THE KCP LIMITED

CEMENT UNIT-II, RAMAKRISHNAPURAM

23rd National Award for "Excellence in Energy Management 2022" 23 – 25th August 2022

LEADER

V.MADHUSUDANA RAO
PLANT HEAD

Team Members

B.ANIL KUMAR- GM(MINES)
R.VARAPRASADA RAO- DGM(E&I)
A.V.R.G.BHAVANARAYANA-AGM(QC)

About “The KCP Limited”

“Celebrating more than 80 years of success”

1941 — *“Journey started with setting up of 800TCD sugar plant at Vuyyuru, krishna Dist. Andhra Pradesh by Sri.V.Ramakrishan Founder of KCP”*

1958 — *“India’s first dry process cement plant was installed at Macherla by Humboldt AG, Germary”*

1999 — *“Hydel Power Division setup at Nekkarikallu, Andhra Pradesh on the Guntur Canal of Krishna river to generate 8 MW of power”*

2006 — *“Wind Power generating Unit setup at Uthumalai village in Tirunelveli District of Tamil Nadu”*

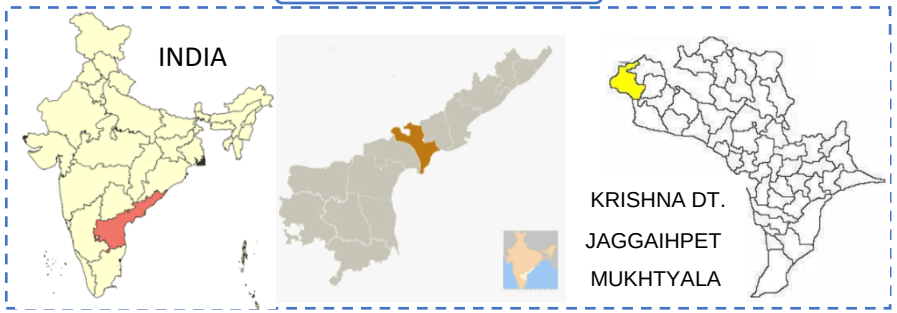
2011 — *“Cement Plant II line # 1 Commissioned at Ramakrishnapuram, Muktyala, Andhra Pradesh, Line # 2 commissioned in 2018 at the same location”*

2013 — *“Commissioning of 1.15 MW Solar at Muktyala Cement Plant, Ramakrishnapuram, Muktyala, Andhra Pradesh”*

2014 — *“Commissioning of 18MW Thermal Power Plant at Muktyala Cement Plant, Ramakrishnapuram, Muktyala, Andhra Pradesh”*

2018 — *““Cement Plant II line # 2 Commissioned at Ramakrishnapuram, Muktyala, Andhra Pradesh,*

Site Location



8500TPD Cement plant - Mukhtyala

Heavy Engg, Workshop- Chennai

1200TPD Cement plant - Macherla

2500TCD Sugar plant Vietnam

Mercure Hotel - Hyderabad

1.15MW Solar Power Plant

“Legacy Continues”

GROUP COMPANIES OF KCP

THE K C P LIMITED, CEMENT
UNIT-I MACHERLA – 0.8 MTPA

THE K C P LIMITED, CEMENT
UNIT-II MUKTYALA – 3.52 MTPA

SUGAR PLANT,
VIETNAM – 6000 TPD

HEAVY ENGINEERING,
THIRUVOTTIYUR

BUILDING MATERILS, MUKTYALA

HOTEL MERCURE KCP,
HYDERABAD

GROUP COMPANIES OF KCP

THERMAL POWER PLANT,
MUKTYALA – 1X18 MW

WIND POWER,
THIRUNELVELI – 3.25 MW

SOLAR POWER PLANT,
MUKTYALA – 1.15 MW

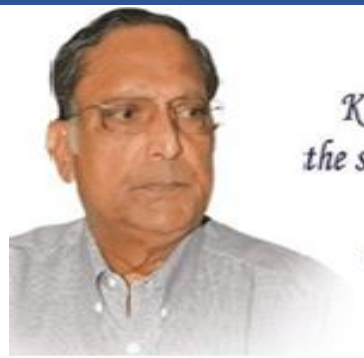
TOTAL - 18.6 MW UNDER EXECUTION

HYDEL POWER PLANT,
NEKARIKALLU – 8.25 MW

WHR - 14.0 MW

SOLAR - 4 X 1.15 MW

UNIT MILESTONES



KCP's Ultimate goal is to achieve the status of " Greenest Cement Plant " among all Cement Units in India and Be the role model

2011

Line-1 Plant Commissioned Capacity Clinker-1.32 MTPA, Cement-1.52 MTPA

2012

Enhancement of Kiln production from 4000 to 4500 TPD

2013

Installed 1 x 1.15 MW Solar Power Plant

2014

Installed Pyro Box for PC firing

2015

1. **All motors are Energy Efficient**
2. **All motors replaced with VFD's**
3. **Installed 1x18 MW CPP**

2016

1. Capacity Enhanced Clinker-1.32 to 1.55 , Cement-1.52 to 1.86.
2. Kiln Shell painting with Lithophone & Sodium Silicate
3. Preheater Cyclones painting with HR Aluminum.

2017

Recorded Lowest Clinker Power Consumption 43.32 kwh/T.Clinker

2018

Line-2 Kiln Erection started

2019

Line-2 Kiln commissioned Total Capacity Clinker-3.06 MTPA, Cement-3.52 MTPA

2020

Highest Clinker & Cement Production

2021

Recorded Lowest Clinker Power Consumption 42.62 kwh/T. Clinker.

2021

1. **Recorded Lowest Clinker Power Consumption 42.06 kwh/T.Clinker**
2. **Highest Clinker & Cement Production**

