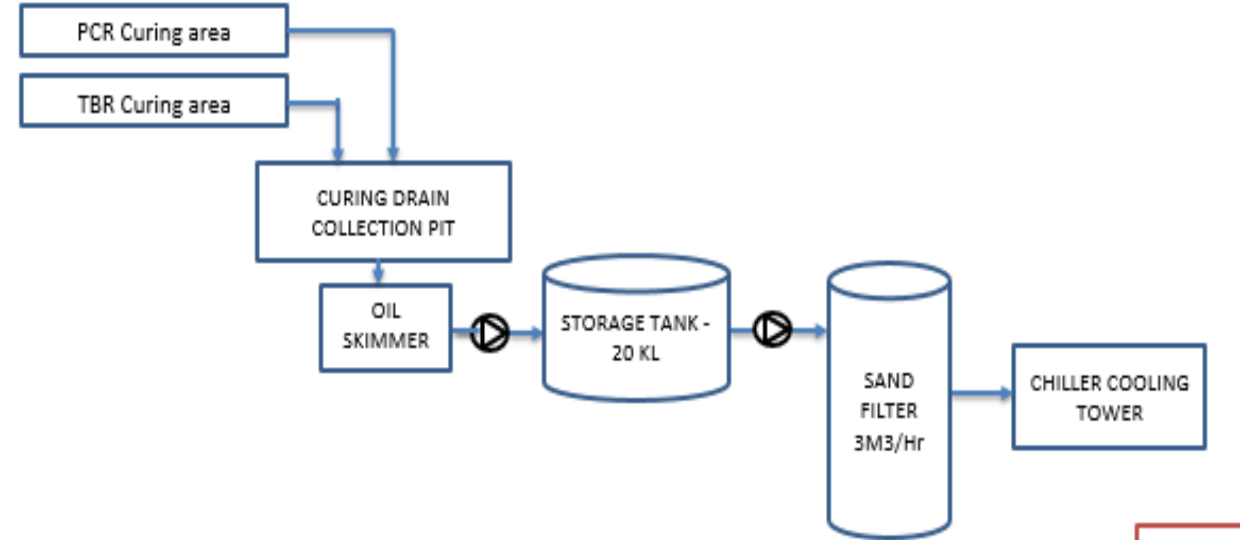
## 6. Innovative Projects implemented

### CURING DRAIN WATER RECOVERY SYSTEM



BEFORE

### CURING DRAIN WATER RECOVERY SYSTEM



AFTER

### **Advantages:**

ETP running hours reduced

Investment : Rs.5 Lacs ,

Savings:

Power consumption - 142000 Kwh/annum

Steam Consumption – 710 MT/annum

Cost saving = Rs.22.4 Lacs/annum

ROI= 3 Months



# 7. Utilisation of Renewable Energy sources

## FY 2020-21

Type of Energy	ON Site / OFF Site	Installed capacity (MW)	Generation (million kwh)	% of overall electrical energy
Solar	ON site	6.0	6.79	10.36
Wind	OFF Site	15.2	31.178	47.57
<b>TOTAL</b>		<b>21.2</b>	<b>37.91</b>	<b>57.93</b>

