JK TYRE & INDUSTRIES LTD.

VIKRANT TYRE PLANT, MYSURU. KARNATAKA

WELCOME

TO

NATIONAL AWARD FOR EXCELLENCE IN ENERGY MANAGEMENT 2021

Presenters

Name	Email ID	Phone Number
Nagendra BN	nagendra@jkmail.com	9986039012
Nagendra HR	nagendra.hr@jkmail.com	9742269536
Jafar Hussain	jafarhusen@jkmail.com	9986035195

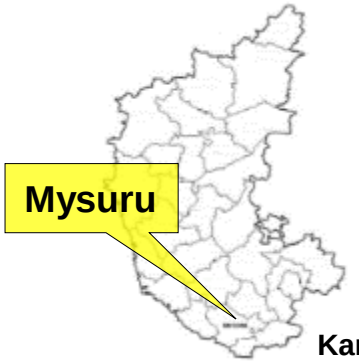
1.PLANT / UNIT INTRODUCTION

JK ORGANIZATION

Late Lala
Juggilal Singhania

Late Lala
Kamlapat Singhania

VIKRANT TYRE PLANT, MYSURU



3 Plants in Mysuru	Current Capacity (MT/Day)
Bias Plant	177
Radial Plant	207
OTR Plant	26
TOTAL	410 (8,500 tyres/ day) 4000 Employees

TYRE BUSINESS : JK TYRE & INDUSTRIES

- JK Tyre & Industries Ltd is a part of prestigious JK Organization
- Pioneered Radial Tyre revolution in India
- Technical – Self-reliant.
- Capacity – Initial capacity : 55 Tons/ Day (at Kankroli in 1977)
  Current capacity : > 2,000 Tons/ Day
  Annual Turnover : > Rs. 10,300 Crores
- 12 Plants – Mysuru (Karnataka) - 3 Plants:
  Kankroli (Rajasthan) - 1 Plant,
  Banmore (MP) - 1 Plant
  Chennai - 1 Plant
  Laksar (Uttarakhand) - 3 Plants
  Mexico (Tornel) - 3 Plants

VTP : SYSTEM CERTIFICATIONS (since early 1990s)

VTP - SYSTEM CERTIFICATIONS (since early 1990s)

Si No	Certification	Plant 1 Bias	Plant 2 Radial	Plant 3 OTR
1	ISO 9001:2015 / IATF 16949: 2016 QMS (Quality Mgmt) (1994)	✓	✓	✓
2	ISO 14001: 2015 EMS (Environment Mgmt.) (1999)	✓	✓	✓
3	ISO 45001:2018 (Occupational Health & Safety) (2019)	✓	✓	✓
4	ISO 50001:2018 EnMS (Energy Mgmt.) (2013)	✓	✓	✓
5	SA 8000 : 2014 (Social Accountability) (2016)	✓	✓	✓
6	ISO 27001:2013 (Information Security Mgmt.) (2016)	✓	✓	✓
7	ISO/IEC 17025:2005 - NABL Accreditation (for Laboratory) (2016)	✓	✓	NA
8	IMEA – Gold Award 2010 (Participated in 2006 & 2007 and won Silver award)			
9	TPM Certification (Excellence) JIPM, Japan (2010)			
10	CII Sohrabji Godrej Green Business Centre – GreenCo PLANTINUM Award (2018)			
11	TPM Certification (Consistency) JIPM, Japan (2015)			

2.IMPACT OF COVID 19

- The COVID 19 impacted us especially during 1st quarter of FY 2020-21 where country was under lockdown and also local Govt restrictions.

- The impact was mainly seen in power consumption as we were compelled to run the plants at sub optimum levels

- However, because of our focused energy management activities we were able to offset the impact significantly thru energy conservation initiatives

ENERGY POLICY

SUSTAINABILITY POLICY

JK Tyre & Industries Ltd commits itself to minimising its impact on our environment through

- Providing a safe and pleasant workplace free from Hazard & Risk;
- Create environmentally sustainable culture, where responsibility is assigned and understood;
- Being an Socially & environmentally responsible neighbour in our community;
- Conserving natural resources by adopting reduce, reusing and recycle concept;
- Reduce Energy consumption by ensuring the responsible use of energy throughout the organisation;
- Increase the share of Renewable energy throughout the organisation
- Participating in efforts to improve environmental protection and understanding
- Taking steps to improve environmental performance continually;
- Conducting rigorous audits, evaluations, and self-assessments of the implementation of this policy;
- Working with suppliers who promote best environmental & sustainable practices
- Enhancing awareness among our employees, volunteers, and users – educating and motivating them to act in an environmentally responsible manner.

Authorised and Approved by
Arun K. Bajoria
Director & President (International Operations)

JK TYRE & INDUSTRIES LTD.

ENERGY POLICY

We at JK Tyre are committed to design, manufacture and distribute our products & services in an energy efficient manner to meet our mission statement of becoming a green company. We will continually improve our energy performance for sustainable growth by:

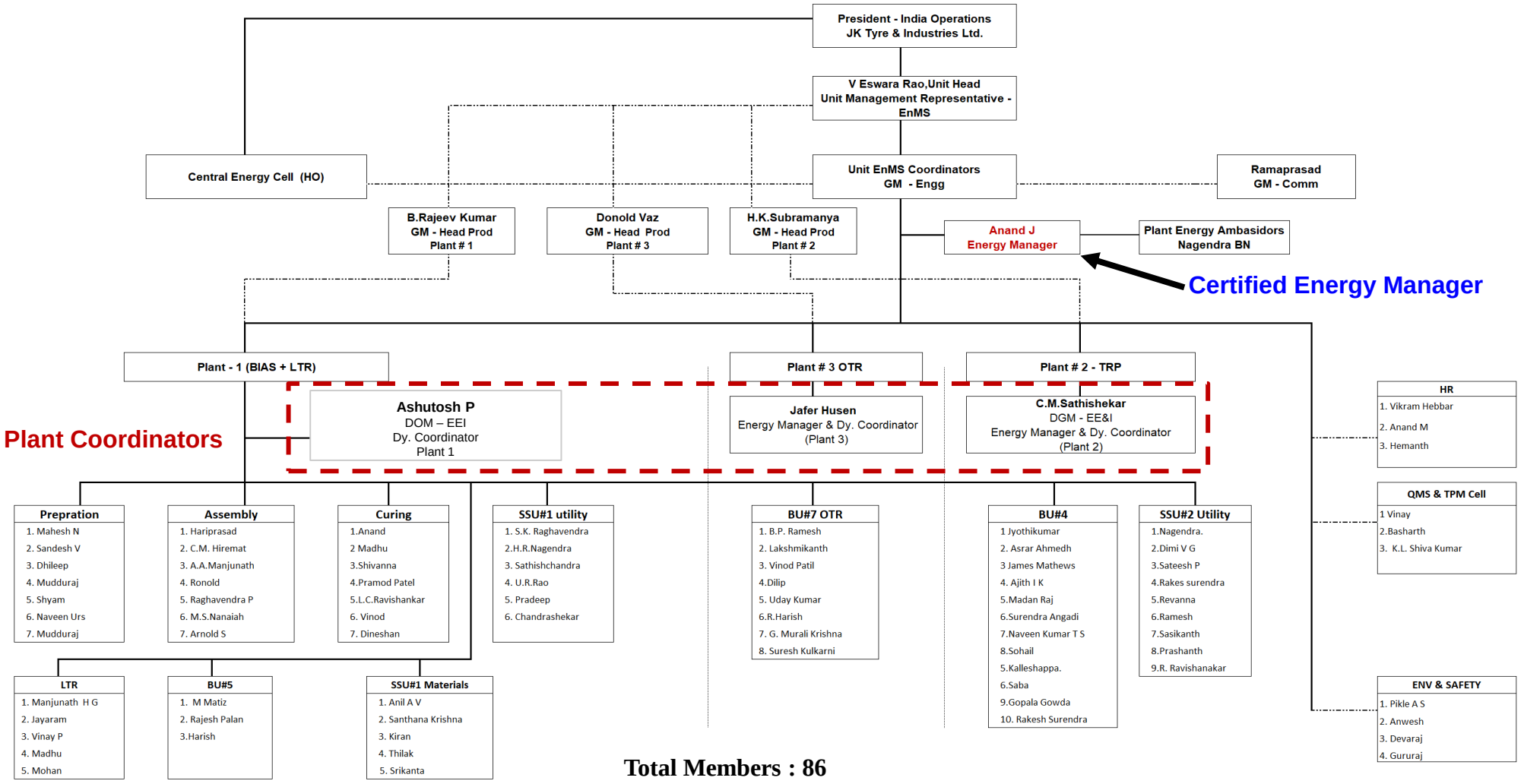
- Complying with all applicable legal and other requirements related to our energy use, consumption and efficiency.
- Taking measure in Energy Management System by being proactive, innovative and cost effective including procurement of energy efficient product & services.
- Enhancing effectiveness of energy management system by ensuring the availability of information and necessary resources to achieve the objectives and targets.
- Integrating energy policy into our business planning, decision making and performance review at appropriate level.

We commit to communicate this policy to all our employees, persons working for and on our behalf and also will make it available to all interested parties on request.

JK TYRE & INDUSTRIES LTD.

ENERGY MANAGEMENT TEAM

PLANT ENERGY MANAGEMENT CELL - VTP

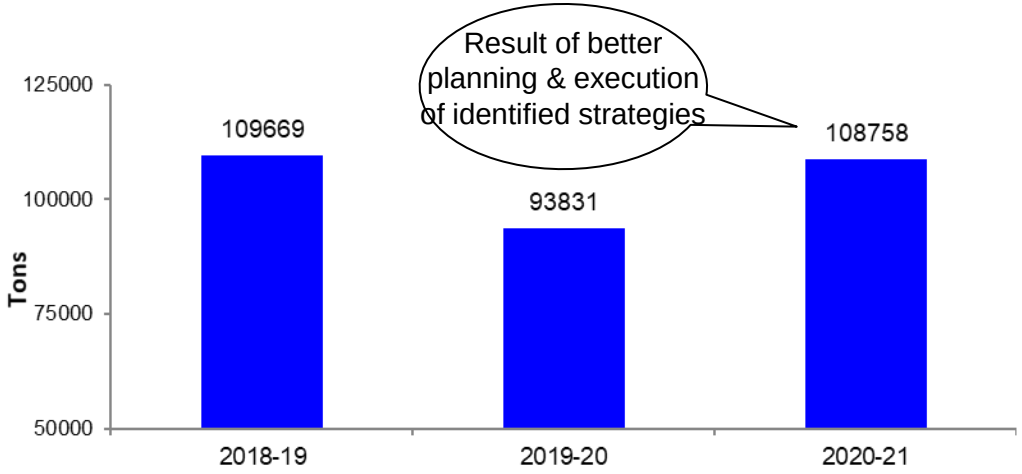


Total Members : 86

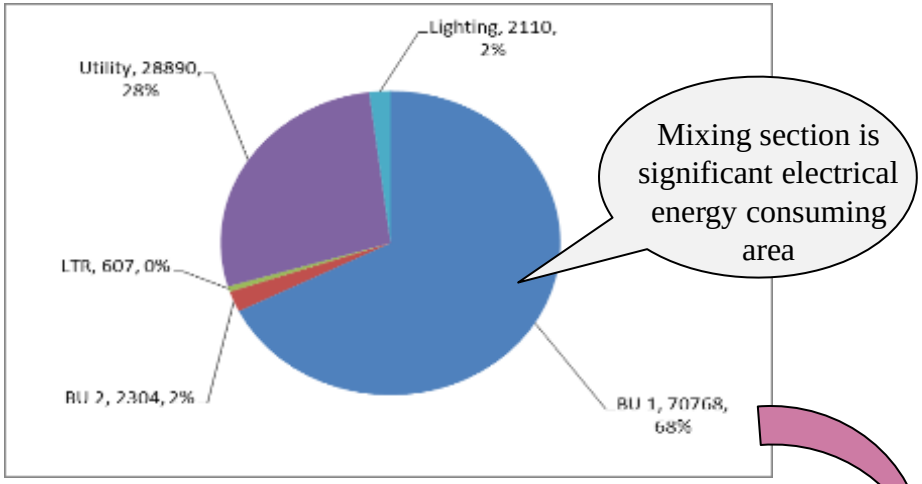
Prepared by	Verified by	Approved By
Nagendra B N EnMS Coordinator	S.K. Shetty Unit EnMS Coordinator	VP Works EnMS - UNIT MR