SUCCESS PILLAR's FOR ACHIEVING STATE OF ART TECHNOLOGY

ELECTRICAL ENERGY CONSUMPTION

THERMAL ENERGY CONSUMPTION

ENVIRONMENT EMMISSIONS

CEMENT UNIT-II

SYSTEM AVAILABILITY

EQUIPMENT RELIABILITY

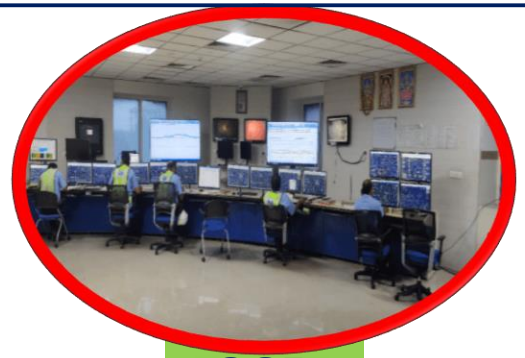
CONSISTENT QUALITY

KCP'S STATE OF ART TECHNOLOGY

Low Electrical

Consistent Quality

PH 8864-6 stage

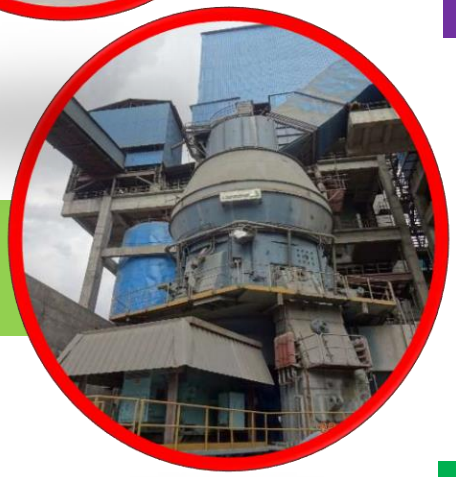


CCR

LOESCHE LM-46.4

PSC3-103.12 T

LOESCHE LM-53.3+3 C/S

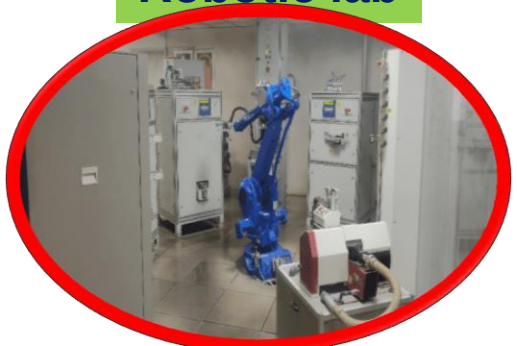


Low Thermal

Low Emissions

Pyro Jet HPJ 286 KO

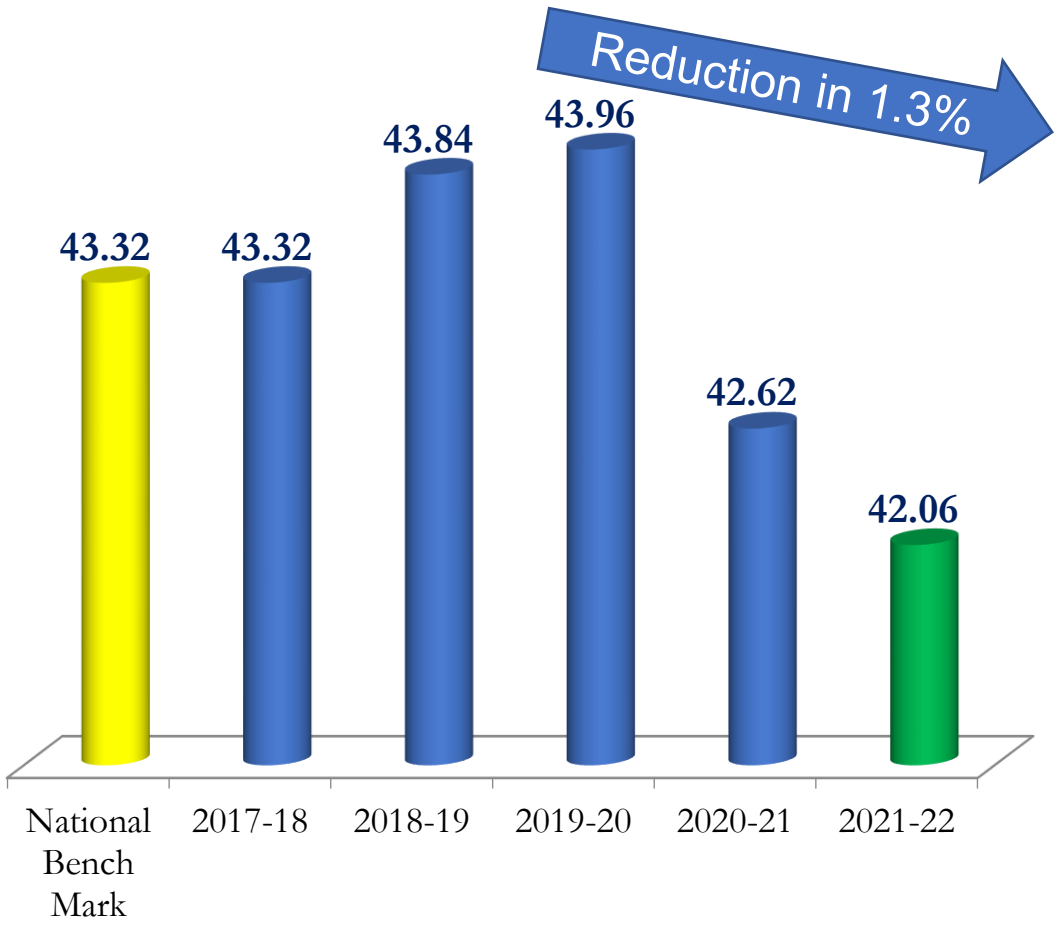
Robotic lab



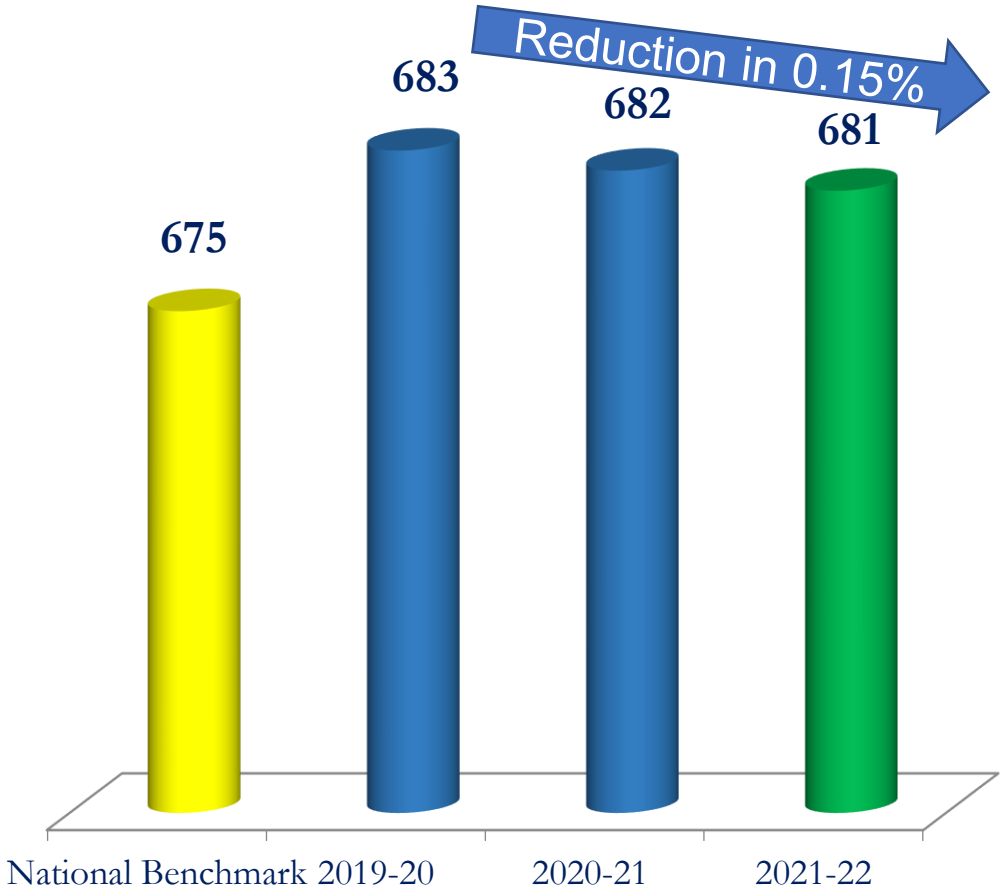
Pulse Jet Bag Filter

Electrical & Thermal Energy Performance

Specific Power Consumption, Kwh/ T. Clinker



Specific Heat Consumption, Kcal/Kg.Clinker

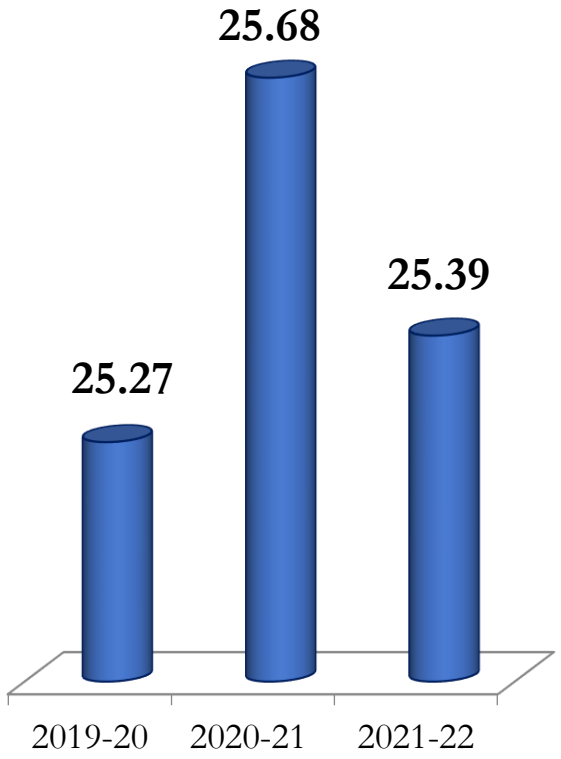


SEC & SHC Values are combined for both Lines

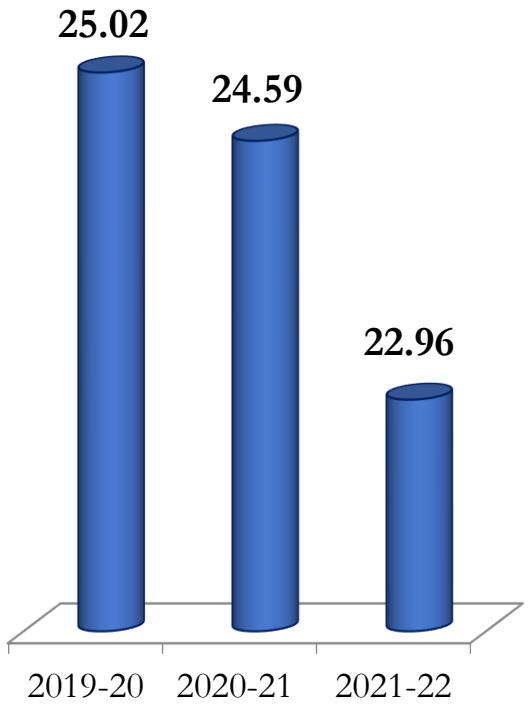
Energy Performance in Last 3 years

(OPC:PPC:RHPC)
(59:37:4)

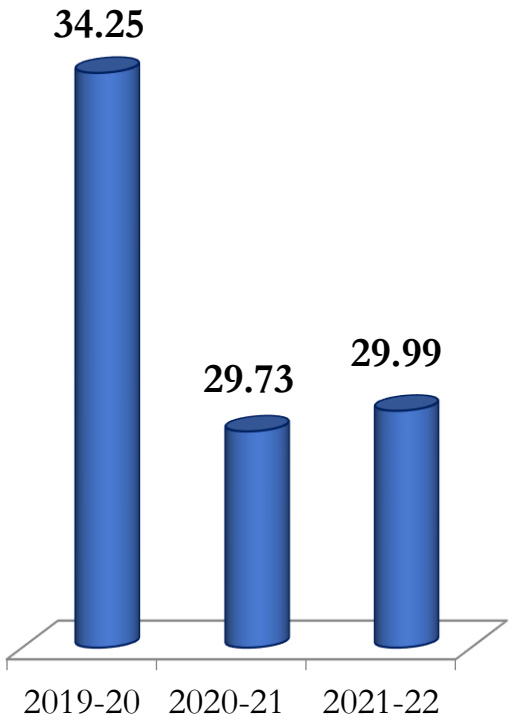
OPC Specific Power Consumption, Kwh/T.Cement



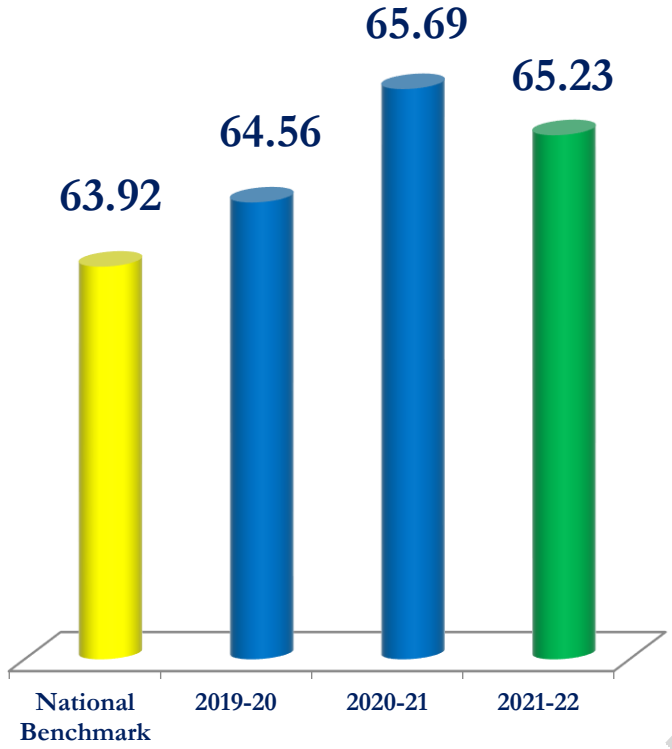
PPC Specific Power Consumption, Kwh/T.Cement