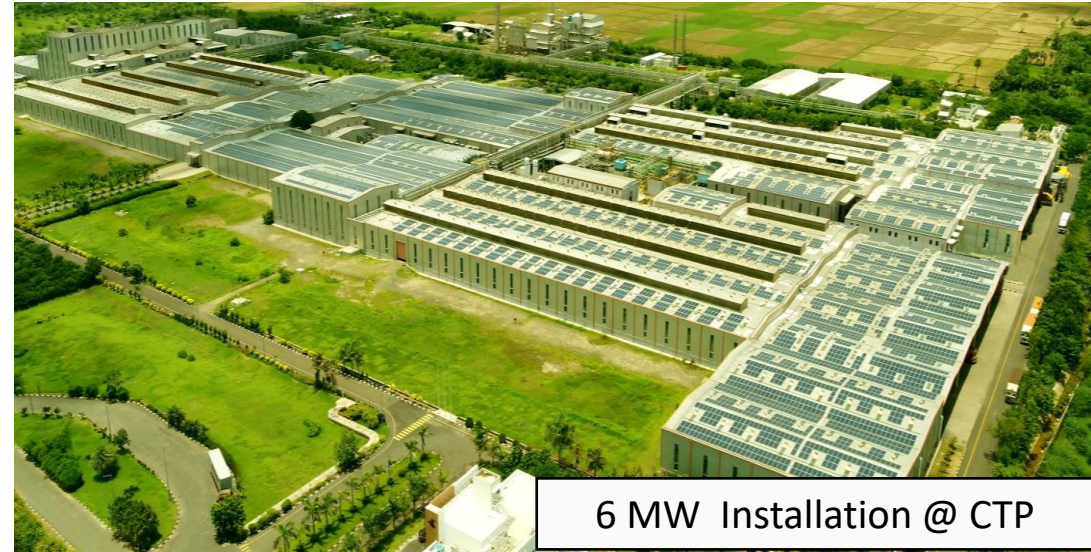
## FY 2021-22

Type of Energy	ON Site / OFF Site	Installed capacity (MW)	Generation (million kwh)	% of overall electrical energy
Solar	ON site	6.0	7.5	9.4
Wind	OFF Site	24.0	36.21	45.3
<b>TOTAL</b>		<b>30.0</b>	<b>43.71</b>	<b>54.7</b>

## FY 2022-23

Type of Energy	ON Site / OFF Site	Installed capacity (MW)	Generation (million kwh)	% of overall electrical energy
Solar	ON site	6.0	7.42	8.6
Wind	OFF Site	24.0	50.24	58.4
<b>TOTAL</b>		<b>30.0</b>	<b>57.66</b>	<b>67.0</b>

## Renewable Energy - Electrical



6 MW Installation @ CTP

## PLAN - FY 2023-24

Type of Energy	ON Site / OFF Site	Planned Capacity (MW)	Generation (million kwh)	% of overall electrical energy
Solar	ON site	7.5	10.0	11.6%
Wind	OFF Site	24.0	50.5	58.7%
<b>TOTAL</b>		<b>32.0</b>	<b>59.5</b>	<b>70.3 %</b>

- Onsite Solar is Captive Power
- OFF Site Wind is Group Captive (26% Share)





# 7. Utilisation of Renewable Energy sources

## FY 2020-21

Type of Energy	ON Site / OFF Site	Equivalent energy savings (Mkcal)	% of overall Thermal energy	Biomass usage (%)
Biomass	ON site	5398	5.01	7.20
Wood/Garden	ON site	165	0.15	0.06
<b>TOTAL</b>		<b>5563</b>	<b>5.16</b>	<b>7.26</b>

## FY 2021-22

Type of Energy	ON Site / OFF Site	Equivalent energy savings (Mkcal)	% of overall Thermal energy	Biomass usage (%)
Biomass	ON site	19194	16.58	26.34
Wood/Garden	ON site	152	0.13	0.09
<b>TOTAL</b>		<b>19346</b>	<b>16.71</b>	<b>26.43</b>

## FY 2022-23

Type of Energy	ON Site / OFF Site	Equivalent energy savings (Mkcal)	% of overall Thermal energy	Biomass usage (%)
Biomass	ON site	22700	19.3	29.80
Wood/Garden	ON site	220	0.10	0.20
<b>TOTAL</b>		<b>22920</b>	<b>19.40</b>	<b>30.0</b>

## Renewable Energy – Thermal



Saw dust mix with Coal

## PLAN - FY 2023-24 / Target – 40%

Type of Energy	ON Site / OFF Site	Equivalent Coal savings (MT)	% of overall Thermal energy	Biomass usage (%)
<b>BIOMASS</b>	<b>ONSITE</b>	<b>70574</b>	<b>47</b>	<b>40</b>



# 8. GHG Inventorisation

Carbon foot print of any entity is the measure of the Green House Gas (GHG) emitted due to the activities of that entity.