3.SPECIFIC ENERGY CONSUMPTION

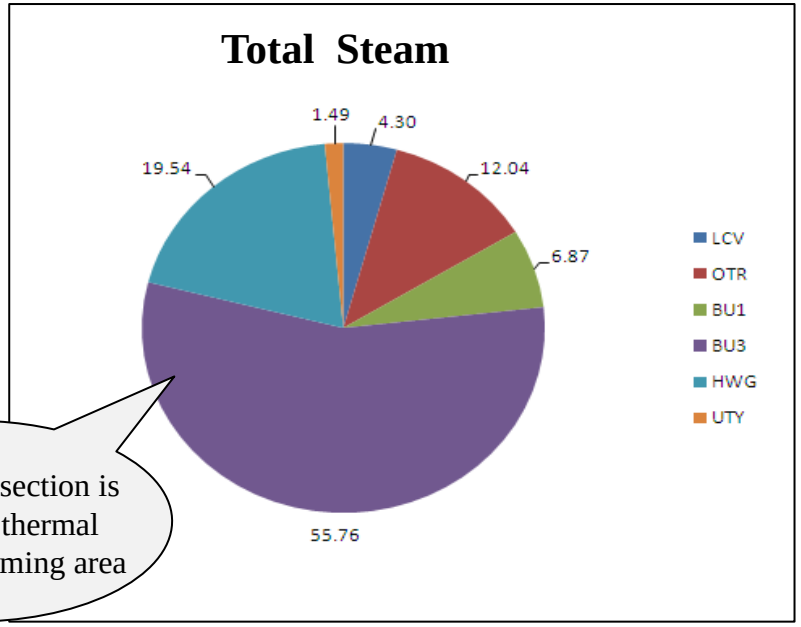
BASIC DATA - PRODUCTION



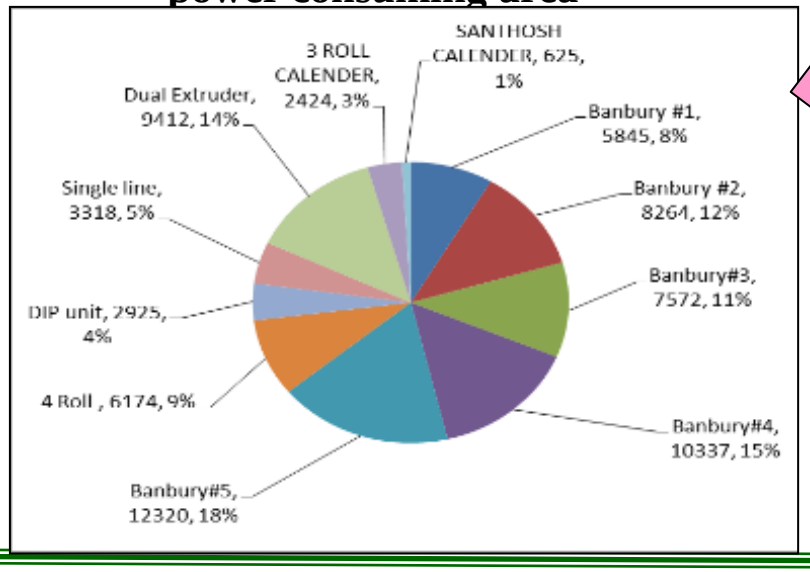
Total Power



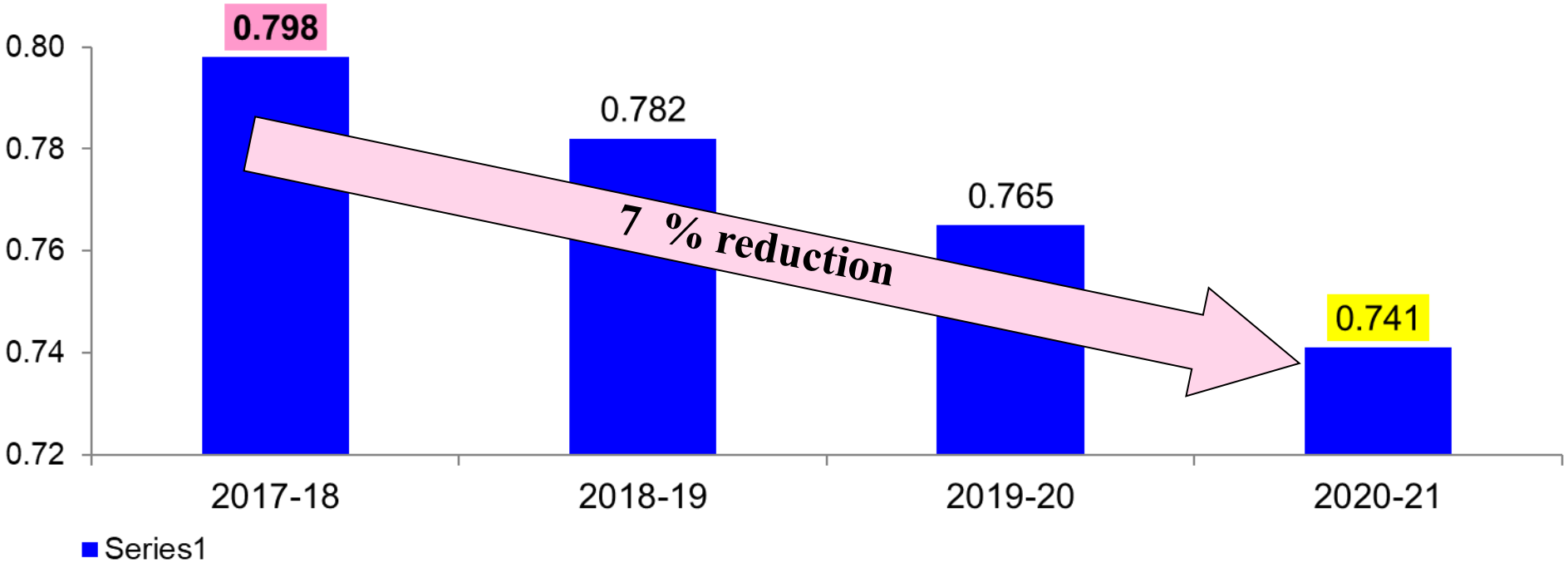
Total Steam



BU#1 (business Unit) is significant power consuming area



ENERGY CONSUMPTION - POWER (kWh/Kg)

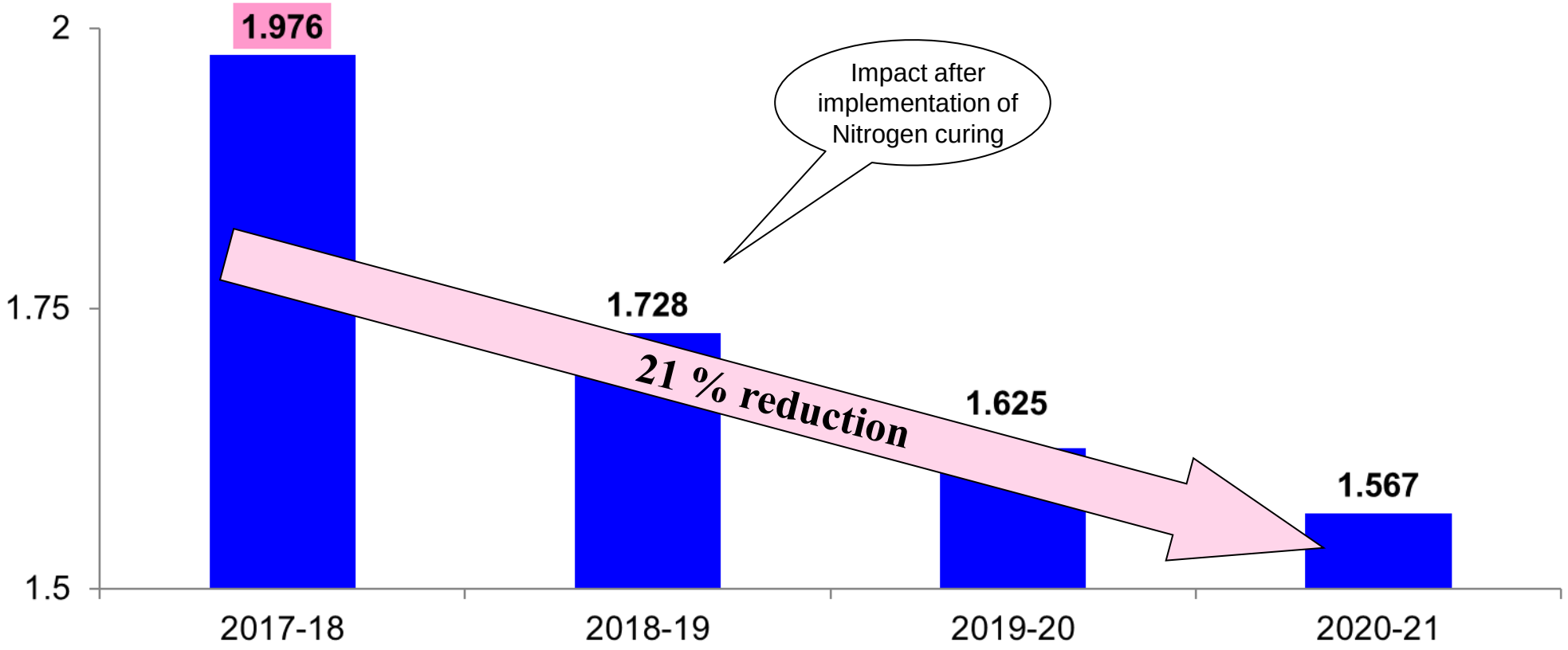


	SPC CALC : 0.800	SPC CALC : 0.800	SPC CALC : 0.800	SPC CALC : 0.800	SPC CALC : 0.800	SPC CALC : 0.800
	BASELINE	BASELINE	BASELINE	BASELINE	BASELINE	BASELINE
	FOR 140 MT	FOR 150 MT	FOR 160 MT	FOR 170 MT	FOR 180 MT	FOR 190 MT
	140.00	150.00	160.00	170.00	180.00	190.00
MAXIMUM ACHIEVABLE POWER W.R.T GIVEN PRODUCTION	127125	131683	136241	140800	145358	149916
MAXIMUM ACHIEVABLE SPC W.R.T GIVEN PRODUCTION	0.908	0.878	0.852	0.828	0.808	0.789
% Impact on SPC	13.105	10.121	7.337	4.733	2.292	0