RHPC Specific Power Consumption, Kwh/T.Cement



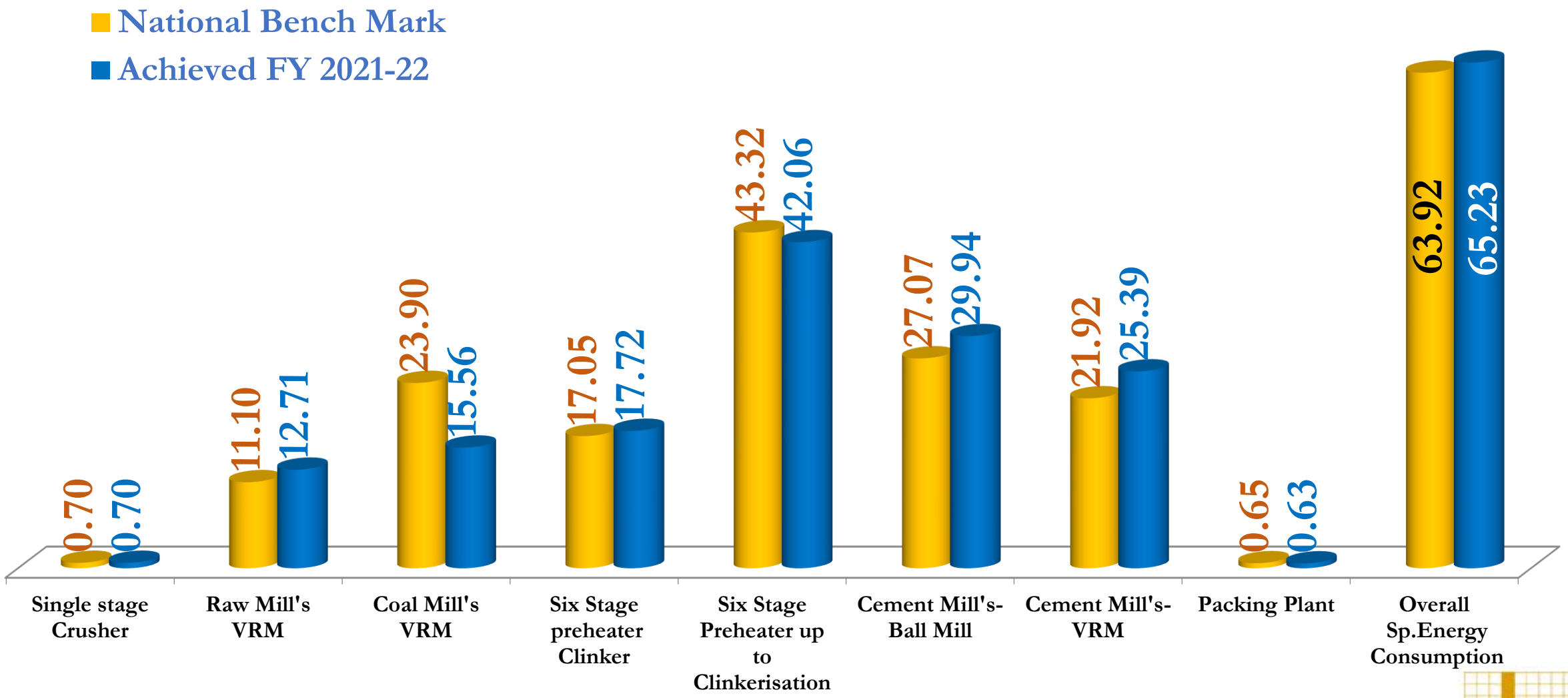
Overall Specific Power Consumption, Kwh/T.Cement



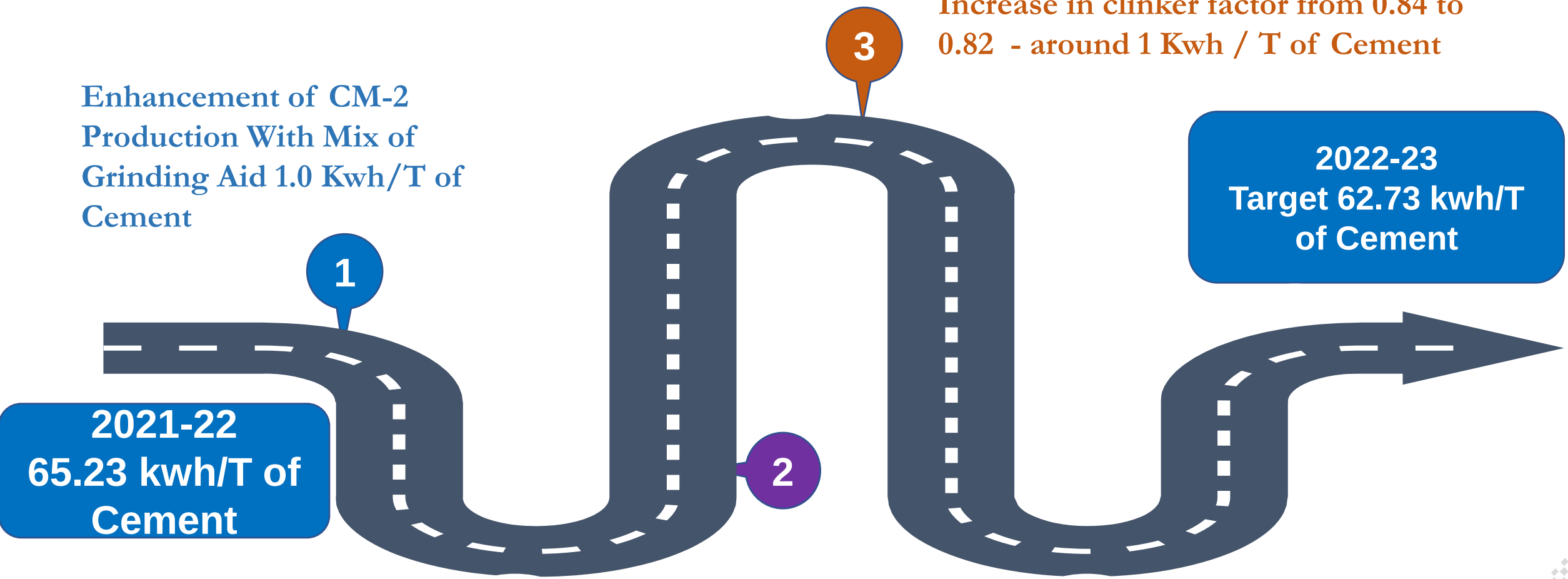
Compared to previous year PPC Production slightly increased

SEC Values are combined for both Lines

SECTION WISE ELECTRICAL ENERGY
NATIONAL BENCHMARK VS ACHIEVED

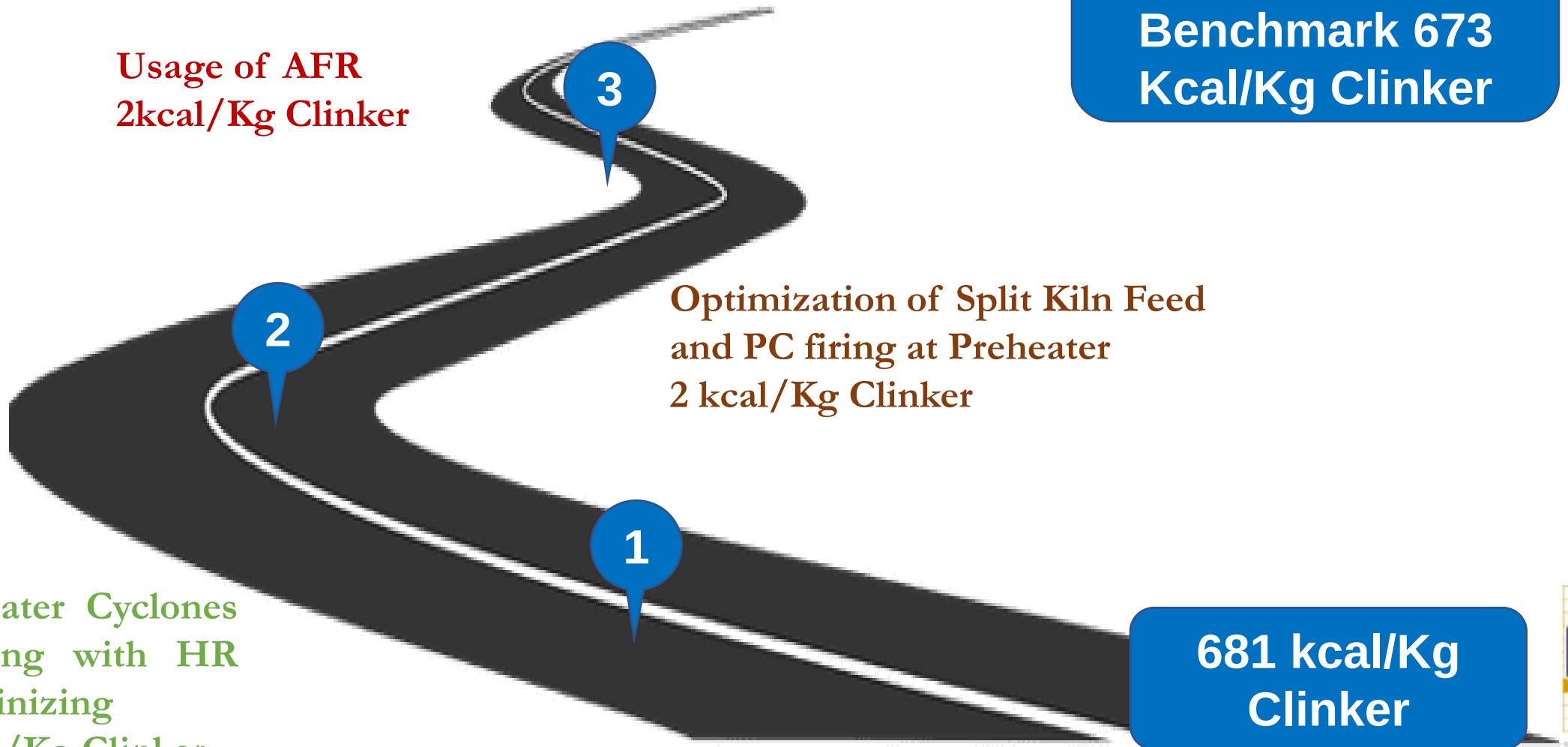


Road map for achieving Target Electrical energy



Road map for achieving Target Thermal energy

Target to achieve National Benchmark 673 Kcal/Kg Clinker



Usage of AFR
2kcal/Kg Clinker

Optimization of Split Kiln Feed and PC firing at Preheater
2 kcal/Kg Clinker

Preheater Cyclones painting with HR Aluminizing
4 kcal/Kg Clinker

681 kcal/Kg Clinker

Long Term Projects on Energy Efficiency

S.No	Project	Estimated Investment, Rs. Crores	Target	Payback, Months
1	Line-2 Preheater HR Aluminizing	0.9	2022	24
2	Arrangement of AFR Feeding System (Carbon Black, Plastic Waste, Wooden Chips, Bio Mass)	4.0	2022	24
3	Installation of 14.0 MW Waste Heat Recovery for Line-1&2 Kiln	77.0	2024	20
4	Installation of 4x1.15 MW Solar Power Plant	20.0	2023	85

ENERGY CONSERVATION MEASURES IMPLEMENTED 2021-22

Energy Conservation Projects

Detail	Unit	2019-20	2020-21	2021-22	Over All (FY 19, 20, 21)
Total no.of Encon Projects	Nos.	14	13	13	40
Encon Projects with Nil Investments	Nos.	7	8	5	20
Total Investment made	Rs.Lakhs	176.86	16.4	424.2	617.46
Total Savings made	Rs.Lakhs	103.6	232.0	515.6	851
Electrical Energy Saved	Lakh Units	8.73	39.89	42.72	91.34
	Rs.Lakhs	81.4	215.4	230.6	527
Thermal Energy Saved	MTOE	3.4477e-5	2.8181e-5	2.8381e-5	9.1039e-5
	Rs.Lakhs	22.2	16.6	285	324
Impact on SEC	KWH/Ton of Cement	64.56	65.69	65.23	
	Kcal/ Kg of Clinker	683	682	681	