- All Plant (decentralized level) GHG Inventorisation
- Rolling up the inventory to Corporate Level

Identification of GHG Sources and Sinks

Selection of Quantification Methodology

Selection and collection of GHG Activity Data

Selection of GHG Emission Factor

Calculation of GHG Emission and Removal

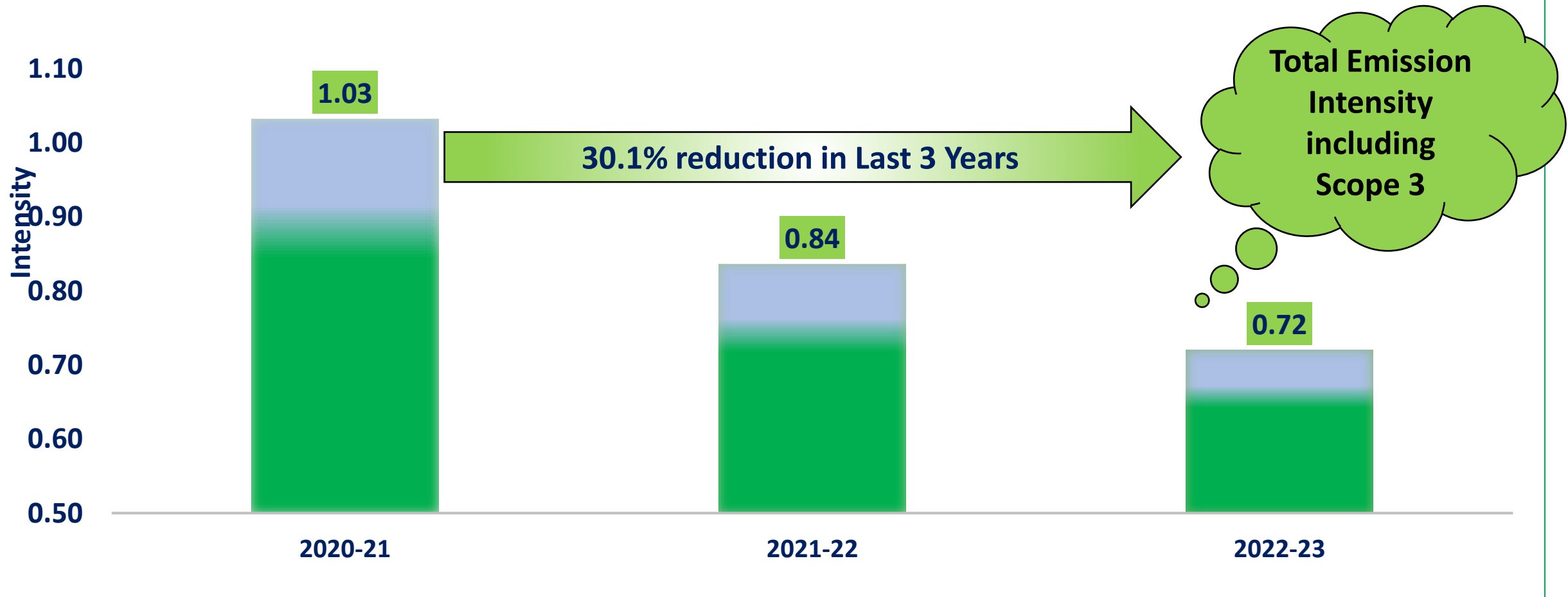
## Setting GHG Operational Boundaries Emission Sources:

Emission Sources	Scope of Emission
Diesel for internal material transport	<b>Direct Emission (scope 1)</b>
Diesel for generators	
Boiler coal	
HSD (High speed diesel)	
Company vehicle-Diesel	
Company vehicle-Petrol	
LPG consumption ( GH)	
Release of refrigerant	
Use of Acetylene	
Weight of CO2 released from fire extinguishers	
Overall purchase of Electricity Energy	<b>Indirect Emission (scope 2)</b>
Material Logistics (Raw Material & FG Transportation)	<b>Other Indirect Emission (Scope 3)</b>
Business Travel	
Employee Commute	
Waste Disposal	