We have reduced the Energy consumption by

7 % from past 3 years

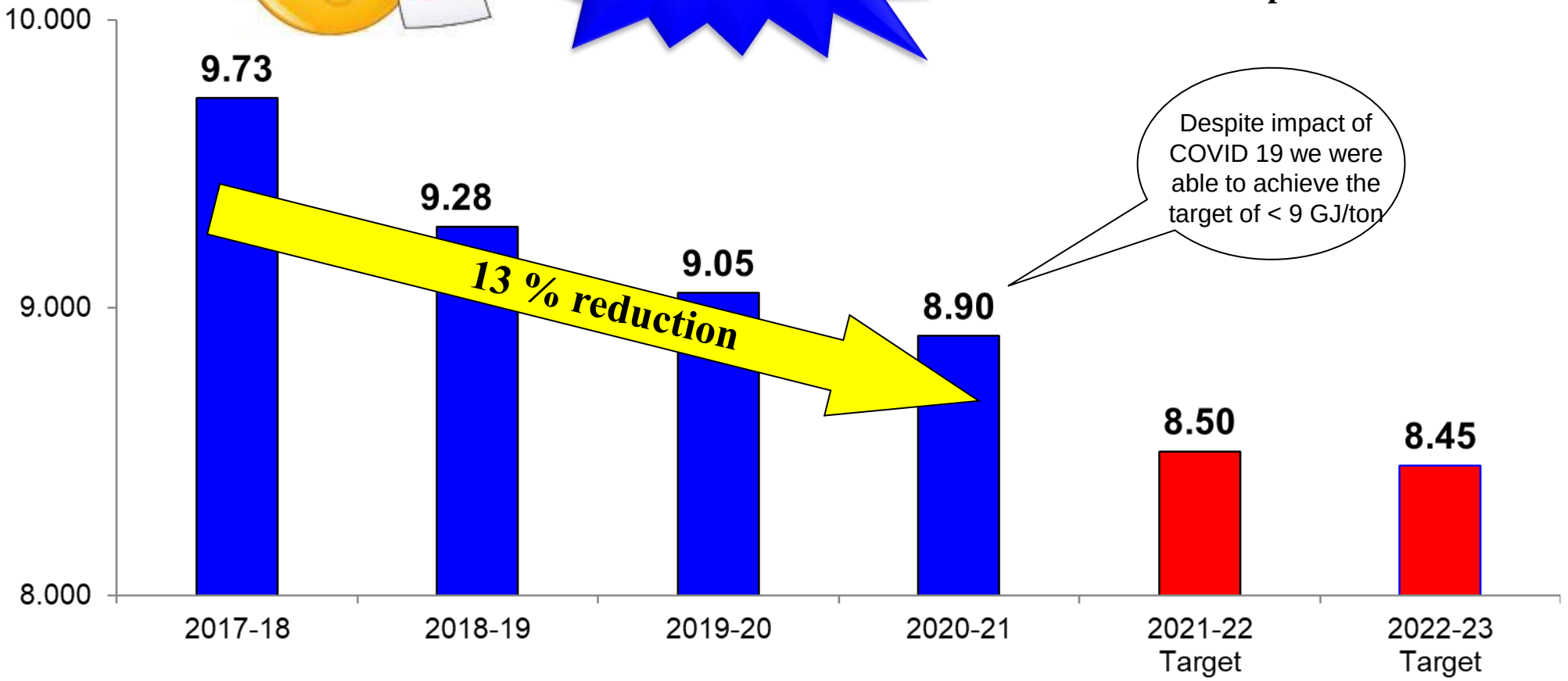
ENERGY CONSUMPTION - STEAM (KG/KG)



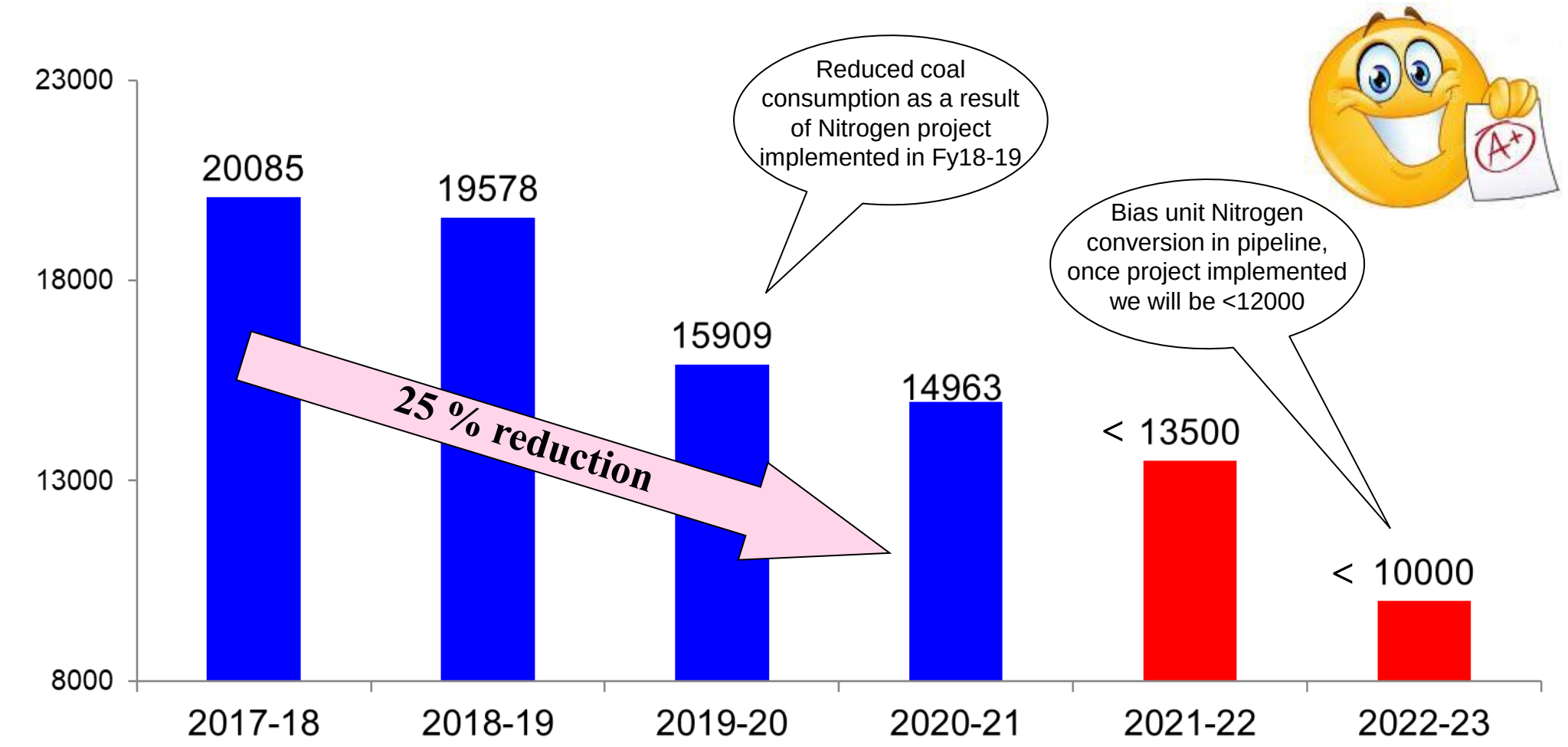
OVERALL ENERGY CONSUMPTION (GJ/TON)

Total reduction in from past 3 year ~ **13 %**

VTP is one of the oldest plant in the group, despite limitations & older equipment's we were able to achieve the targets & compete with new generation plants

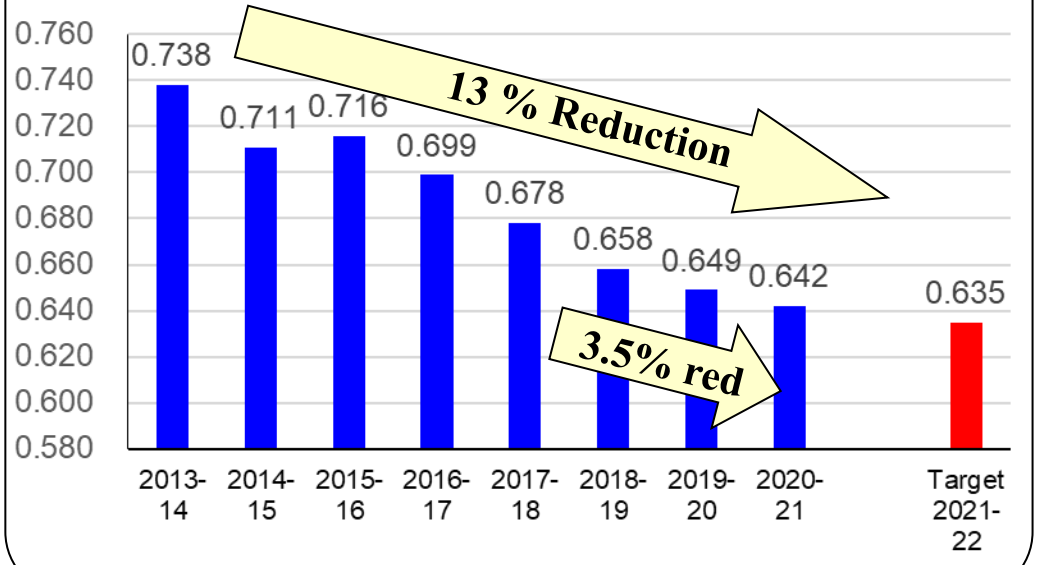


THERMAL ENERGY CONSUMPTION (MTOE)



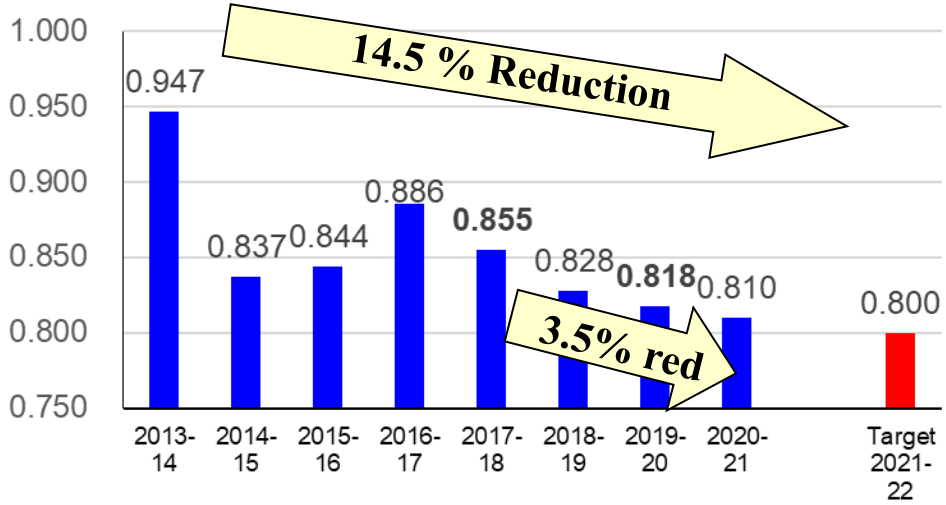
SPECIFIC ENERGY CONSUMPTION - POWER (kWh/Kg)