Energy Saving Projects Implemented in 2021-22

S.No	Energy Saving Project	Energy Saving, Lac Rs/Annam	Investment,	Payback Months
Zero Investment				
1	Power Savings attained by changing motor connection in auxiliary Cooling Tower Fans	0.79	0	0
2	Fuel Savings by Improvement of Cooler Recuperation Efficiency in Line-2 (Lower Cooler Recuperation Efficiency)	406	0	0
3	Fuel Savings by Improvement of TA Temperature in Line-2 (High Temperature drop across TA duct)	75	0	0
4	Fuel Savings by Improvement of Cooler Recuperation Efficiency in Line-1 (Lower Cooler Recuperation Efficiency)	461.6	0	0
5	Fuel Savings by Improvement of TA Temperature in Line-1 (High Temperature drop across TA duct)	134.1	0	0

Energy Saving Projects Implemented in 2021-2022

S.No	Energy Saving Project	Energy Saving, Rs. Lakhs/Annam	Investment, Lakhs Rs.	Payback, Months
With Investment				
6	Installation of Solar Water Heaters in colony A5,E3 and Executive Blocks	0.6	9.0	15
7	CM-3 Booster fan and Hot air duct Installation	32.85	416.00	13
8	Replacement of Conventional Lights with LED Lights	0.28	1.40	05
9	Optimization of Packer-1&2 Bags Cleaning Blower	0.61	0.10	01
10	Optimization of Process Cooling Tower by keeping AHU-CT bypass	0.62	0.10	01
11	Optimization of Flyash tanker Unloading Compressor	3.75	0.60	01
12	Raw Mill-2 Fan inlet duct modification	1.18	0.10	01
13	Installation of Level sensor in Cement mill-3 reject hoppers	2.37	0.90	04
	Total	**42.72**	**424.2**	

INNOVATIVE PROJECT

1.INSTALLATION OF LEVEL SENSOR IN CEMENT MILL-3 REJECT HOPPER

Proposal:- Level sensor arranged for Reject hopper in Cement mill-3.

Benefit:- Continuous running of Reject Recirculation circuit can be avoided. Conveyor and bucket elevator will run only after hopper reaches its high level. In turn power saving around 30 kw/hr.

Expected Benefit:

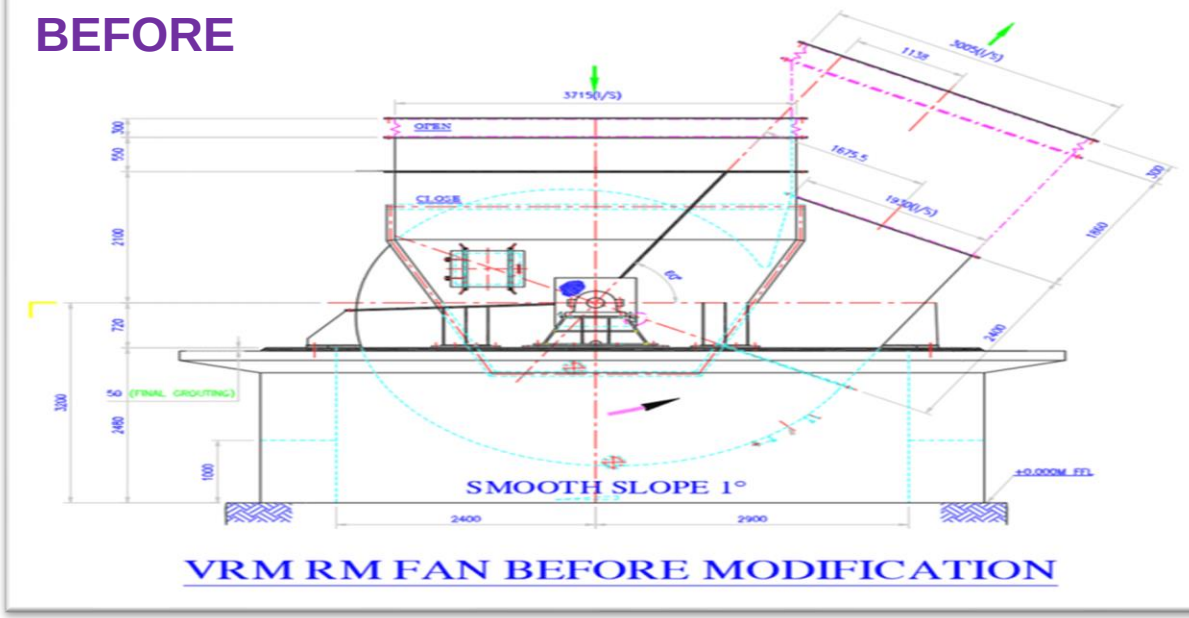
Energy Saving : 30x20hrsx300days : 1.8 Lac KWH/Yr.

Cost Saving :

1,80,000kwxRs5.4= 9.72 Lakhs/ Year

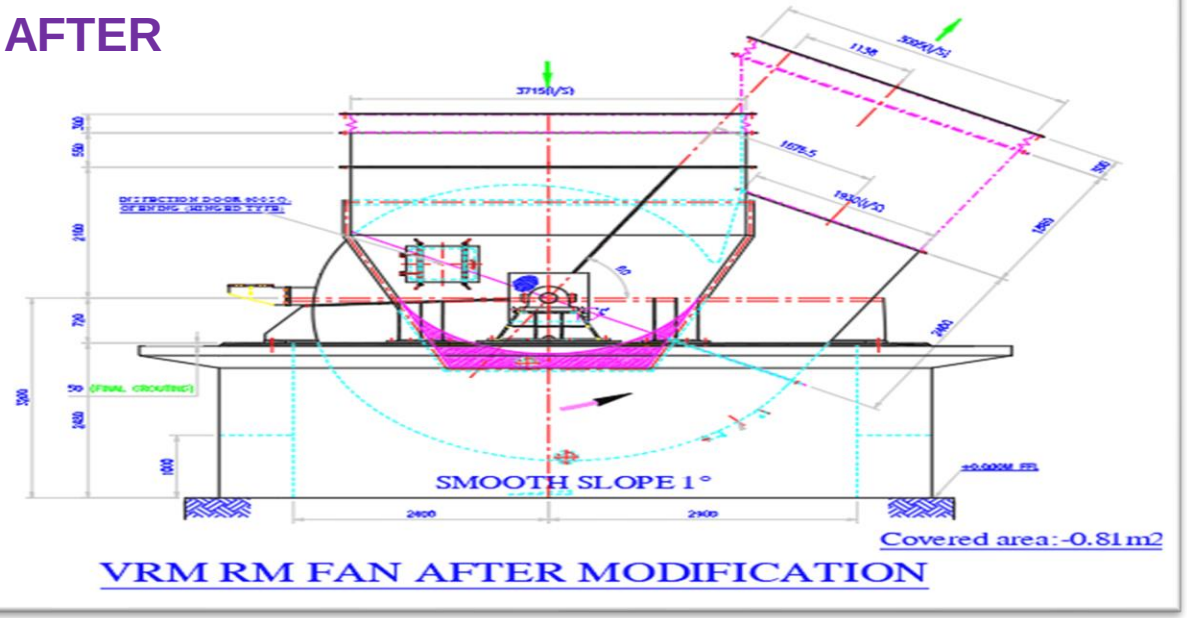
2.RAW MILL-2 FAN INLET DUCT MODIFICATION

BEFORE



VRM RM FAN BEFORE MODIFICATION

AFTER



VRM RM FAN AFTER MODIFICATION

BEFORE MODIFICATION

Raw Mill fan specific power consumption with Avg feed 380 Tph - 4.75 KW/Ton of material

380X4.75 = 1805 KW/H

AFTER MODIFICATION

Fan inlet cone area openings closed with M.S plate

Raw Mill fan specific power consumption with Avg feed 380 Tph - 4.71 KW/Ton of material

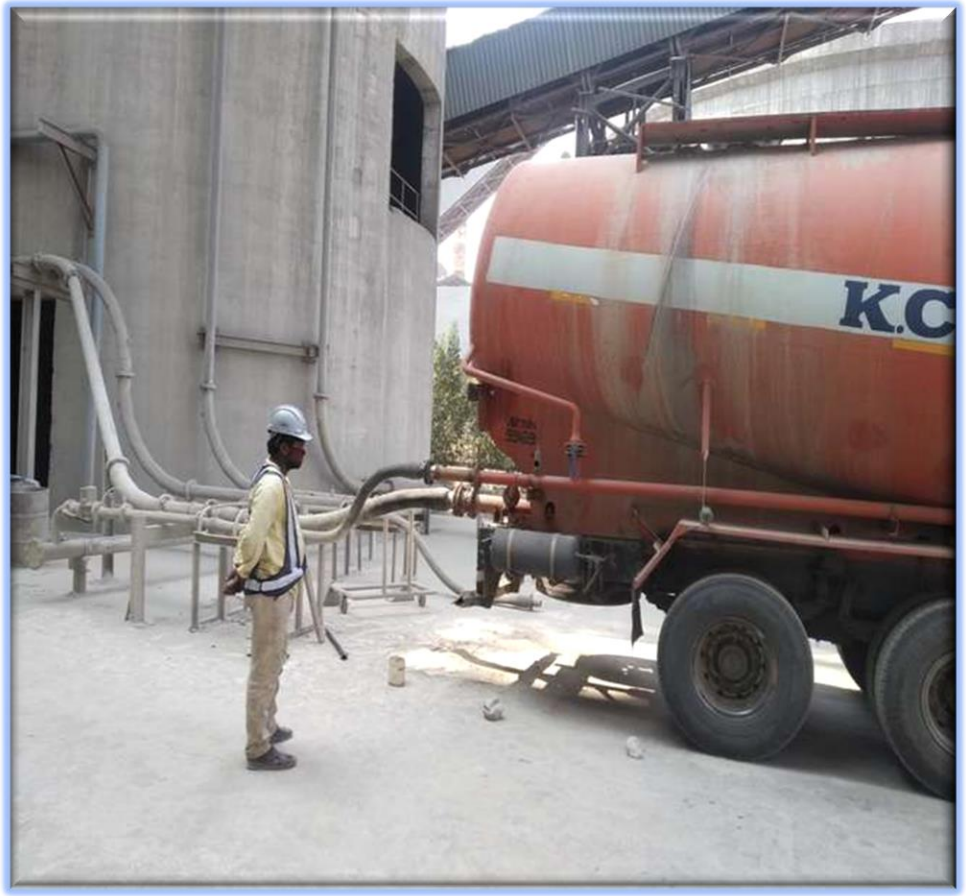
380X4.71 = 1790 KW/H

Fan inlet drop pressure decreased upto = -10 mmwc

Benefit - Power saved = 15 KWH

15kw X 20hr/day x 330days x Rs.5.4 = 5.3 Lakh/year

3.OPTIMIZATION OF FLY ASH TANKER UNLOADING COMPRESSOR



BEFORE: Fly ash tanker unloading to cement mill silo's, miller only operate the compressors at the time of unloading the tanker ,After unloading the tanker by the driver he is going with out information for stopping the compressor and dryer in that case idle running of the compressor.