## 8. GHG Inventorisation

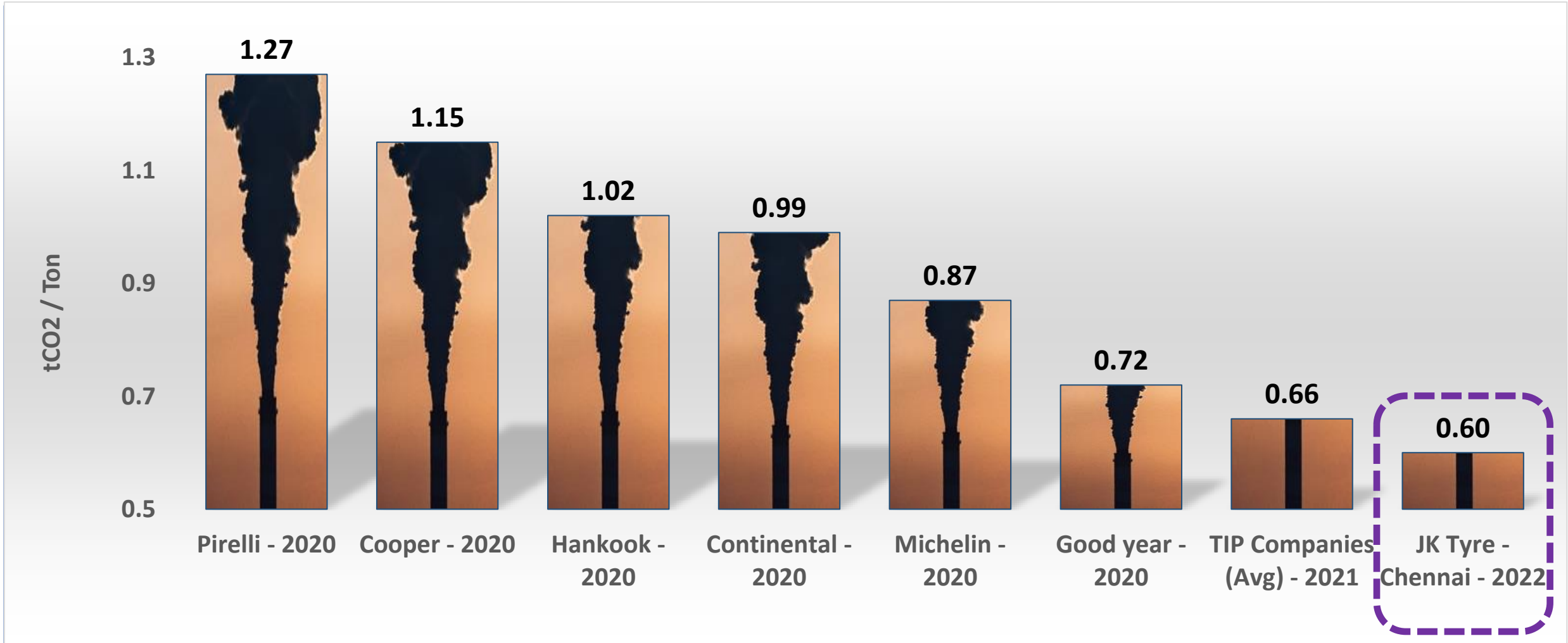
### EMISSION INTENSITY GRAPH (CO<sub>2</sub>E TON/TON OF TYRE)





# 8. GHG Inventorisation

## Global Benchmarking – CO2 Emission (tCO2/Ton of Finished Product)









# 9.Green Supply Chain Management

## GREEN PURCHASE POLICY

### Objective:

To responsibly purchase products and services by considering environmental protection issues into the sourcing decision making process and to encourage all upstream suppliers to adopt green manufacturing and green supply chain, so as to not only reduce the environmental degradation, but to possibly have a positive impact on the environment and to show commitment towards continual improvement, prevention of pollution and to comply with all the applicable legal requirements.

### Scope:

This Policy applies to the following categories such as Raw Materials, Engineering Spares, Capital Equipment, Tools, Moulds, Dies, and Service offerings.

### Focus Areas:

1. Aim to source products and services that minimize environmental impact in the following areas:

- Energy efficiency, Water conservation and waste reduction
- Prevention/reduce the use of hazardous substances
- Proactive product stewardship & Life cycle assessment Aspects
- Conserve the resources of the planet
- Use renewable energy

2. We are committed to support our suppliers in adopting green practices through awareness creation and training on the compliance requirements.

3. We give preference to suppliers who adopt green practices in addition to QCD performance in the following areas:

- Reduce specific energy and water consumption
- Minimizing the Green House Gas emissions & measure the carbon footprint
- Minimizing the generation of waste and safe disposal of the hazardous wastes generated
- Recycle & reuse material to reduce absolute consumption
- Incorporating the use of renewable resources

4. We shall seek to implement the hierarchy of preference to avoid, reduce, reuse, recycle, recover, prevent and dispose throughout the sourcing activity.

5. We commit ourselves to set and review the objectives and targets for the continual improvement in all the areas of our operations through everyone's involvement.