PLANT # 1



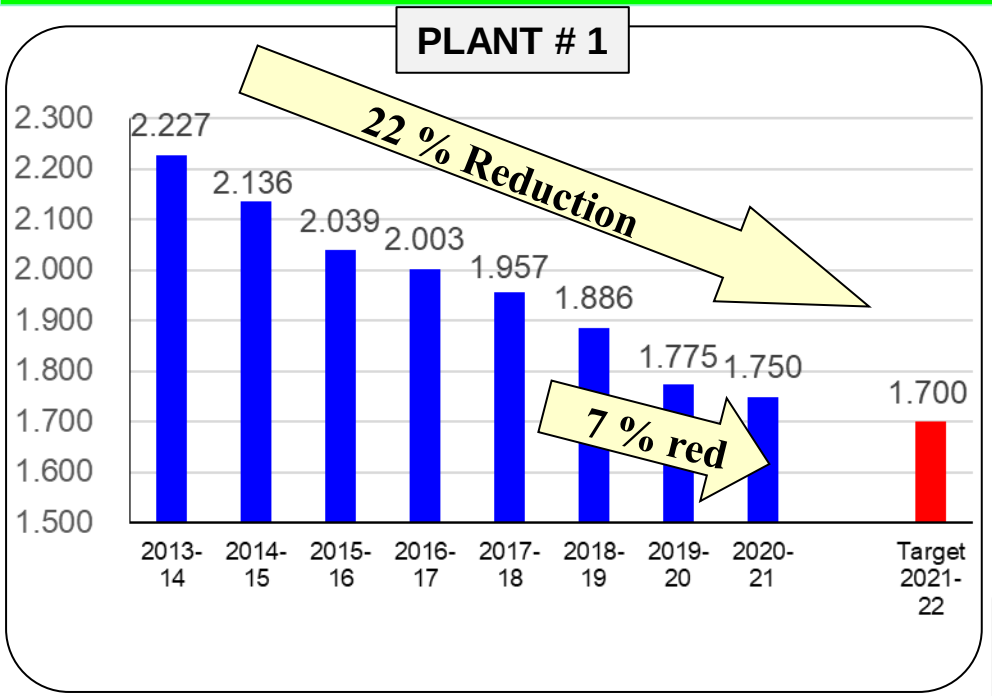
Good

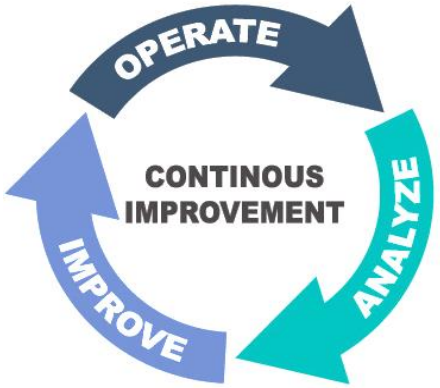
PLANT # 2

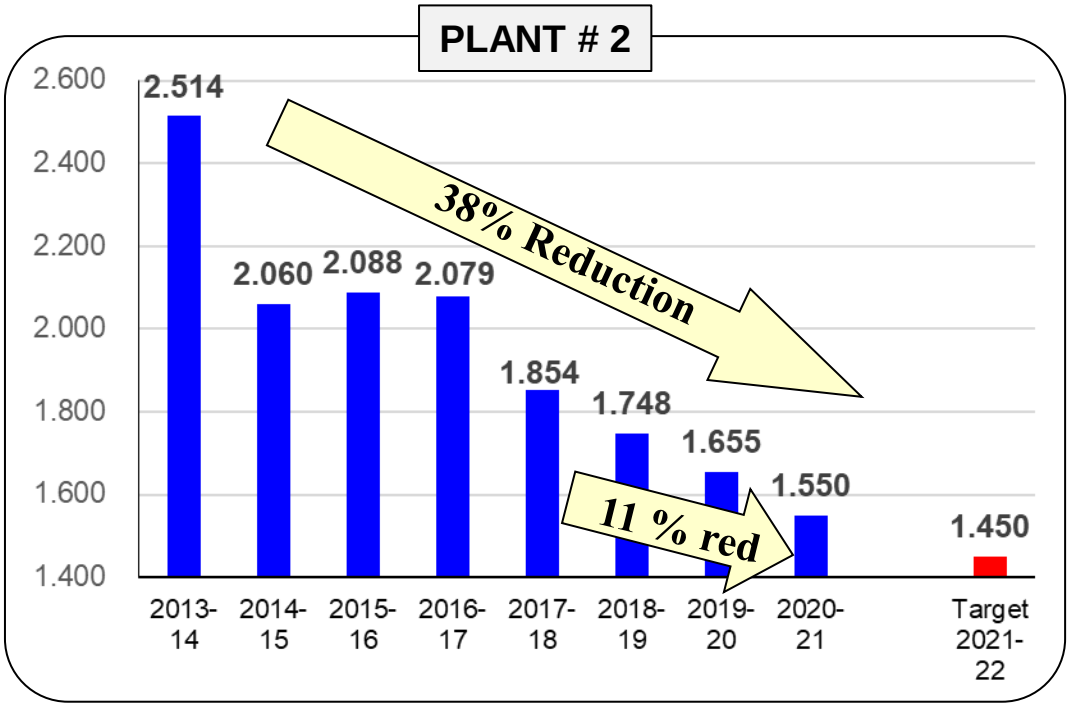


Achieved energy targets despite low production & other challenges. This is the clear impact / result of implementing the energy conservation projects

SPECIFIC ENERGY CONSUMPTION - STEAM(Kg/Kg)

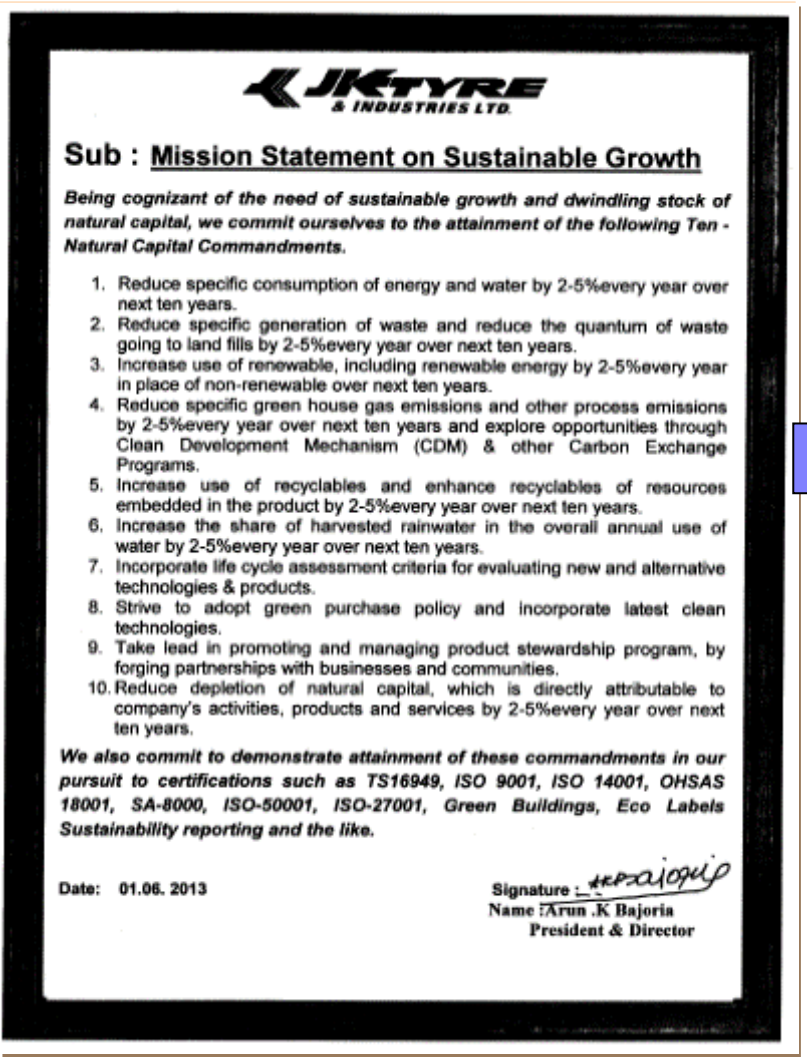






MISSION STATEMENT ON SUSTAINABILE GROWTH

ENERGY CONSUMPTION REDUCTION TARGETS



JK TYRE & INDUSTRIES LTD.

Sub : Mission Statement on Sustainable Growth

Being cognizant of the need of sustainable growth and dwindling stock of natural capital, we commit ourselves to the attainment of the following Ten - Natural Capital Commandments.

1. Reduce specific consumption of energy and water by 2-5%every year over next ten years.
2. Reduce specific generation of waste and reduce the quantum of waste going to land fills by 2-5%every year over next ten years.
3. Increase use of renewable, including renewable energy by 2-5%every year in place of non-renewable over next ten years.
4. Reduce specific green house gas emissions and other process emissions by 2-5%every year over next ten years and explore opportunities through Clean Development Mechanism (CDM) & other Carbon Exchange Programs.
5. Increase use of recyclables and enhance recyclables of resources embedded in the product by 2-5%every year over next ten years.
6. Increase the share of harvested rainwater in the overall annual use of water by 2-5%every year over next ten years.
7. Incorporate life cycle assessment criteria for evaluating new and alternative technologies & products.
8. Strive to adopt green purchase policy and incorporate latest clean technologies.
9. Take lead in promoting and managing product stewardship program, by forging partnerships with businesses and communities.
10. Reduce depletion of natural capital, which is directly attributable to company's activities, products and services by 2-5%every year over next ten years.

We also commit to demonstrate attainment of these commandments in our pursuit to certifications such as TS16949, ISO 9001, ISO 14001, OHSAS 18001, SA-8000, ISO-50001, ISO-27001, Green Buildings, Eco Labels Sustainability reporting and the like.

Date: 01.06. 2013

Signature :

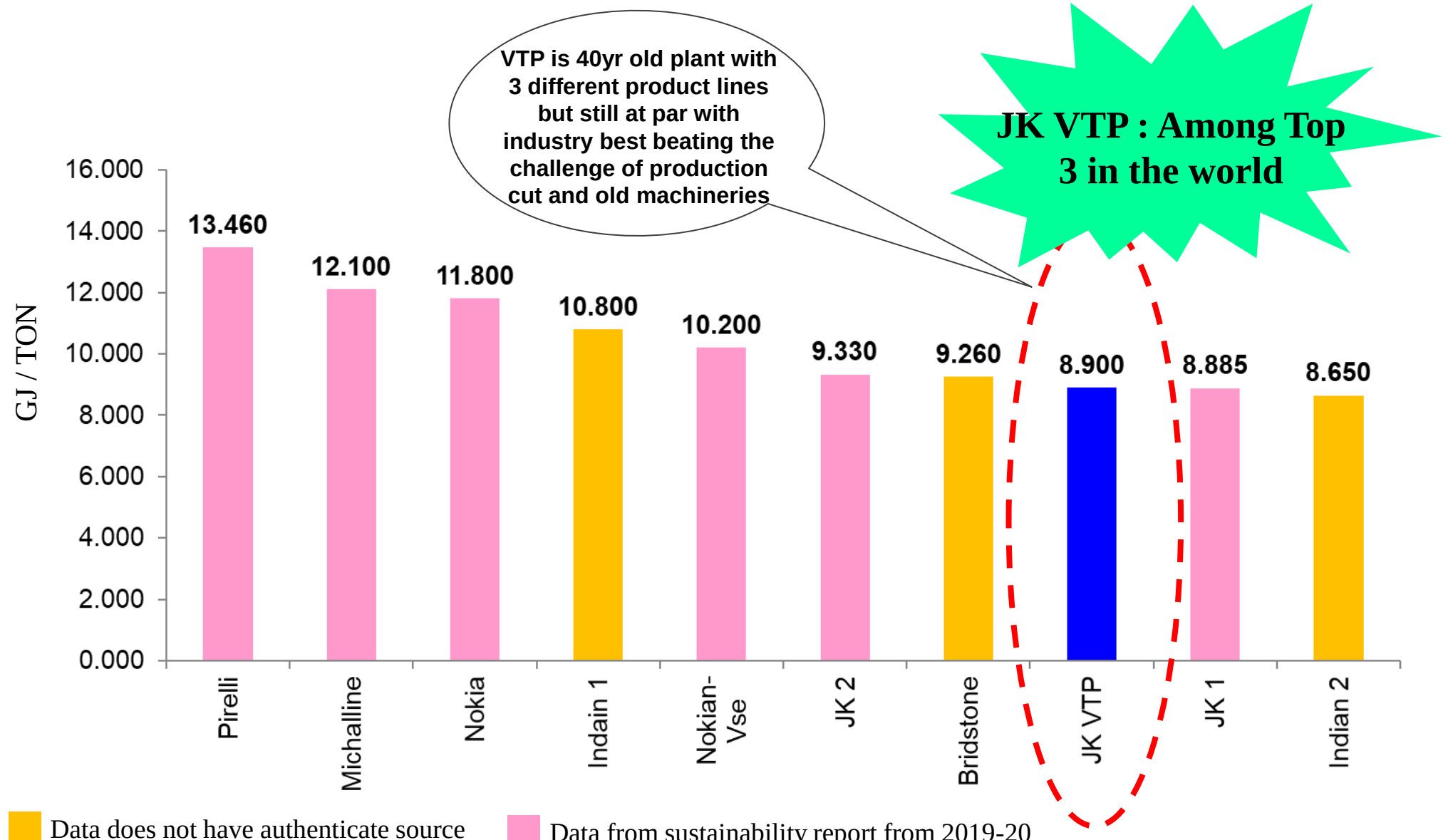
Name :Arun .K Bajoria

President & Director

ENERGY PARAMETERS / OBJECTIVE	UNIT OF MEASURE	PROJECTED ENERGY PERFORMANCE			
		2020-21	2021-22#	2022-23#	2023-24#
Power Consumption - Plant 1	Kwh/Kg.	0.642	0.635	0.630	0.625
Power Consumption - Plant 2	Kwh/Kg.	0.810	0.800	0.784	0.765
Overall VTP - Power	Kwh/Kg.	0.745	0.739	0.731	0.710
Steam Consumption - Plant 1	Kg/Kg.	1.750	1.700	1.650	1.600
Steam Consumption - Plant 2	Kg/Kg.	1.550	1.450	1.250	1.200
Overall VTP - Steam	Kg/Kg.	1.605	1.600	1.575	1.550
Overall VTP	**GJ/ Ton**	**8.90**	**8.50**	**8.45**	**< 8.00**