AFTER: To provide the one person on each shift to unloading the fly ash tanker and after unloading compressor will be stopped by the shift person and also we can avoid the fly ash dust from tanker during the unloading.

Benefits: By providing the shift wise operator power saving will be

114.5 KW X 9Hrs X 300days X Rs.5.4 =Rs.16,81,776/-

Man Power cost:3 Shifts X Rs.358 X 300 Days =Rs.3,22,200/-

Total Benefit : Rs.**13,59,576**/-

4.OPTIMIZATION OF PROCESS COOLING TOWER BY KEEPING AHU-CT BYPASS

Before Modification

After Modification

RM-2 Load Center AHU AC units are running with it's dedicated water cooling tower (Operating load: 7 Kwh)

Modification:

Provided connectivity to the AHU from Line-2 Kiln Cooling Tower.

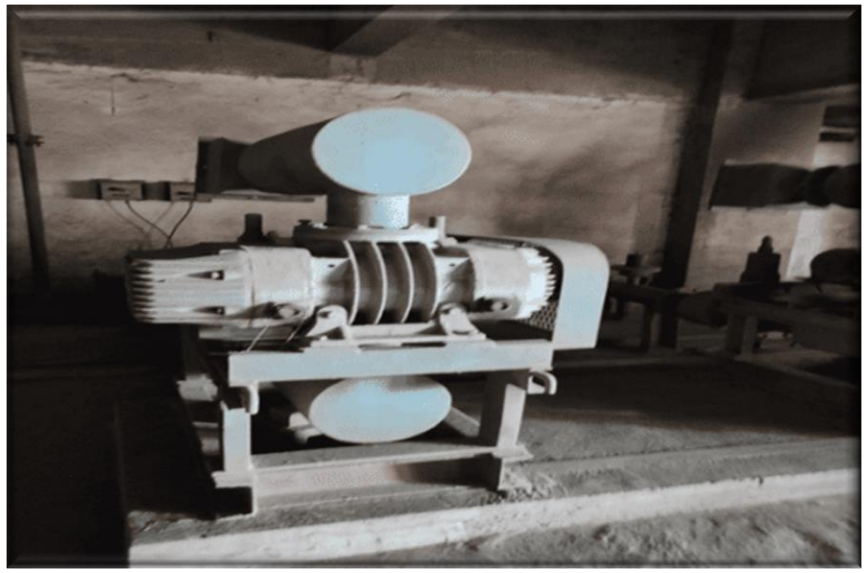
AHU Cooling Tower was stopped after this modification
Net Power Saving: 7KWh

Expected Benefit:

Energy Saving : 50300 KWH/Yr.
Cost Saving : 2.7 Lakhs/ Yr.

5.OPTIMIZATION OF PACKER-1&2 BAGS CLEANING BLOWER

Before Modification



After Modification

Before:
Roots Blower using for Packing plant 1&2 packer bags cleaning device
Operating Load:12KW.
Design Volume: 800m^3/hr,Presurre:0.5Kg/Cm^2.

After: Roots blower is replaced with Air slide blower
Operating Load:5KW
Design Volume: 600m^3/hr,Pressure:0.06Kg/Cm^2.

Energy saving : 12KW – 5KW = 7 KW/hr.

Expected Benefit:
Energy Saving : 50400 KWH/Yr.
Cost Saving : 2.72 Lakhs/ Yr.

UTILIZATION OF RENEWABLE ENERGY

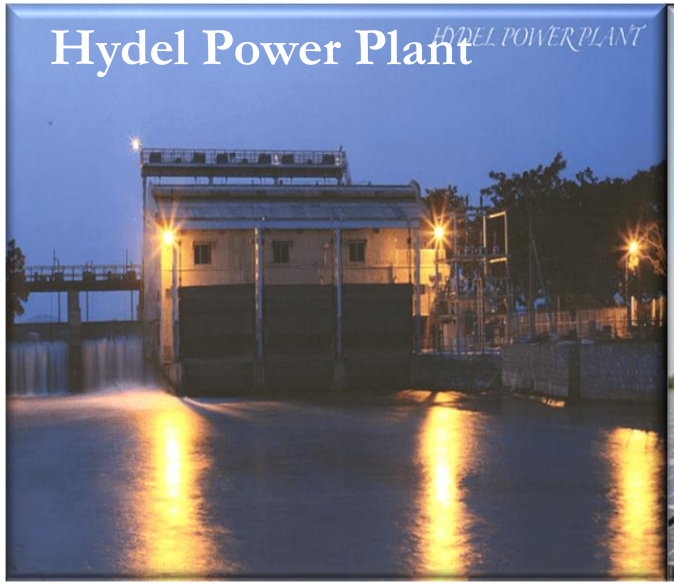
Total Renewable Energy

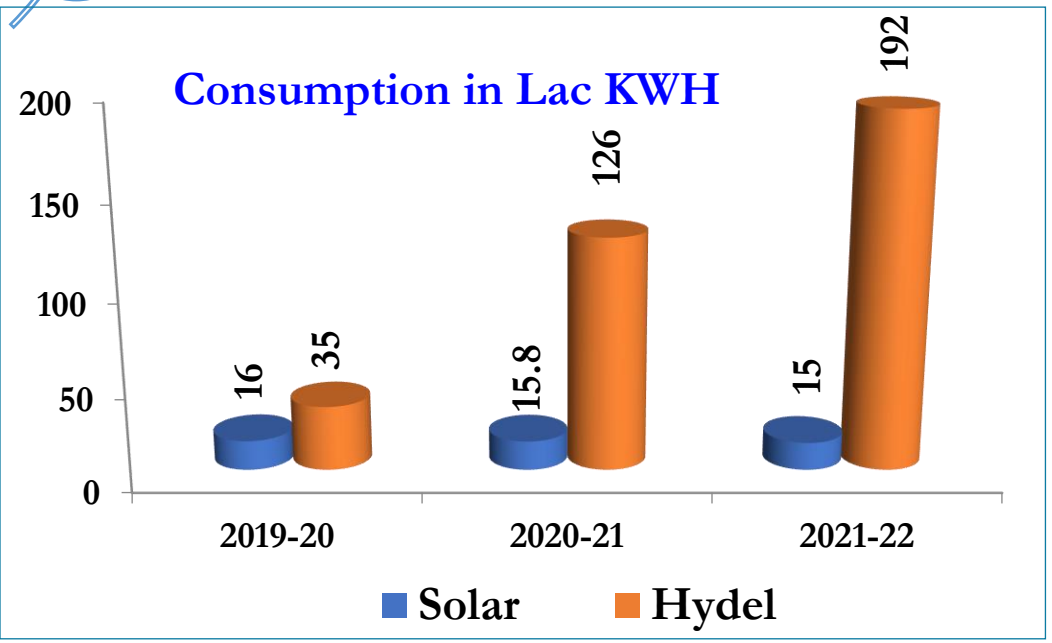
- 12.65 MW

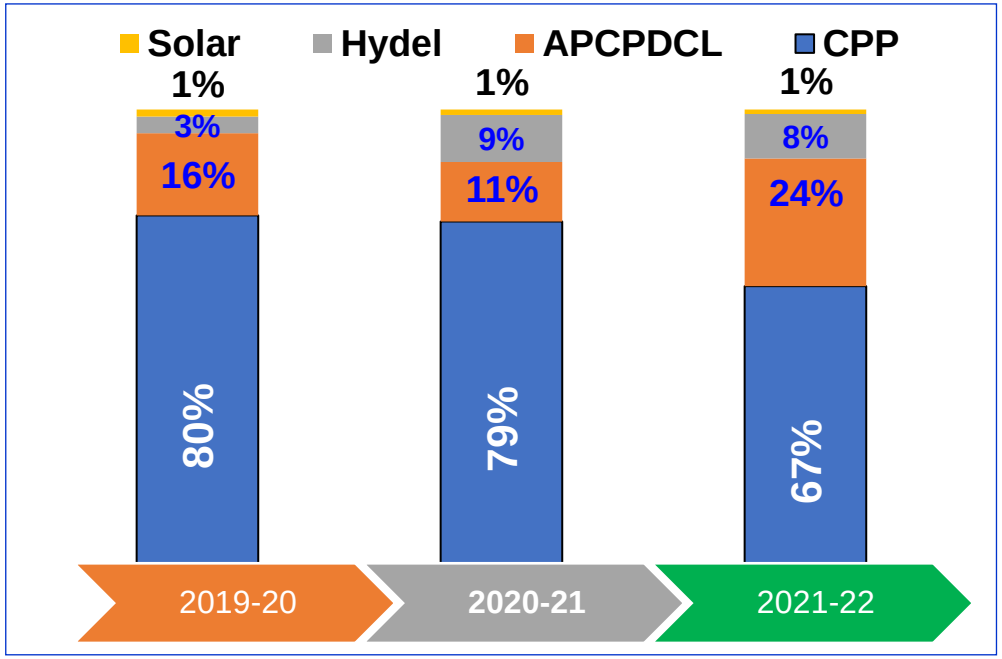
1.15 MW Solar Power

8.25 MW Hydel Power

3.25 MW Wind Power







Solar Energy Utilization

Solar Street lights

INVESTMENT MADE: 6.0 LAKHS
SAVING: 1.0 LAKHS/ANNUM

Solar Water Pump at Mango Garden

INVESTMENT MADE: 5.0 LAKHS
SAVING: 1.2 LAKHS/ANNUM

Solar Water Heaters for Colony – 150 Flats

INVESTMENT MADE: 8.5 LAKHS
SAVING: 6.0 LAKHS/ANNUM

Solar Fencing around the Residential Colony

INVESTMENT MADE: 1.2 LAKHS

Solar Energy Utilization

RPP Obligation: 2021-22

KCP CEMENT UNIT-II RPO OBLIGATION FY 2021-22				
Captive Consumption Units (MWH) -128276				
Sl.NO	Description	MWH	REC	Remarks
A	**Solar RPO – 7%**	**8979**	**8979**	
B	**Non Solar RPO-10%**	**12828**	**12828**	
C	**Hydel Energy Wheeling**	**14367**	**14367**	As per CC bills Hydel Energy adjustment, By Captive wheeling hydel energy we got benefit of 215 Lac Rs/- in RPO by avoiding purchase of Non Solar REC for FY 2021-22
D	**Non Solar RPO**		**14367**	As per Statistical data, Fulfilled Non-solar RPPO by wheeling of Hydel energy for the FY 2021-22.
E	**Solar REC**		**1640**	We have availed approval from SLDC & NLDC for 1640 Solar REC in July 2021
F	**Solar REC**		**971**	We have a stock of 971Solar REC may apply REC Self Retention for fulfilment of Solar RPO for FY 2021-22
G= (A-E-F)	**Solar REC Purchased in IEX/PXIL**		**6368**	To Fulfil Solar RPO FY2021-22 **6368 REC X 2400/- Rs.= 152.83 Lac Rs.** .