K A Unni Nayar  
Vice President Works  
Chennai Tyre Plant

**JKTYRE**  
INDUSTRIES LTD.  
CHENNAI TYRE PLANT

## Green Procurement Guidelines

- All the Procurement activities are through SAP
- For all Raw Materials, Green initiatives like packing standards Logistics Requirements etc., form part of Specifications issued to suppliers and specification forms an integral part of the Purchase contract.
- Requirement of energy efficiency gets reflected in all Purchase documents.
- Taking measures in Energy management system by being reactive , innovative and cost effective including procurement of energy efficient products & services.
- As a Responsible company, we are started procuring from suppliers near to our manufacturing plants in South. Eg. :- Carbon Black, Zinc Oxide, Bead wire, Reclaim rubber, Stearic Acid Which was earlier supplied from North.

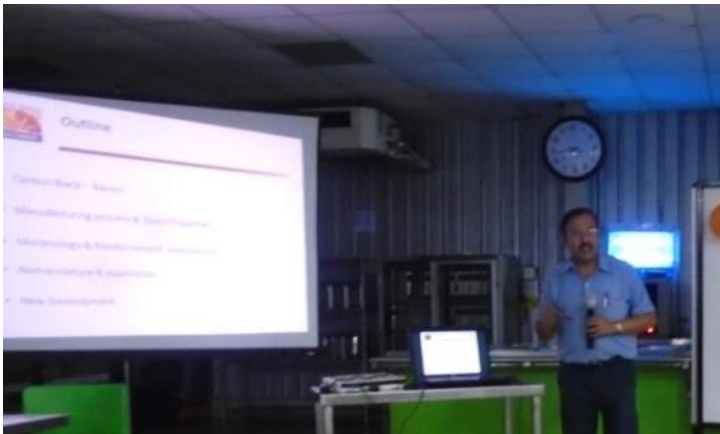


# 9.Green Supply Chain Management

## Supplier visits: To share the green practices

Annual Energy Conference is organized to share the Energy Projects, Improvements & Best practices within JK organization, Supplier and Vendors. Horizontal deployment done across the verticals based on the Applicability of the Projects.

### **Birla Carbon (SUPPLIER)**



**MR. ARMBAND BISWAS – HEAD QUALITY**

## Responsible Supply Chain

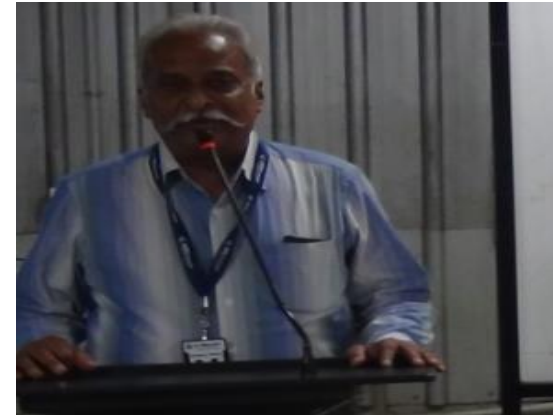
JK Tyre is committed to collaborating with its suppliers to develop a responsible and sustainable supply chain. To fulfil this commitment, the Company conducts training sessions for its suppliers on various sustainability aspects, including resource optimisation, energy management, water management, and other related topics.

### **BEKAERT (SUPPLIER)**



**MR .JELIN EDWIN –  
MANAGER TECHNICAL  
& SITE INCHARGE**

### **POCL (SUPPLIER)**



**MR .T S VISWANATH – VICE PRESIDENT – MARKETING &  
DR .ARUN – VICE PRESIDENT – R & D**







# 9.Green Supply Chain Management

## Redefining Freight Transportation

JK Tyre is spearheading a ground-breaking initiative by utilising the RRU (RoadRailer Unit) for transportation between Chennai and Delhi. With the objective of reducing dependency on road trucks and alleviating traffic congestion, the RRU has emerged as a game-changer.