Target based on 100% plant loading, however we have variable reference / control targets to compare the performance at different production level as per plant loading

4. INFORMATION ON COMPETITORS, NATIONAL & GLOBAL BENCHMARK



5.ENERGY SAVING PROJECTS IMPLEMENTED - 2018-19

Project Sr. No	Brief Description of project	Amount Approved` in lacs	Savings For 2018-19 (Lacs Rs)		Energy Savings	
			Planned Yearly	Achieved 2018-19	Qty	UOM
RTP.41	Replace 36W conventional tubes with 18W LED tube	6.3	3.3	3.5	52239	kWh
RTP.42	Replace 250 W Metal hallide lamps by 80 W High Bay LEDs	24.8	15.2	15.82	236119	kWh
RTP.43	Replace125 W streetlight lamps by 36 W LED lights	4.8	3	2.96	44179	kWh
RTP.44	Installation of VFD's for Fume extractors in Mixers	17.5	4.	14.8	220896	kWh
RTP.45	Installation of VFD's for Dust Collector in Mixers	10	8.7	6.52	97313	kWh
RTP.46	Power factor improvement 0.84 to 0.99 at TS3 station Reduce the MD kVA and KWH impact in billing with retofitment and additonal 500 KVAR APFC panel	9.4	13.7	13	194030	kWh
RTP.47	VFD for the 15 KW AHU blowers of A & C division . Power saving during day and Night times , 14 nos	25	25.4	25.5	380597	kWh
RTP.48	TLV Traps for All header dead ends of Dome and Shaping steam	5	8.4	8	143	Ton of Coal
RTP.49	Auto damper control for AHU. This will reduce energy consumption in VAM chillers during cold seasons and also during nights when ambient is equal to or lower than set room temperature.	5	6	4.85	87	Ton of Coal

ENERGY SAVING PROJECTS IMPLEMENTED - 2019-20

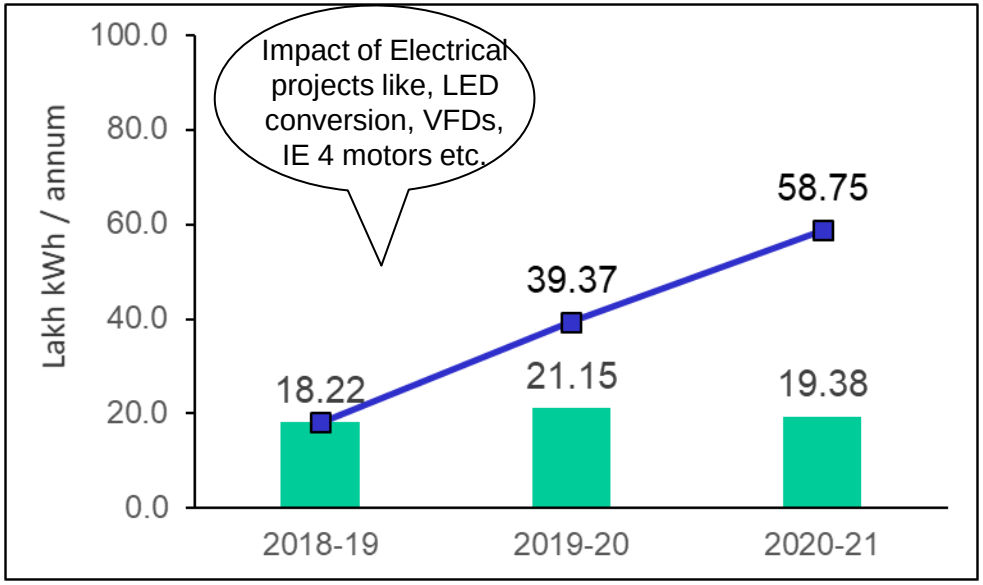
Project Sr. No	Brief Description of project	Amount Approved` in lacs	Savings For 2019-20 (Lacs Rs)		Energy Savings	
			Planned Yearly	Achieved 2019-20	Qty	UOM
RTP.51	Replacement of conventional 250 MH watt light fittings with 80 watt LED fittings for 100% LED conversion at RMS Area -36 nos	2.9	0.5	0.65	9701	kWh
RTP.52	Replacement of conventional 125W wellglass & 250W MH fitting with 40W & 80 LED for 100% LED conversion at Banbury Area - 110 nos	6.8	5.8	4.82	71940	kWh
RTP.53	Replacement of conventional 250W MH fitting with 80 LED for 100% LED conversion at Hot Calendar Area - 65 nos	5.3	1.7	1.63	24328	kWh
RTP.54	Replacement of conventional 250W,36W fitting with LED for 100% LED conversion at Curing, Tyre testing,FGS, Engg Maint Dept area - 135 nos	2.9	[illegible]	2.1	31343	kWh
RTP.55	Replacement of conventional 250W,36W.125W fitting with LED for 100% LED conversion at Utility area - 181 nos	[illegible]	6.5	6.52	97313	kWh
RTP.56	Replacement of conventional 250W,36W.fitting with LED for 100% LED conversion at offices, toilet -204 nos	1.6	2.3	2.5	37313	kWh
RTP.57	Installation of digital relay type moisture traps at compressors and air receivers. Phase 1 will cover all upsteam equipments including compressors, driers and primary air receivers. Power saving of 300 kwh/day and improved dryness of compressed air for utilitzation	2	1.5	1.2	17910	kWh
RTP.58	Replacement of old damaged condensate return lines at curing to increase condensate recovery and save coal	15	20	23	411	Ton of Coal
RTP.60	Insulation of 336 nos x 3 mtrs steam hose in curing press with reusable insulation hose guard	5	5	4.26	76	Ton of Coal

ENERGY SAVING PROJECTS IMPLEMENTED : 2020-21

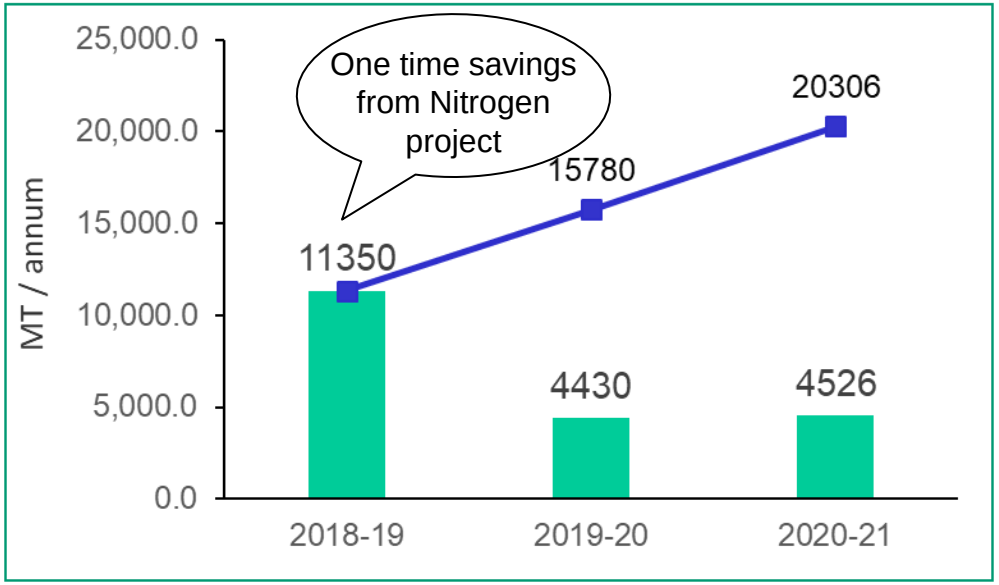
Project Sr. No	Brief Description of project	Amount invested in Rs Lacs	Savings For 2020-21 (Lacs Rs)		Energy Savings	
			Planned Yearly	Achieved 2020-21	Qty	UOM
VTP.73	To install VFD for IJT Boiler Feed water pump	3.6	4.2	4.35	64925.4	kWh
VTP.74	Energy Efficient motors IE-3	35	21	20.89	311791.0	kWh
VTP.75	Power saving by Installation of VFD on Mixer Mills.	12	6	6.22	92835.8	kWh
VTP.76	Replace existing 250 watt HPMV Lights to LED 80 Watt	4	1.1	1	14925.4	kWh
VTP.77	Replace existing 40 watt Tube light to 18 watt LED	7	[illegible]	4.1	61194.0	kWh
VTP.78	Replace existing 40 watt Light to LED 20 Watt coal yard conveyor conventional Light to LED	[illegible]	0.2	0.5	7462.7	kWh
VTP.79	Replace Existing Flame proof fitting 160 watt ML TO LED 45 Watt	1	1.5	1.25	18656.7	kWh
VTP.80	Energy saver for AC	1.5	1.1	0.75	11194.0	kWh
VTP.89	Elimination of Shaping main header by providing branch header tapping to Dome steam header line with additional control valve	5	8.54	8.36	124776.1	kWh
VTP.94	Installation of VFD for Cooling Blower Motor in Curing area and running it at Reduced speed wrt temperature	4	2.3	1.92	28656.7	kWh

OVERALL IMPACT OF ENERGY SAVING PROJECTS

Power (Lakh kWh)



Thermal (Coal in MT)



Savings Summary

Year	No of Proposals	Investments (Rs Lakhs)	Savings Achieved (Rs Lakhs)
2018-19	18	116.36	105.02
2019-20	21	75.18	91.11
2020-21	17	108.3	94.56

6.INNOVATIVE PROJECT IMPLEMENTED

Kaizen Sheet	Company	MM/YY	Sr. No.
Kaizen Title: Elimination of Shaping Steam Line in Curing.	JK Tyre -Mysuru Plant	Dec-20	Dec-20-01

Problem/Present Status:

- Specific Steam Consumption not meeting the Target of 1.55 kg/kg.
- Dome line & shaping line separate
- Water consumption more, 145KL/month
- Consuming more Power, 1800KW/month
- Excess Steam of 135MT/month

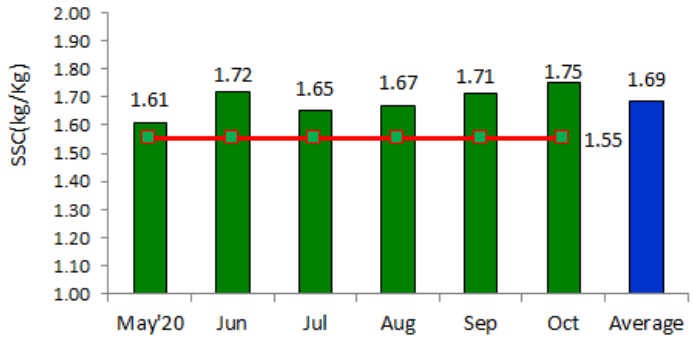
Root Cause Identification:

Why # 1	Shaping Header line loss
Why # 2	Consumption of Shaping Steam is Less than Condensate being generated for the entire Header
Why # 3	The shaping steam is used only at the beginning of the cure cycle for few minutes and then Dome steam enter. Till completion of cure cycle the steam in shaping line is idle
Why # 4	Two separate steam line provided for Dome & shaping steam in the Existing Design of Curing Trench

Implemented Area: Tyre Curing

Before Improvement:

Specific steam consumption more than target



Impact of the Problem

Steam Consumption more in Shaping Line

- Specific Steam Consumption not meeting the Target of 1.55 kg/kg
- Excess Steam of 8 Ton / day

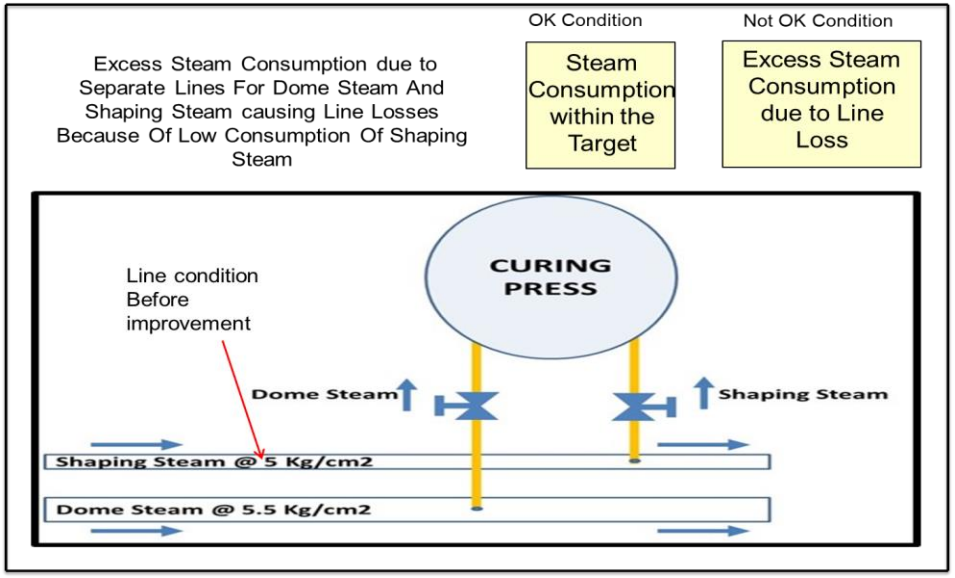
Root cause: No Mechanism to stop the Line Loss.

Idea to eliminate root cause: To Eliminate Shaping Steam Line Because Of Low Steam Consumption Leading To Excess Line Losses

Counter-measure: Provided Common Line Of Dome And Shaping Steam

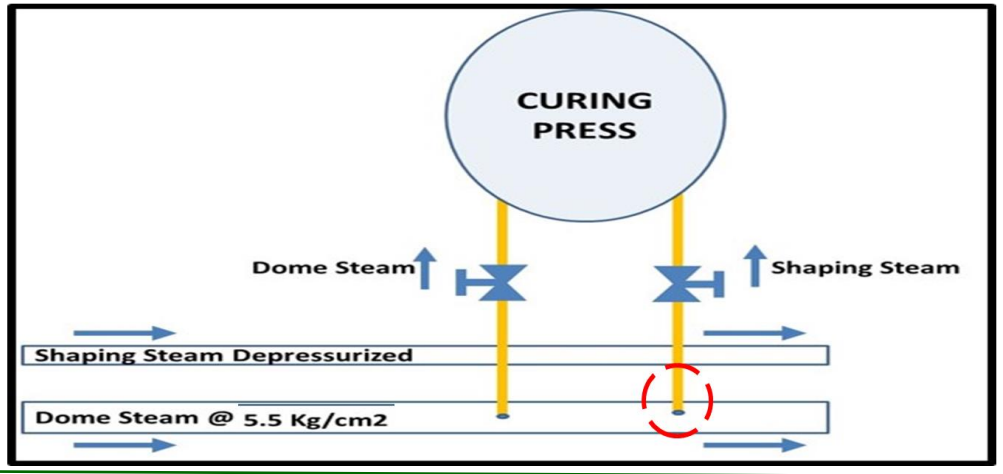
INNOVATIVE PROJECT IMPLEMENTED

Before Situation

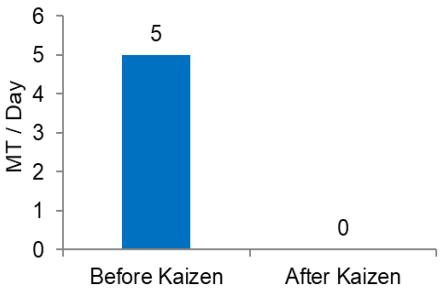


After Situation

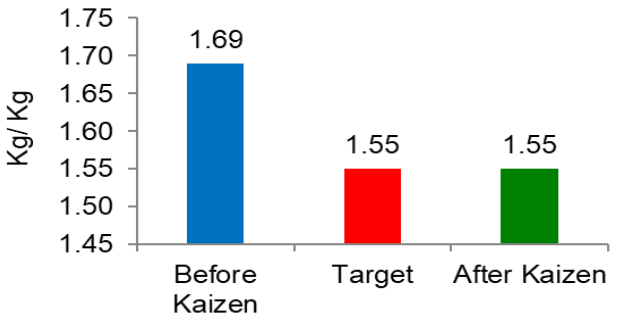
"Shaping line tapping taken from Dome steam header & removed the shaping line. This completely eliminated shaping steam line loss "



Steam loss in Shaping line



Specific Steam Consumption



Benefits Achieved

- Steam Consumption reduced by *9 %* (avg 1.69 kg/ kg to 1.55 kg /
- Steam loss in shaping line eliminated - 5 ton / day to 0
- Steam saving up to *1560 MT/ Annum*
- Cost savings of *Rs. 22.95 lacs / annum (Cost of coal)*
- *Maintenance cost for shaping steam line Rs 15,000 /annum save*
- *CO2 emission reduced by 815 MT / annum (@ 2.5 ton /ton)*

Investment:
- **Rs. 10,000/Press**
- **Rs.10,000 X 14 Presses = Rs.1,40,000**

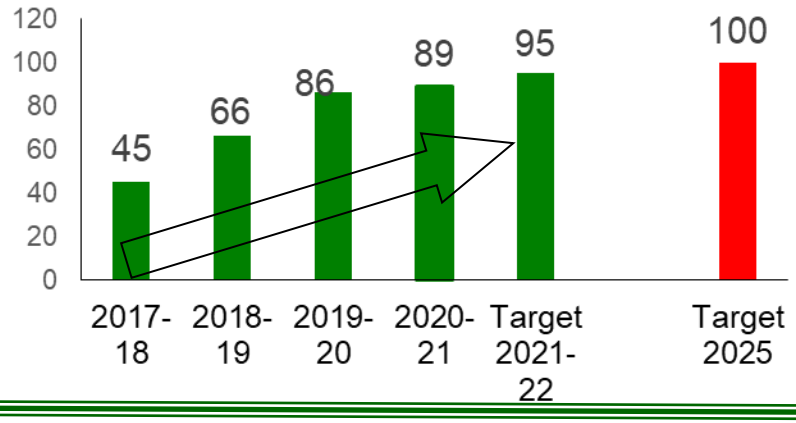
Savings:
- **5MT Steam /Day = *1530MT/Annum***
- **1530MT X 1500Rs/MT = *Rs.22,95,000***
- **ROI = 22 Days**

7. UTILIZATION OF RENEWABLE ENERGY SOURCES

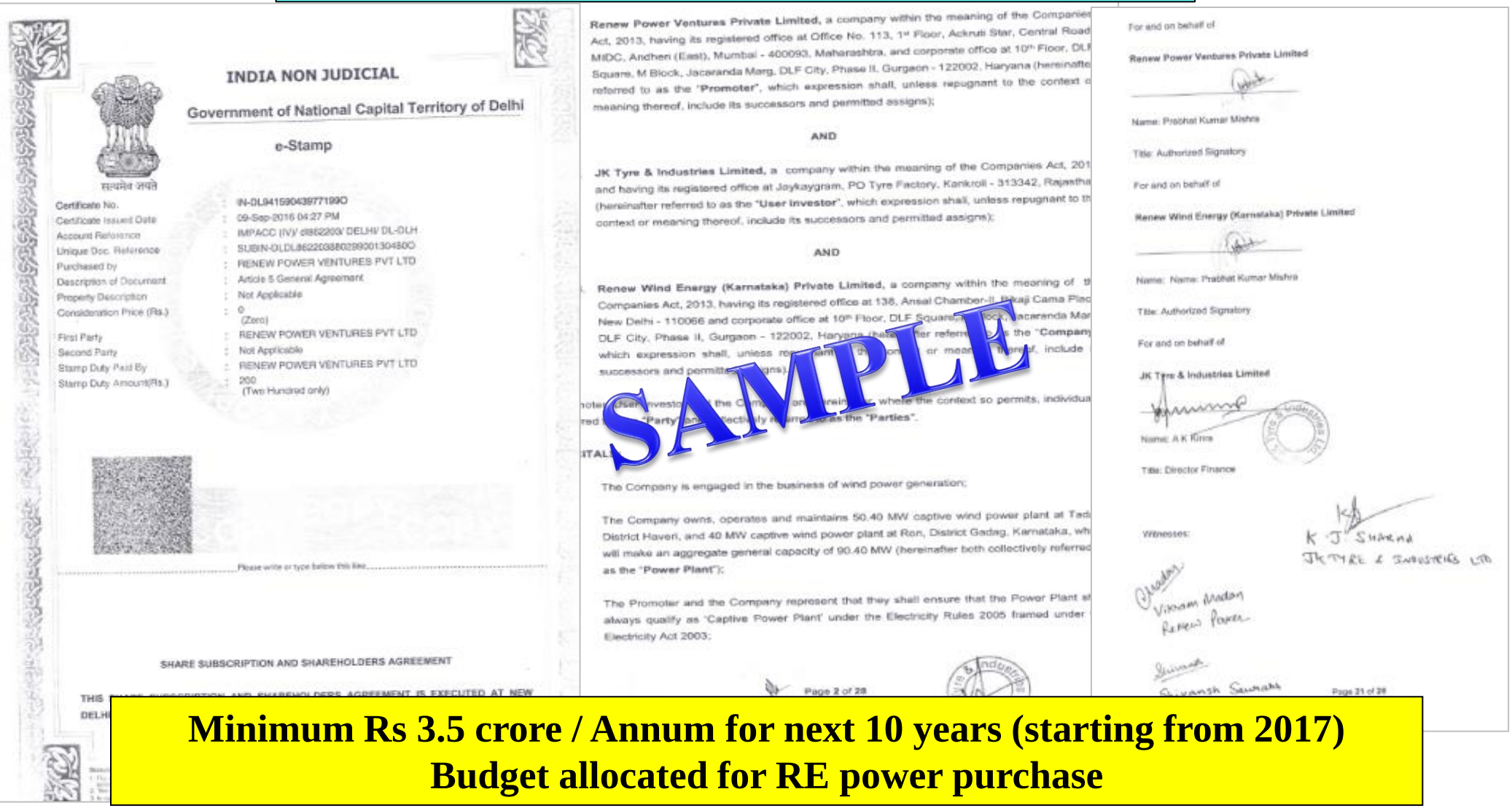
Type	Units	Annual Consumption	% of total power
Unit purchased from IEX	Million KWh	8.3	10.6
Unit purchased from Renew Energy	Million KWh	63.3	85
Unit purchased from CESCOM	Million KWh	0.3	0.3
Units generated from Roof Top Solar	Million KWh	0.7	0.8
Units generated from recovery Turbine	Million KWh	0.3	0.3
Total Power	Million KWh	**77.9**	**100**