IEX INDIAN ENERGY EXCHANGE

RE Certificate for Buyer

Issued On -30-Mar-2022

Number C-IEX_SL001504

Serial No.- IEX_0006368

The KCP Limited

6,368 Certificates

REC Type- SOLAR

This certifies that The KCP Limited is the holder of 6,368 SOLAR non transferable certificates, bought on 30 March,2022, through Indian Energy Exchange Ltd.

This certificate represented hereby is issued and shall be held subject to all the provisions of the regulations and the By-laws of Honorable CERC and Indian Energy Exchange Ltd and any amendments thereto.

WITNESS the signatures of its duly authorized officers this 30 March,2022.

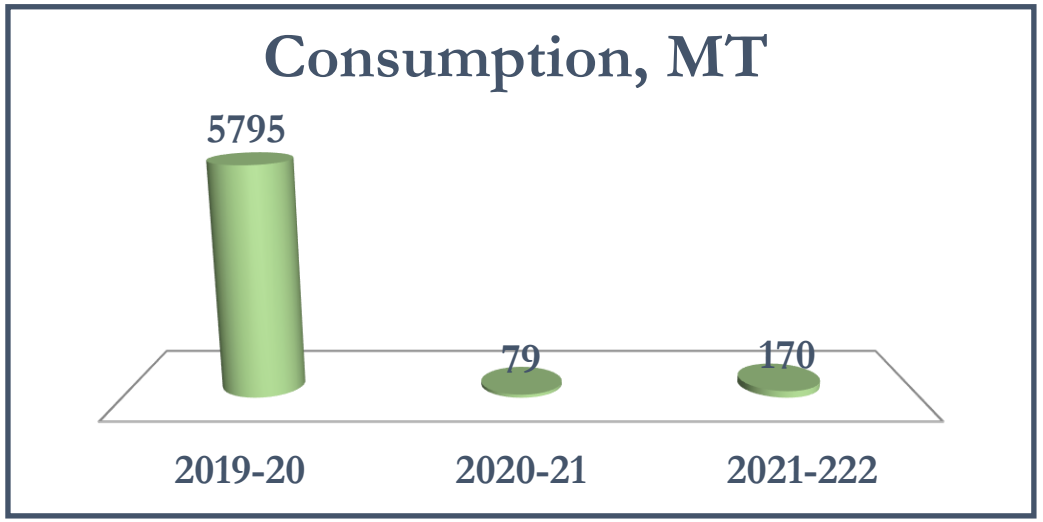
[Name and Designation of Authorized Signatory]

Amit Kumar
Sr VP Market Operations
Indian Energy Exchange Ltd

[Computerized Generated Report, Signature is not required]

Utilization of Waste Material As Fuel

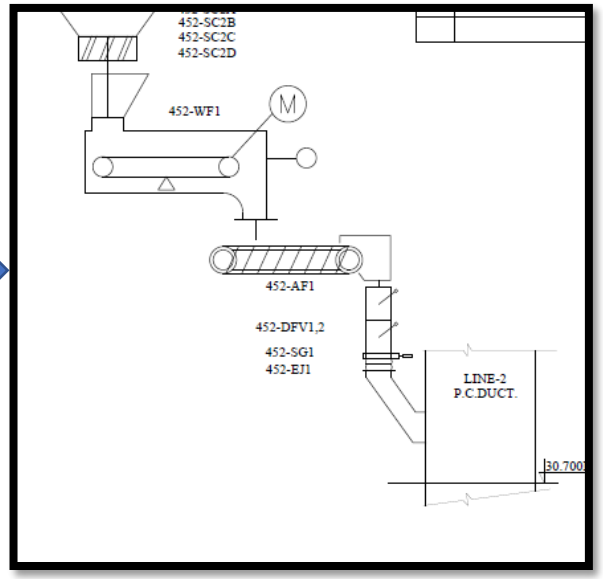
- WOODEN CHIPS
- CARBON BLACK
- PHARMA LIQUID
- PLASTIC WASTE
- MIX AGRO WASTE
- WASTE LUBRICANT



Use of Pharma Liquid AFR

Collection of Garbage in Colony

Incineration in Kiln

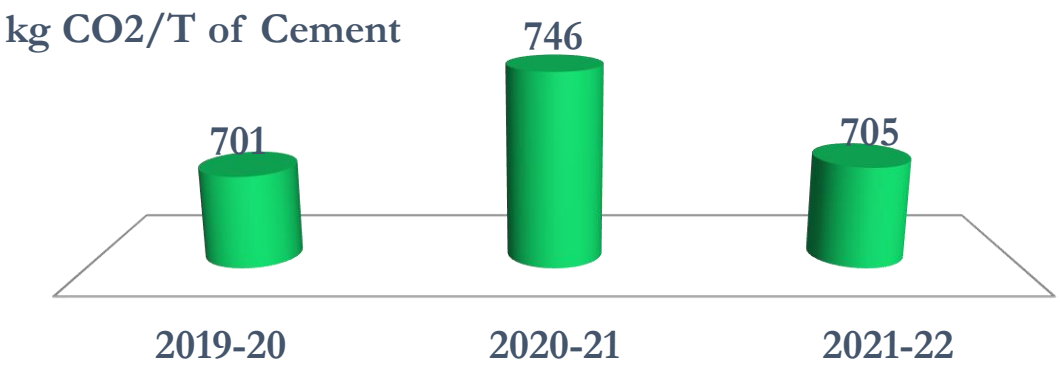


Firing Waste Lubricant oil in PC

Learning from CII Awards ...

- **To bring in recognition to the Organisation through unique innovative practices.**
- **Creating platform for sharing of knowledge which takes to sustainable growth through optimum utilization of resources, diversified Quality Products, Processes and Services for all our Stakeholders.**
- **Understand the Industry best and implement the same in our Organisation.**
- **Creating a competitive edge amongst the industries through right person is assigned for the right job and that they grow and contribute towards organizational excellence**
- **Employee engagement & belongingness increased**

GREEN HOUSE GAS Emissions



- Battery operated vehicle inside the plant for internal people transportation
- Reducing the lead distance of transporting the cement by selecting the nearest distance either from UNIT-I or UNIT-II Cement manufacturing units.
- Reduction of NOx emission levels by adoption of newer technologies like by installation of low NOx pyro jet burner along with long pre-calciner with pyro top supplied by Humboldt Wedag.
- Utilization of fly ash to the maximum permissible extent and promotion of higher PPC volumes to the maximum extent.
- Following Reverse Logistics for transportation of Cement and bringing Coal, Gypsum and Additives.

Miyawaki Plantation performed in 2 Acres

Efforts to reduce GHG emissions

- Miyawaki Plantation.
- Installation of WHR
- Installation of 4.60 MW Solar power plant
- Promoting blended cements
- Colony Street lighting & Plant lighting with LED lights.

Green supply chain

The KCP Limited
Cement Unit-II, Ramakrishnapuram

Green Purchase Policy

Following standard systems & procedures defined for selecting vendors for critical equipment supplies/Major equipment and compliance of same is monitored from time to time.

- KCP is having a purchase manual with pre-defined procedure for all procurements.
- Procurement of EEF LT Motors.
- Procurement of Eco Friendly A/C package units, and VOC free paints.
- Reduce environmental footprint by means of material, energy & water conservation.
- Ensure that asbestos products not procured in the plant.
- Sourcing raw materials from nearby sources so that travel distance is reduced and vehicle usage is curtailed thereby helping environment in minimizing carbon & sound pollution. Usage of Roads and other relevant resources like diesel/ lubs/ tyres shall also be reduced.
- Installation of speed controllers in our new heavy vehicles.
- Procurement of Energy Efficient rated electrical appliances. All the transporters including raw materials transporters shall be advised for strict compliance of Green supply chain transport policy.

Vice President - Operations

Dated: 01 April 2019

Green Supply Chain Implementations:

1. Creating awareness on Environmental Impacts.
2. Rethinking of material requirements and consumption for sustainability.
3. Reducing the use of hazardous material.
4. Improved energy efficiency Materials Purchase.
5. Reducing the pollution and noise levels and using recycled materials and recycling waste.
6. Customer preference.
7. Continuously compliance the environmental regulations.

- Manufacturing of fly ash based pavers, Hallow & Concrete bricks Capacity: 20,000 – 25,000 no's per day (Investment: Rs. 2.0 cores.)
- The fly ash & Bed material generated in CPP are being used for the manufacturing of Hallow bricks, Concrete solid bricks & Colored Pavers.
- Recycling of CPP waste neutralization water to Cement Plant for equipment process & Cooling to avoid scaling in Pipe lines.`

Green supply chain Best Practices

Before:
All bag filter fans in DOL Operation

After:
Installed 22 No's VFD s for all the bag filter fans

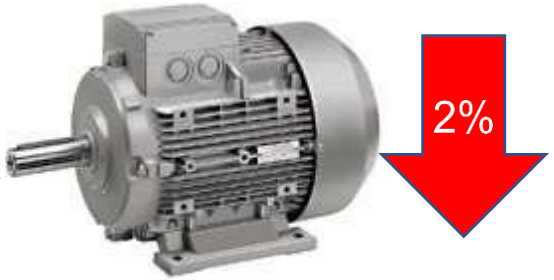
FTL Lights

150 No's LED Lights

Switch over 3 Star Rating AC

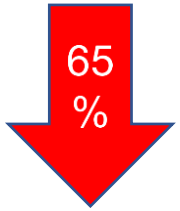
5 Star Inverter Rating

Before: IE2 Motor



After: IE3 Motor

3 Star Rating

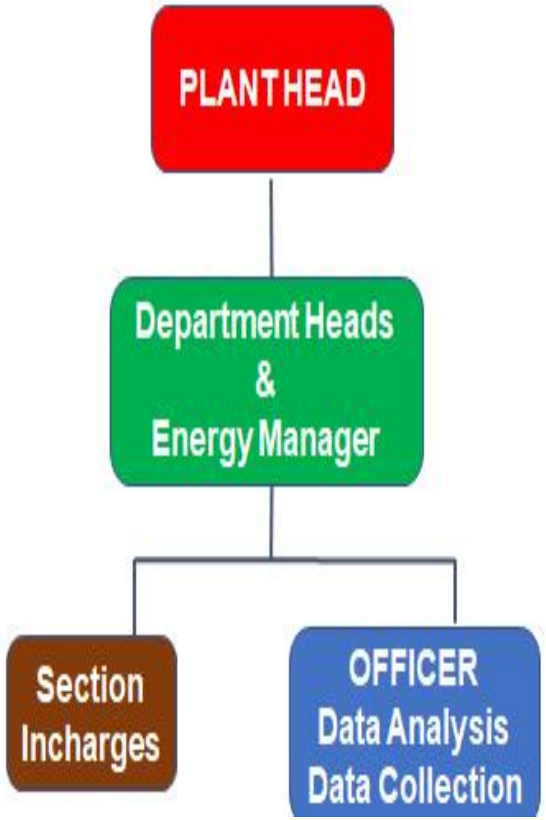


5 Star Rating

Initiatives:

- 100% safety on roads as voice enabled GPS is installed which alerts the driver on possible risk.
- Ship more cement covering more distance than before.
- Better planning is ensured by the company with its stakeholders - transporter, dealer, trucker and society.
- Vehicle service center.