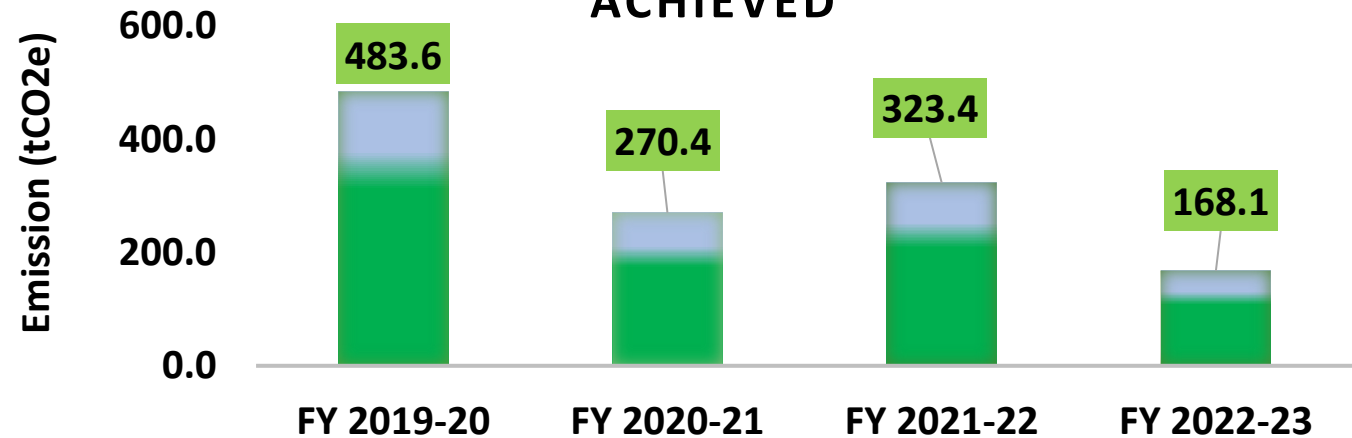
Despite maintaining similar transit times to road transportation, upcoming railway corridors will further enhance efficiency. Moreover, this sustainable approach by JK Tyre resulted in significant cost savings and contributed to a greener future, with an impressive 60%-70% reduction in carbon emissions compared to conventional road movement.

**Reverse Logistics:** - After receiving the raw material, we are using the same truck to carry our semi finished goods for Tube , Bladder and Flap Manufacturing.

**RM materials source changed to Reduce transportation Distance-**RM Silica & Zinc Oxide sources changed from Kolkata and Rajasthan to Pondicherry & Gummidipoondi to reduce transportation distance