89% of total power consumed is from Green Source in FY20-21

FUTURE PLAN : Achieve > 95% by 2022



REC Power Purchase Agreement (wind energy)



INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp

सत्यमेव जयते

Certificate No. : IN-DL94159043977199O
Certificate Issued Date : 09-Sep-2016 04:27 PM
Account Reference : IMPACC (IV)/ dl862203/ DELHI/ DL-DLH
Unique Doc. Reference : SUBIN-DLDL86220388029900130480O
Purchased by : RENEW POWER VENTURES PVT LTD
Description of Document : Article 5 General Agreement
Property Description : Not Applicable
Consideration Price (Rs.) : 0 (Zero)
First Party : RENEW POWER VENTURES PVT LTD
Second Party : Not Applicable
Stamp Duty Paid By : RENEW POWER VENTURES PVT LTD
Stamp Duty Amount(Rs.) : 200 (Two Hundred only)

Please write or type below this line

SHARE SUBSCRIPTION AND SHAREHOLDERS AGREEMENT

THIS SHARE SUBSCRIPTION AND SHAREHOLDERS AGREEMENT IS EXECUTED AT NEW DELHI

Renew Power Ventures Private Limited, a company within the meaning of the Companies Act, 2013, having its registered office at Office No. 113, 1st Floor, Ackruti Star, Central Road MIDC, Andheri (East), Mumbai - 400093, Maharashtra, and corporate office at 10th Floor, DLF Square, M Block, Jacaranda Marg, DLF City, Phase II, Gurgaon - 122002, Haryana (hereinafter referred to as the "**Promoter**", which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns);

AND

JK Tyre & Industries Limited, a company within the meaning of the Companies Act, 2013, and having its registered office at Jaykaygram, PO Tyre Factory, Kankroli - 313342, Rajasthan (hereinafter referred to as the "**User Investor**", which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns);

AND

Renew Wind Energy (Karnataka) Private Limited, a company within the meaning of the Companies Act, 2013, having its registered office at 138, Ansal Chamber-II, Bikaji Cama Place, New Delhi - 110066 and corporate office at 10th Floor, DLF Square, Jacaranda Marg, DLF City, Phase II, Gurgaon - 122002, Haryana (hereinafter referred to as the "**Company**", which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns)

SAMPLE

hereinafter the "**User Investor**" and the Company collectively referred to as the "**Parties**" or individually as a "**Party**" wherever the context so permits, individually referred to as the "**Parties**".

The Company is engaged in the business of wind power generation;

The Company owns, operates and maintains 50.40 MW captive wind power plant at Tadas, District Haveri, and 40 MW captive wind power plant at Ron, District Gadag, Karnataka, which will make an aggregate general capacity of 90.40 MW (hereinafter both collectively referred as the "**Power Plant**");

The Promoter and the Company represent that they shall ensure that the Power Plant shall always qualify as 'Captive Power Plant' under the Electricity Rules 2005 framed under Electricity Act 2003;

Page 2 of 28

For and on behalf of

Renew Power Ventures Private Limited

Name: Prabhat Kumar Mishra

Title: Authorized Signatory

For and on behalf of

Renew Wind Energy (Karnataka) Private Limited

Name: Name: Prabhat Kumar Mishra

Title: Authorized Signatory

For and on behalf of

JK Tyre & Industries Limited

Name: A K Rima

Title: Director Finance

Witnesses:

Vikram Madan
Renew Power

Shivansh Saxena

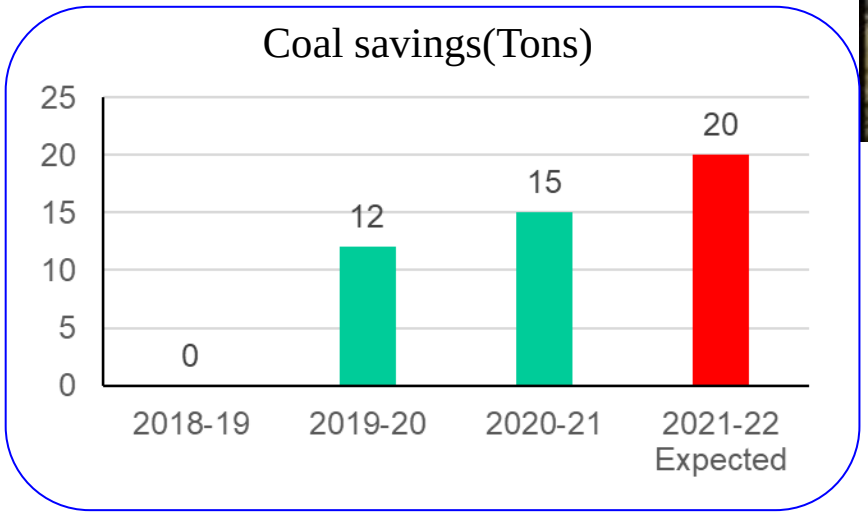
K J Sharma
JK TYRE & INDUSTRIES LTD

Page 21 of 28

Minimum Rs 3.5 crore / Annum for next 10 years (starting from 2017)
Budget allocated for RE power purchase

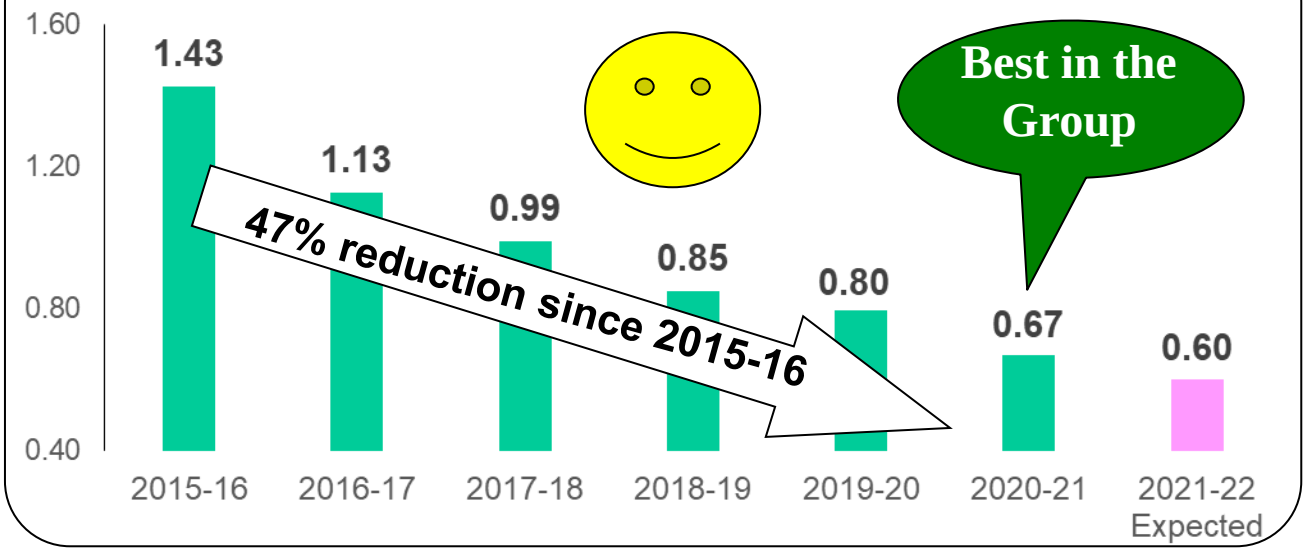
8. UTILISATION OF WASTE MATERIAL AS FUEL

- We do not generate industrial waste which can be used as fuel.
- Other waste such as Wood packing scrap material, trimmed branches, Dry leaves is sent for briquetting & re used in boiler as fuel.
- CO_2 foot print reduced by around 53 Ton / annum (by offsetting coal)

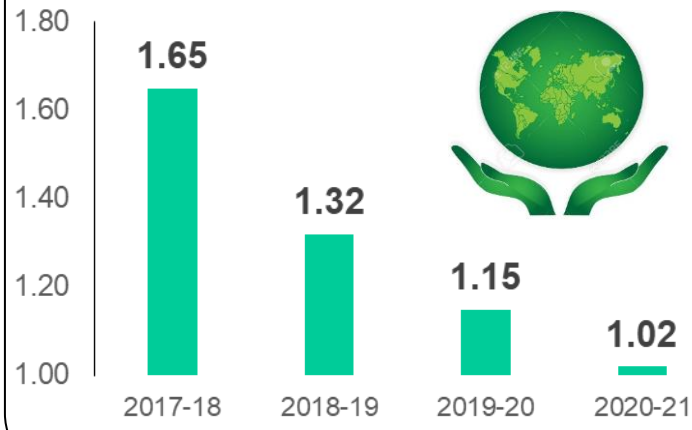


9. GHG INVENTORISATION (ISO14064-1:2019

GHG EMISSIONS (CO2e Ton/Ton) – SCOPE 1 & 2



SCOPE 3 Emissions



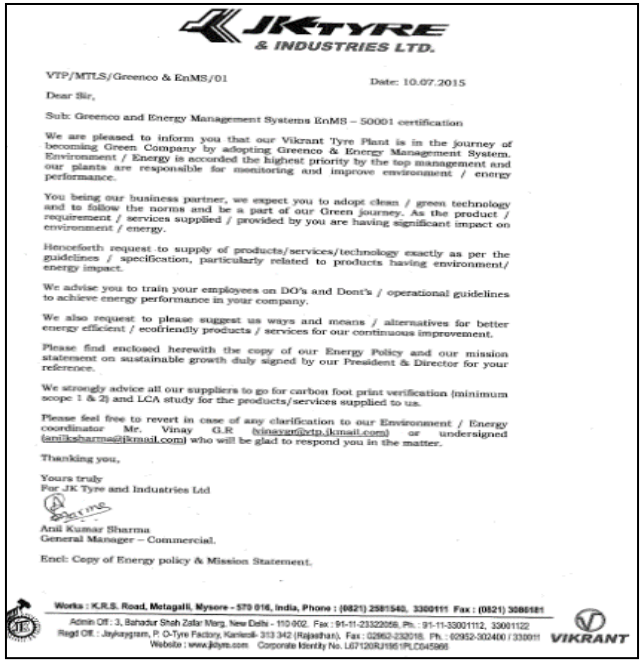
TOTAL GHG EMISSIONS (CO2e Ton/Ton) – SCOPE 1,2 &3

JKTIL GHG Emission Data | 2020-21	UoM	KTP	BTP	CTP	VTP
Direct Emission	tCO2e	26376.81	19942.46	41155.87	55801.83
Indirect Emission - Imported Energy	tCO2e	28372.32	19080.24	21775.81	4512.95
Indirect Emission - Transportation	tCO2e	6569.10	4392.23	12248.38	12574.71
Total Emission	tCO2e	28372.32	43414.93	75180.06	72889.49
Production	MT	62181.16	27516.93	73592.04	98983.25
Emission Intensity	tCO2e/MT	0.9861	1.5778	1.0216	0.7364

Verification report & Opinion statement

10. GREEN SUPPLY CHAIN

Green purchase guidelines



JK TYRE & INDUSTRIES LTD.

VTP/MTLS/Greenco & EnMS/01 Date: 10.07.2015

Dear Sir,

Sub: Greenco and Energy Management Systems EnMS – 50001 certification

We are pleased to inform you that our Vikrant Tyre Plant is in the journey of becoming Green Company by adopting Greenco & Energy Management System. Environment / Energy is accorded the highest priority by the top management and our plants are responsible for monitoring and improve environment / energy performance.

You being our business partner, we expect you to adopt clean / green technology and to follow the norms and be a part of our Green journey. As the product / requirement / services supplied / provided by you are having significant impact on environment / energy.