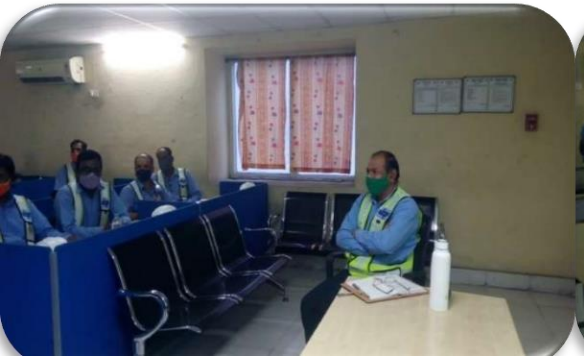
Daily Energy Monitoring Report



Designation	Roles & Responsibilities
Plant Head	• Drives energy saving culture in the organization. • Set targets for reduction in various parameters inline with the vision & Energy policy. • Fiscal validation of Energy saving projects and necessary financial allocation.
Department Heads, Energy Manager	• Review status of Energy saving projects through Daily Review Meetings. • Drive employee involvement initiatives.
Team Members	• Identification & Implementation of energy conservation projects. • Drive employee involvement initiatives. • Generate energy conservation ideas. • Measure, Monitor & analyze section wise energy consumption in the factory.

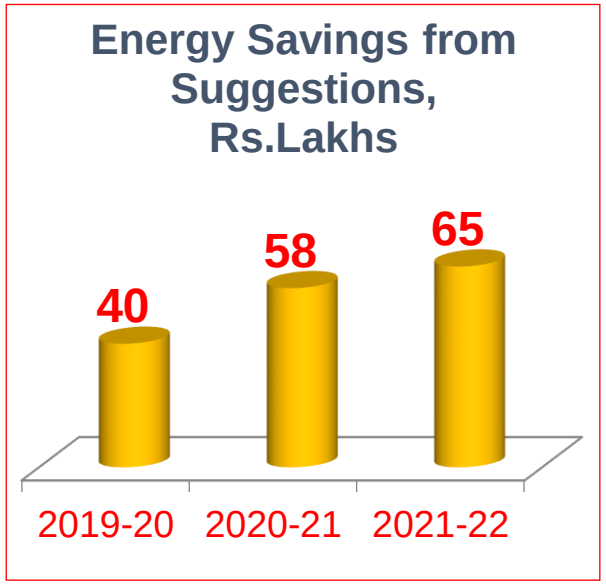
Energy Performance Monitoring Report-2021-2022

S.NO	DESCRIPTION	Sp.Energy Consumption	Responsibility	TARGET FY 21-22	ACTUAL
1	LS CRUSHER	Kwh/Ton of Lime Stone	Y.SUBBARAO	0.72	0.70
2	RAW MILL-1	Kwh/Ton of Raw meal	M.SATYANARAYANA	12.00	12.76
3	RAW MILL-2	Kwh/Ton of Raw meal	Y.KISHORE BABU	12.50	12.70
4	KILN-1	Kwh/Ton of Clinker	P NARASIMHA RAO	18.00	17.77
5	KILN-2	Kwh/Ton of Clinker	J V S GUNNAIAH RAJU	18.00	17.70
6	COAL MILL-1	Kwh/Ton of Coal	M.INNA REDDY	15.00	15.21
7	COAL MILL-2	Kwh/Ton of Coal	E RAMU	17.00	15.76
8	CEMENT MILL-1	Kwh/Ton of Cement	P.SRINIVASARA RAO	26.00	27.42
9	CEMENT MILL-2	Kwh/Ton of Cement	CH SURESH REEDY	26.00	29.42
10	CEMENT MILL-3	Kwh/Ton of Cement	CH V RAMARAJU	24.50	25.32
11	PACKING PLANTS	Kwh/Ton of Cement	P BIXAM & N S RAJU	0.65	0.63
12	UTILITIES	Kwh/Ton of Clinker	G.MALLESH	1.7	1.73
13	SERVICES	Kwh/Ton of Cement	MD.RAHIM	2.0	1.29
14	HEAT CONSUMPTION	KCal/Kg of Clinker	T SAMBASIVA RAO	675	681
15	EXPLOSIVE ENERGY	Tons/Kg of Explosive	P.RAMAKRISHNA	9.00	9.27




Strategies adopted for Team work & employee involvement

- ✓ kaizen & Suggestion Scheme
- ✓ Cross Functional Team
- ✓ Young Leaders Forum
- ✓ Chat with Unit Head
- ✓ Employee Energy Score Card
- ✓ Participation in Seminars
- ✓ External trainings
- ✓ Energy Conservation week
- ✓ Safety Messages sharing in Gate meeting / monthly safety magazine
- ✓ National Safety Day Celebrations various contests
- ✓ Safety Committee meeting members participation
- ✓ Monthly Energy committee meeting
- ✓ Safety Walks



Employee Recognition at shop floor level

Energy Scorecard for Monitoring the performance of major Equipment's by the team members

ENERGY TEAM RESPONSIBILITIES

S.NO.	DESCRIPTION	SEC	NAME	TARGET FY 21-22	ACTUAL
1	LS CRUSHER	Kwh/Ton of Lime Stone	Y.SUBBARAO	0.72	0.70
2	RAW MILL-1	Kwh/Ton of Raw meal	M.SATYANARAYANA	12.00	12.76
3	RAW MILL-2	Kwh/Ton of Raw meal	Y.KISHORE BABU	12.50	12.70
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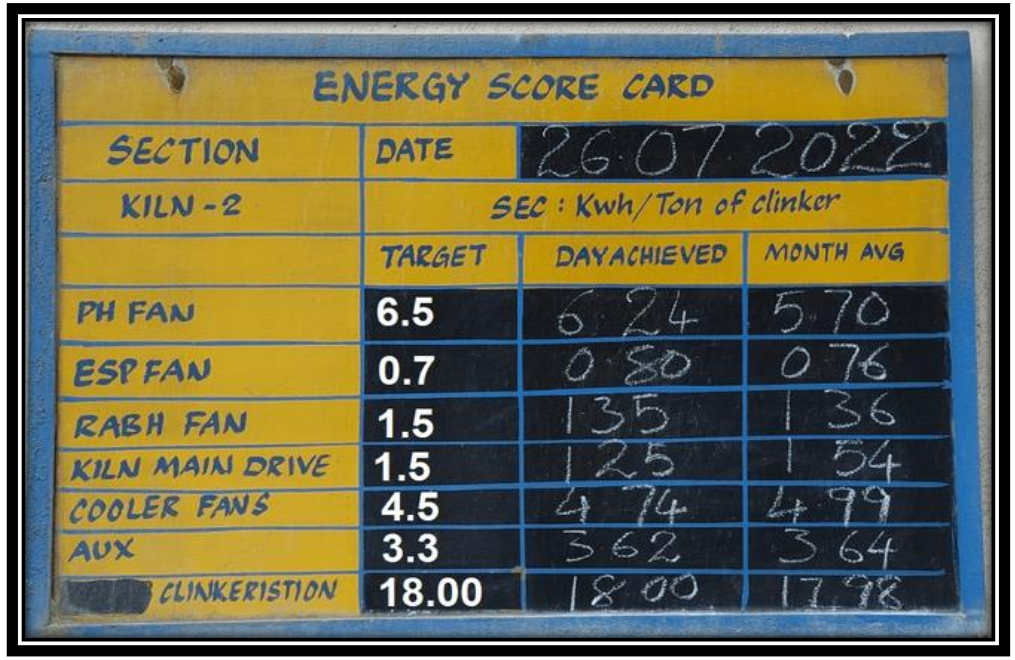

Focus for the Energy Efficiency

- Daily Monitoring
- Trainings
- Innovative Modifications
- Periodical upgradation of new technological equipment's

Integrated Management System

9001:2015 | 50001:2018 | 14001:2015 | 45001:2018

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 258117-2018-AQ-IND-RvA | Initial certification date: 08 September 1994 | Valid: 01 May 2021 – 30 April 2024

This is to certify that the management system of

The KCP Limited

Cement Unit - II (Manufacturing Division)

Ramakrishnapuram, Muktyala (V), Jaggayyapet (M), Krishna Dist - 521 457, India

and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:

ISO 9001:2015

This certificate is valid for the following scope:

Manufacture & sale of clinker and cement

Place and date: Chennai, 13 April 2021

For the issuing office: DNV - Business Assurance, ROMA, No. 10, GST Road, Alandur, Chennai - PIN - 600 016, India

Sivadasan Madiyath, Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV GL Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnvgl.com/assurance

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 10000450431-MSC-RvA-IND | Initial certification date: 24 May 2016 | Valid: 21 August 2021 – 21 August 2024

This is to certify that the management system of

The KCP Limited - Cement Unit - II (Manufacturing Division)

Ramakrishnapuram, Muktyala Village, Jaggayyapet Mandal,Krishna District - 521 457, Andhra Pradesh, India

has been found to conform to the Energy Management System standard:

ISO 50001:2018

This certificate is valid for the following scope:

Manufacture of clinker and cement

Place and date: Barendrecht, 30 June 2021

For the issuing office: DNV - Business Assurance, Zwolseweg 1, 2994 LB Barendrecht, Netherlands

Erle Koek, Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 197474-2016-AE-IND-RvA | Initial certification date: 15 April 2016 | Valid: 01 May 2021 – 30 April 2024

This is to certify that the management system of

The KCP Limited

Cement Unit - II (Manufacturing Division)

Ramakrishnapuram, Muktyala Village, Jaggayyapet Mandal, Krishna District - 521 457, Andhra Pradesh, India

has been found to conform to the Environmental Management System standard:

ISO 14001:2015

This certificate is valid for the following scope:

Manufacture of clinker and cement

Place and date: Chennai, 13 April 2021

For the issuing office: DNV - Business Assurance, ROMA, No. 10, GST Road, Alandur, Chennai - PIN - 600 016, India