## TRANSPORT OPTIMIZATION - BENEFITS ACHIEVED

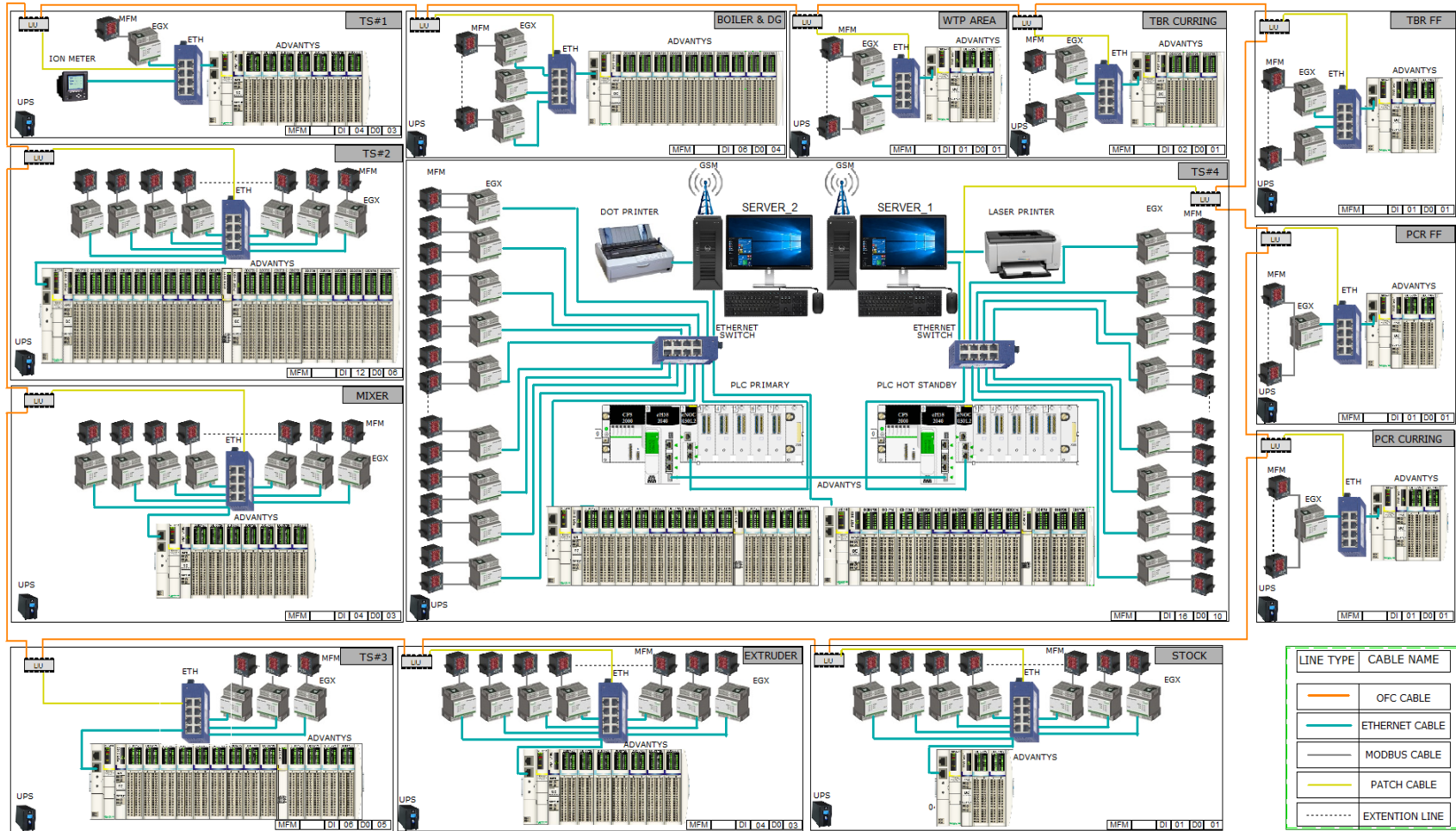




# 10. EMS System and other requirements

## Energy Management System – Plus Breaker Control – Plant over all architecture

### OVERALL SYSTEM CONFIGURATION



✓ IOT based advance Energy management system connected with 1013 Energy meters including spares and 256 Nos Breakers

✓ EMS plus breaker controlling system to control energy

✓ System alerts the excess energy consumption immediately thro Auto SMS, and E-mail helps to take appropriate actions immediately rather than afterward investigation

✓ System records Sag/swell and transients and all electrical parameters at the sampling rate of 1024 samples/cycle





# 10. EMS System and other requirements

**bsi.**  
**Certificate of Registration**  
 ENERGY MANAGEMENT SYSTEM - ISO 50001:2018

This is to certify that: **JK Tyre & Industries Ltd.**  
 Chennai Tyre Plant  
 Sriperumbudur - Tambaram Road (SH-110)  
 Kolathur Village, Sriperumbudur Taluk  
 Kanchipuram District 602 106  
 Tamil Nadu  
 India

Holds Certificate No: **ENMS 596960**  
 and operates an Energy Management System which complies with the requirements of ISO 50001:2018 for the following scope:

**The Manufacture and Supply of Automotive Radial Truck, Bus & Passenger Car Tyres and generation of Steam through Coal fired Boilers for Process use.**

For and on behalf of BSI:  
 Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2013-07-16  
 Latest Revision Date: 2019-05-29  
 Effective Date: 2019-05-30  
 Expiry Date: 2022-05-29  
 Page: 1 of 1

**BSI** **ANAB ACCREDITED**

Information and Contacts: BSI, 389 Chiswick Park Avenue, Uxbridge, Middlesex, UK  
 BSI Assurance UK Limited, a Member of the BSI Group

*...making excellence a habit™*

**ISO 50001 : 2011  
 Certified on July 2013**

**CII - Sohrabji Godrej Green Business Centre**  
*hereby certifies that*  
**JK Tyre & Industries Limited**  
**Chennai Tyre Plant**  
*has successfully achieved the standards as required for the following level of certification under the GreenCo - Green Company Rating System which is valid for a period of 3 years*  
**GreenCo Platinum**  
 May 2019

**Pradeep Bhargava**, Chairman, GreenCo Rating System  
**L S Ganapati**, GreenCo Assessor Panel  
**K S Venkatagiri**, Executive Director, CII-Godrej GBC