Henceforth request to supply of products/services/technology exactly as per the guidelines / specification, particularly related to products having environment/ energy impact.

We advise you to train your employees on DO's and Dont's / operational guidelines to achieve energy performance in your company.

We also request to please suggest us ways and means / alternatives for better energy efficient / ecofriendly products / services for our continuous improvement.

Please find enclosed herewith the copy of our Energy Policy and our mission statement on sustainable growth duly signed by our President & Director for your reference.

We strongly advice all our suppliers to go for carbon foot print verification (minimum scope 1 & 2) and LCA study for the products/services supplied to us.

Please feel free to revert in case of any clarification to our Environment / Energy coordinator Mr. Vinay G.R (vinaygr@vtp.jkmail.com) or undersigned (anil3sharma@gmail.com) who will be glad to respond you in the matter.

Thanking you,

Yours truly
For JK Tyre and Industries Ltd

Anil Kumar Sharma
General Manager – Commercial.

Encl: Copy of Energy policy & Mission Statement.

Works : K.R.S. Road, Metagalli, Mysore - 570 016, India, Phone : (0821) 2581540, 3300111 Fax : (0821) 3086181
Admin Off : 3, Bahadur Shah Zafar Marg, New Delhi - 110 002. Fax : 91-11-23323059, Ph. : 91-11-33001112, 33001122
Regd Off : Jaykaygram, P. O-Tyre Factory, Kankroli- 313 342 (Rajasthan), Fax : 02952-232018, Ph. : 02952-302400 / 330011
Website : www.jkityre.com Corporate Identity No. L67120RJ1951PLC045966

VIKRANT

Green Procurement Guide lines - VTP

Raw Material	Non hazardous, eco friendly, Bio degradable, REECH compliance chemicals
Appliances – AC, Fridges	Minimum 3 star
Motors	Min IE 4
Paints	Low VOC Paints
Taps	Push Type
Tube light & Bulbs	LED
House Keeping cleaning agents	Eco friendly cleaning agents

100% Compliance

All material code in SAP updated with Energy performance requirement.

- Taking measures in Energy management system by being proactive , innovative and cost effective including procurement of energy efficient products & services.
- As a Green Responsible company, we have re-sourced / re-organized / re-structured our suppliers close to our manufacturing plants. Suppliers in South cater to south plant & North to North plants

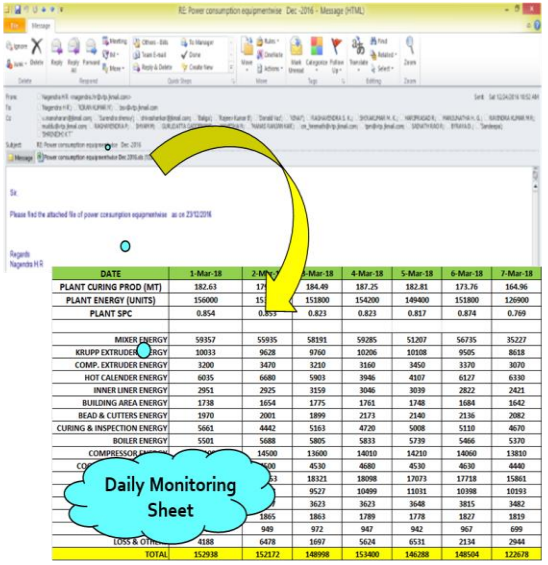
Eg. :- Carbon Black - Earlier supplied from Kolkata to VTP & Chennai supplied carbon black to KTP now the supplies reorganized so that Chennai supplies to VTP & CTP and Kolkata supplies to KTP, LTP & BTP. This resulted is overall savings in emission from supply chain

- **INVOLVING SUPPLIERS IN CII GREENCO JOURNEY** - We are encouraging our suppliers to go for GreenCo certification

11.TEAM WORK, EMPLOYEE INVOLVEMENT & MONITORING

REVIEW MEETINGS - Daily shop floor review-Chaired by unit head & plant heads, Monthly review, Annual Performance Review, Energy review –chaired by Mfg. Director, Business review(BRM) - Chaired by President
Benchmarking of Targets w.r.t industry standards, Review of targets is done based on high impact projects

DAILY MONITORING SYSTEM



Action plan for day to deviation implemented & effectiveness reviewed in next day meeting

STRATEGIES FOR EMPLOYEE AWARENESS & INVOLVEMENT

Most Energy Efficient Plant

Apex Group	Core Team	Front line	Working group
○ Formulate Policy ○ Give Direction • Review Energy consumption • Review status of Energy projects • Provide resource	○ Set target to Reduce Energy consumption • Implement Energy projects ○ Benchmarking ○ Energy Audits ○ Provide resource ○ Support & guide plant team ○ Compliance to legal & other requirements ○ Train plant team	○ Control / avoid Energy loss • Process control ○ Monitoring & measurement of relevant EnPI ○ Train Working group – Spread awareness	○ Participate in improvement activities • Energy Kaizen ○ Control / avoid Energy loss by adhering to Work Instruction & SOP's

Avoid Loss , Improved Awareness

- On the job training is also being imparted to employees in regard to conservation of energy.
- Employees have been identified for undergoing training in department where significant energy use .
- Energy conservation tips are being displayed in the prominent places like utility, production hall etc
- Employee suggestions on conservation of energy. Suggestions are evaluated & implemented
- Employees in CFTs have made many Kaizens to conserve energy.

TEAM WORK, EMPLOYEE INVOLVEMENT & MONITORING

KAIZENS

JK TYRE & INDUSTRIES LTD,
VIKRANT TYRE PLANT, MYSURU

KAIZEN SHEET

Production	Quality	Delivery	Cost	Morale	Safety	Energy
P	Q	D	C	M	S	E

Plant	Department	Si. No.
VTP 2	Energy Cell	

Kaizen Title: USE OF ETP TREATED WATER TO PROCEES COOLING TOWER MAKE UP

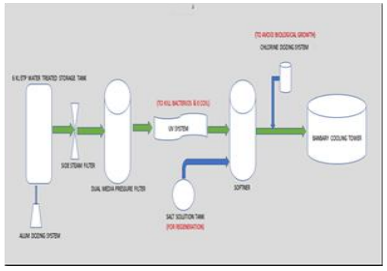
Implemented Area/In charge	S.K.Shetty
Implemented by/supported by	Nagendra B N Ananda J
Kaizen Start Date	05.12.2020
Kaizen End Date	10.02.2021

Problem/Present Status: Before Improvement

Process cooling tower make up with Fresh soft water for the cooling tower evaporation losses ,which requires 80-90 KLD water required to make up the cooling tower

After Improvement

Planned to use the ETP treated water for cooling tower make up losses with design and installed the UV treatment plant to treat ETP treated water further to maintain the required water quality



Root Cause Identification: (Why-Why Analysis)

Why-1	Process Cooling tower Evaporation losses make up
Why-2	Fresh soft water used for make up of CT losses
Why-3	No system of re using the process water to Evaporation losses
Why-4	ETP treated water quality not matching with Soft water
Why-5	No plant

UV Plant

Results/Benefits:

a. Quantitative:

1.Reduction of soft water consumption - 70 KLD
2.Plant Specific water consumption reduced

b. Qualitative:

1.Contribution towards Zero discharge plant –reusing the process water
2.Employee Morale improved
3.Saving of natural resources to protect Environment

Standardization:

1. SOP prepared to operate the plant
2. List of water parameters displayed to check the quality

Root Cause

No Plant to treat the ETP water further to match with soft water quality

Idea to Eliminate Root Cause

Design and installed the UV treatment plant to treat ETP treated water further to maintain the required water quality

Result

- 70 KLD water get available with equivalent to soft water quality
- Plant Specific water consumption reduced

Horizontal Deployment

- Sharing this kaizen to implement at other JK plants

12. IMPLEMENTATION OF ISO 50001/GREENCO

ISO 50001:2018 CERTIFICATE

bsi.

By Royal Charter

Certificate of Registration

ENERGY MANAGEMENT SYSTEM - ISO 50001:2018

This is to certify that:

JK Tyre & Industries Ltd.
Vikrant Tyre Plant
KRS Road
Metagalli
Mysore 570 016
Karnataka
India

Holds Certificate No: **ENMS 595612**

and operates an Energy Management System which complies with the requirements of ISO 50001:2018 for the following scope:

The Manufacture of Automotive Bias, Radial & Off the Road Tyres, use of Electricity from State Electricity Board and from other Renewable sources including IEX (Indian Energy Exchange), Generation of DG Power (as standby), Generation of Solar Power, Generation of power through Recovery Turbine, Generation of Steam through Coal Fired Boilers, Generation of Compressed Air, Generation of Chilled Water for Process use.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2013-04-29
Latest Revision Date: 2019-05-05

Effective Date: 2019-03-22
Expiry Date: 2022-03-21

Page: 1 of 2

...making excellence a habit.

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.
An electronic certificate can be authenticated online.
Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone +91 11 2692 9000.
Further clarifications regarding the scope of this certificate and the applicability of ISO 50001:2018 requirements may be obtained by consulting the organization.
This certificate is valid only if provided original copies are in complete set.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.

Effective Date: 2019-03-22
Expiry Date: 2022-03-21

GREENCO PLATINUM AWARD

CII
Confederation of Indian Industry

CII - Sohrabji Godrej Green Business Centre

hereby certifies that

J K Tyre & Industries Ltd.
Vikrant

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
March 2018

Jamshyd N Godrej
Chairman
CII-Godrej GBC

Pradeep Bhargava
Chairman
GreenCo Rating System

L S Ganapati
Chairman
GreenCo Assessor Panel

K S Venkatagiri
Executive Director
CII-Godrej GBC

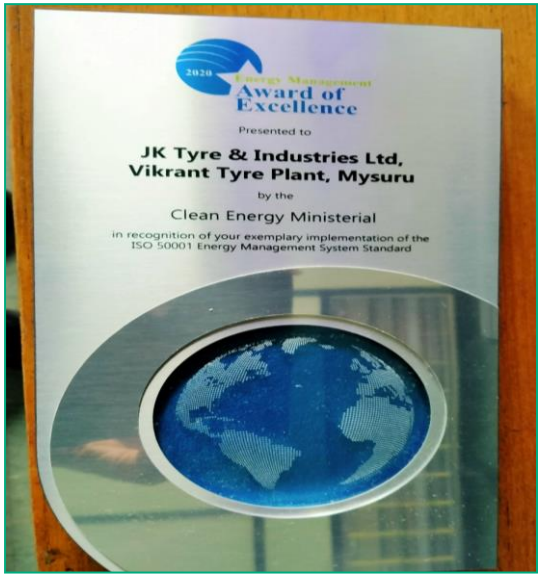
Parameter	Max Possible	VTP SCORE
Energy Efficiency	150	122
Water Conservation	100	70
Renewable Energy	100	75
Greenhouse Gas Emissions	100	76
Waste Management	100	95
Material Conservation, Recycling and Recyclability	100	83
Green Supply Chain	100	79
Product Stewardship	75	72
Life Cycle Assessment	75	44
Others	100	85
Total	**1000**	**801**

13. LEARNING FROM CII ENERGY AWARD 2020 OR ANY OTHER AWARD PROG.

- Understanding on latest technologies in the field of energy management
- Adoption of Innovative practices by other industries
- Improved presentation skills
- Exposure to other sectors like oil, gas cement etc..

AWARDS, ACKNOWLEDGEMENT 2020-21

CEM AWARD OF EXCELLENCE IN ENERGY MANAGEMENT 2020 by CEM Canada



FAME EXCELLENCE AWARD 2021 towards livelihood creation & 3R's- Platinum and Excellence in Environment protection -diamond

20TH ANNUAL GREENTECH ENVIRONMENT AWARD WINNER 2020

CII National Award for Excellence in Energy Management 2020

NATIONAL ENERGY CONSERVATION AWARD from BEE

GREENCO PLATINUM PLUS by 2022-23

Thank You