Sivadasan Madiyath, Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

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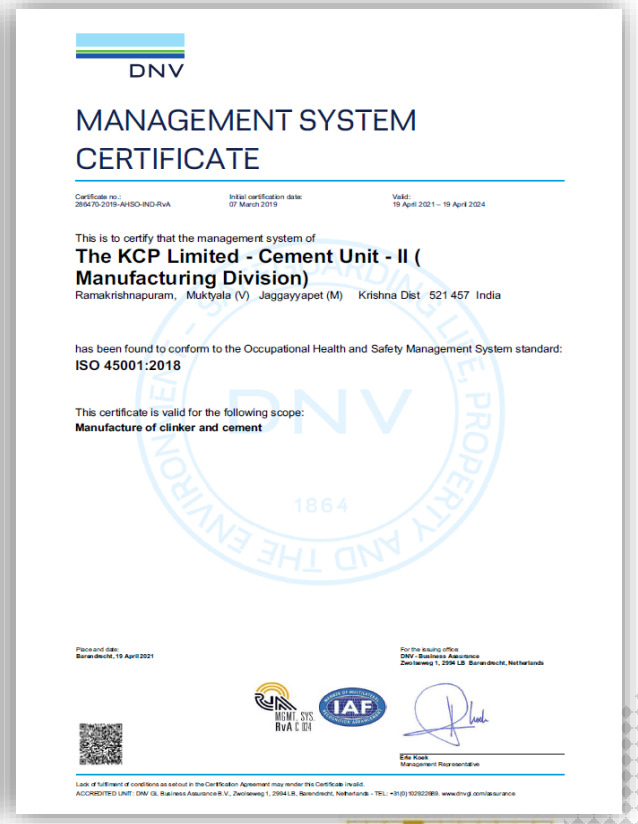


DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 286470-2019-AHSO-IND-RvA | Initial certification date: 07 March 2019 | Valid: 19 April 2021 – 19 April 2024

This is to certify that the management system of

The KCP Limited - Cement Unit - II (Manufacturing Division)

Ramakrishnapuram, Muktyala (V) Jaggayyapet (M) Krishna Dist 521 457 India

has been found to conform to the Occupational Health and Safety Management System standard:

ISO 45001:2018

This certificate is valid for the following scope:

Manufacture of clinker and cement

Place and date: Barendrecht, 19 April 2021

For the issuing office: DNV - Business Assurance, Zwolseweg 1, 2994 LB Barendrecht, Netherlands

Erle Koek, Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV GL Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnvgl.com/assurance

kcp

Certified ISO 50001 & Implementation of GreenCO

Energy Policy

The KCP Limited
CEMENT UNIT-II
RAMAKRISHNAPURAM

IMS Policy

(Quality, Environment, Energy and Occupational Health & Safety)

We are committed to achieve sustainable growth and continual improvement in the performance of Integrated Management System in the manufacturing of clinker and cement.

We shall achieve this by:

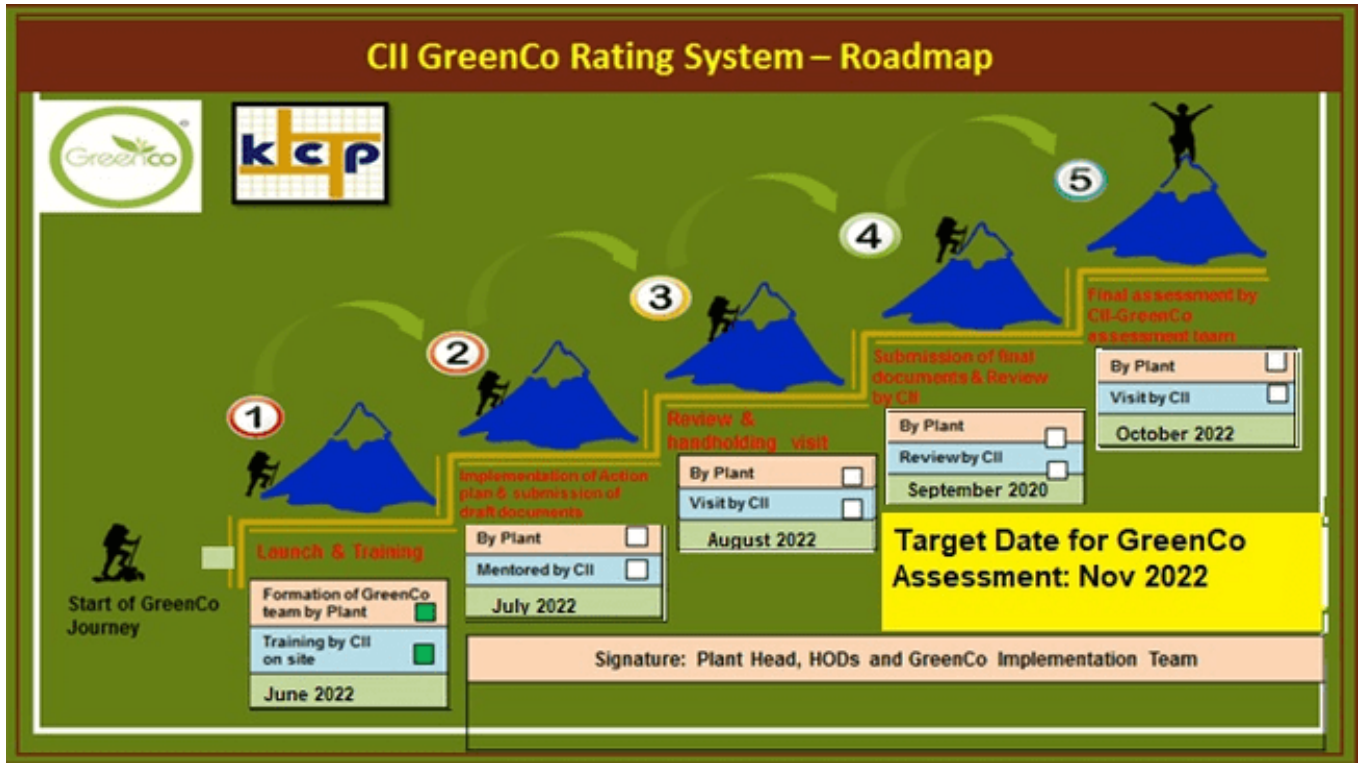
- Manufacturing and supply of Clinker , Cement with consistent quality
- Protection of the environment and prevention of pollution
- Ensuring the availability of information and necessary resources to achieve IMS objectives and Energy targets
- Improving the energy performance related to energy efficiency, energy usage and energy consumption
- Providing safe and healthy working conditions, including elimination of hazards and risk reduction, for the prevention of work related injury and ill health
- Promoting consultation and participation of workers and their representatives
- Complying with all applicable legal and other requirements
- Implementing Technological Innovations and providing with latest equipment,
- Knowledge enhancement and upgrading the professional skills through training and motivation, and
- Integrating the management systems' requirements with business processes of KCP

Dated: 01 Sep 2020

Dr V L INDIRA DUTT
CHAIRPERSON & MANAGING DIRECTOR

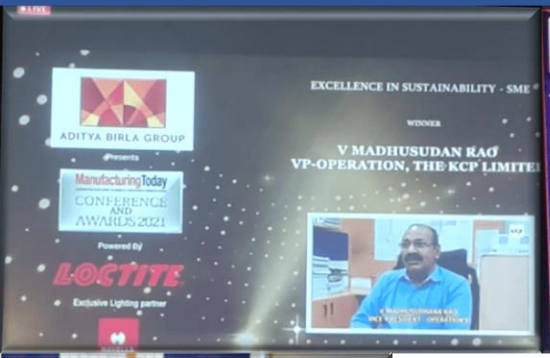
Total Investment made in last three years – 617.5 lakhs

Journey Towards GreenCo Rating System

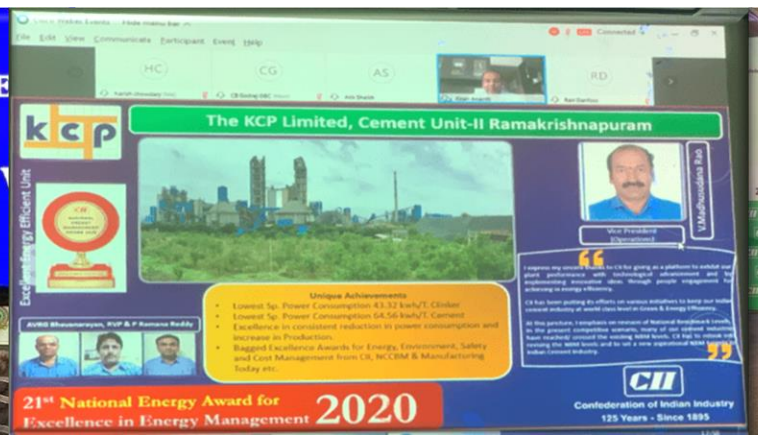


We aimed to achieve Organizational Excellence through Innovation and become role model to top Green Co rating Cement industries". In line with this, action plan has been initiated and implementing all qualitative measures for successful completion of final assessment to be done in Nov 2022.

THE KCP LIMITED, CEMENT UNIT-II, MUKTYALA, *AWARDS RECEIVED AS ON…*



- 2021:Excellence in Sustainability Award from Manufacturing Today
- 2021:National Award for "Excellent Energy Efficient Unit" for the year 2020-21 from CII in Cement Sector
- 2021: National Energy Leader award for the year 2020-21 from CII in Cement Sector
- 2021:Sectorial Topper in Cement Sector by CII-SR EHS Excellent Gold Award 2021
- 2020: 5 Star for Excellence in EHS practices
- 2020: National Award for Excellence in water Management
- 2020: National Award for Excellence in water Management
- 2020: Bagged First Place in Sectorial and Sustainability, in recognition of best practices in Environment, Health & Safety.
- 2020: National Excellence Energy Efficient in Energy Management
- 2019: 5 Star for Excellence in EHS practices
- 2019: Excellence in Sustainability by Manufacturing Today
- 2019: National Excellence Energy Efficient in Energy Management



THE KCP LIMITED, CEMENT UNIT-II, MUKTYALA, *AWARDS RECEIVED AS ON…*

- 2018-19: NCB-Excellence in the field of Energy and Environment
- 2018: National Energy Efficient in Energy Management
- 2017-18: NCB-Excellence in the field of Energy and Environment
- 2017: National Excellent Energy Efficient in Energy Management
- 2016-17: NCB-Best Electrical Energy Performance Award
- 2016: National Energy Efficient in Energy Management

- 2016: 3 Star for Appreciation in EHS practices
- 2015: National Excellent Energy Efficient in Energy Management
- 2015: Most useful Presentation Award
- 2014-15: NCB-Best Electrical Energy Performance Award
- 2014: National Excellent Energy Efficient in Energy Management
- 2014: National Energy Conservation Award (BEE) in Cement Sector by Government of India, Ministry of Power
- 2013-14: NCB-Best Electrical Energy Performance Award

kcp

Thank You

Contact Details:
Sri.V.Madhusudana Rao
Vice President-Operations
Email: vmr@kcp.co.in
Ph.No:08654-296006/7/8

Save
Energy & Environment