**Indian Green Building Council (IGBC)**  
*hereby certifies that*  
**JK Tyre & Industries Ltd.**  
 Chennai Tyre Plant  
 (IGBC Registration No: GF 15 1123)  
*has successfully achieved the Green Building Standards required for the following level of certification under the IGBC Green Factory Building Rating System*  
**IGBC Green Factory Building Platinum**  
 July 2016  
*This certification is valid for the next 3 years*

**Pradeep Bhargava**, Chairman, IGBC Green Factory Building Rating System  
**Dr Prem C Jain**, Chairman, IGBC  
**K S Venkatagiri**, Executive Director, CII-Godrej GBC







## 10. EMS System and other requirements

### Energy Conservation day celebration @ plant

National energy conservation day celebrated our plant on Dec'14<sup>th</sup> day to encourage people for efficient energy use in order to reduce the energy consumption and prevent the energy loss both in factory as well as daily lives.

### Energy Pledge of Chennai JK Tyre Plant

On National Energy Conservation Day I pledge my wholehearted commitment towards energy conservation in my daily lives that will reduce greenhouse gas emissions and help protect our climate and preserve the environment for years to come. I understand that energy consumption affects our natural environment and human health and well-being.

I pledge that I will strive to:

- Improving machine efficiency by reducing energy wastage and losses, through improved operation and maintenance.
- Encourage my workforces to avoid excessive and wasteful uses of energy to reduce energy consumption.
- I Promote people for less energy usage by eliminating the excessive and wasteful uses.





# 11. NET ZERO commitment



JK Tyre to be **carbon neutral by 2050.**



## DECARBONISING INDIA

“There must be a better way to make the things we want, a way that doesn’t spoil the sky, or the rain or the land.” - **Paul McCartney**



The “Net Zero” mission of our country has encouraged us to develop technologies that take us a step closer to that mission. In the same effort, we have developed a "UX Green" tyre which is made up of 80% recyclable material.

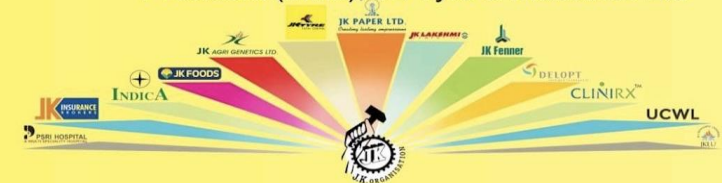


We at JK Tyre are working on becoming a carbon-neutral company by 2050. Our organisation is featured among the top 3 tyre makers globally in terms of energy efficiency. We get 53% of our power requirements through renewable sources and plan to increase this proportion to 75% in the next 5 years.

This development is not only a reflection of the company's values but also showcases our thoughtful allegiance to advancing sustainable growth and boosting our contribution to nation's mission.



**Sh. Anuj Kathuria**  
President (India), JK Tyre & Industries Ltd

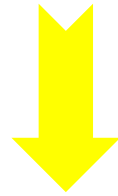




# 11. NET ZERO commitment

## Emission Reduction Plan

Carbon Offset / sequestration



### Energy Front

Renewable Energy Substitution

- Electrical
- Thermal

EnCon Projects

### Greening the Environment

- Tree Plantation within Fence
- Tree Plantation Beyond the Fence

### Indirect Emission Sources

- Projects on Transportation
- Material Logistics
  - Business Travel
  - Employee Commute
  - Disposal





# Learning from CII Award Program



CII National Award for Excellence in Energy Management is an excellent platform to benchmark our Energy Performance and to showcase the efforts and achievements.



The award builds our BRAND and National wide recognition



Imparting the requirements stated in the Energy award program supported us to improve our Energy performance which has raised our capabilities to work and receive this National Energy leader award.



The preparation for award application helps to inspire and align the entire workforce and rapidly accelerates the PACE OF SYSTEM IMPROVEMENT.



# Awards & Accolades



**CII –National Energy Leader  
2018,2019,2020, 2021&2022**



**CII - Green Co Certification 2019 -  
Platinum**



**Golden Peacock Energy Efficiency  
Award 2017**



**BEE – National Energy Conservation  
Award 2014,2015&2021**



**CEM Global award - Excellence in Energy  
Management 2019 – First company from India**



**SEEM National Energy Management  
Award 2016,2017,2018,2019,2020 & 2021**



**Thank You**

