

# Hindalco Industries Limited, Renukoot



We manufacture materials that make the world -  
**Greener - Stronger - Smarter**

Team Members :

Vivekanand (Asst. Gen Manager)

Vivek Agrawal (Manager )

Rajnish Singh (Asst. Manager)



# About the Company :



- A Flagship Company of Aditya Birla Group
- Established in 1962 with “Kaiser Technology”
- A pioneer Non-ferrous Metals Powerhouse– : Industry leader in both segments of Aluminium and Copper
- Renukoot Operations include:
  - Alumina Refinery, Co-generation Unit, Smelter Plant
  - Fabrication (Down Stream Production) & Captive Power Plant (35 km away)
- Commenced its operations with initial capacity of 20,000 TPA metal and 40,000 TPA Alumina.
- Emerged as the largest integrated Aluminium manufacturing company in India.
- Globally 12th largest Aluminium and Alumina producer.
- Has been, strategically, a healthy mix of Organic and Inorganic Growth.
- Capacity Enhancement through modernization of the plants, upgrading the processes and incorporating energy efficient latest technologies.

# Vision & Mission

## Vision :

To be a Premium Metals Major, Global in size and reach, Excelling in everything we do, and creating value for its stack holders.

## Mission :

To relentlessly pursue the creation of superior shareholder value by exceeding customer expectations profitably, unleashing employee potential and being a responsible corporate citizen adhering to our values.

## Group Purpose:

"To enrich lives, by building dynamic and responsible businesses and institutions, that inspire trust," provides us with a unique lens to measure our every action and its consequent impact on our stakeholders, community, and the world at large.



**Taking India to  
the world**

## **“Values” - We value**

**Integrity : Honesty in Every Action**

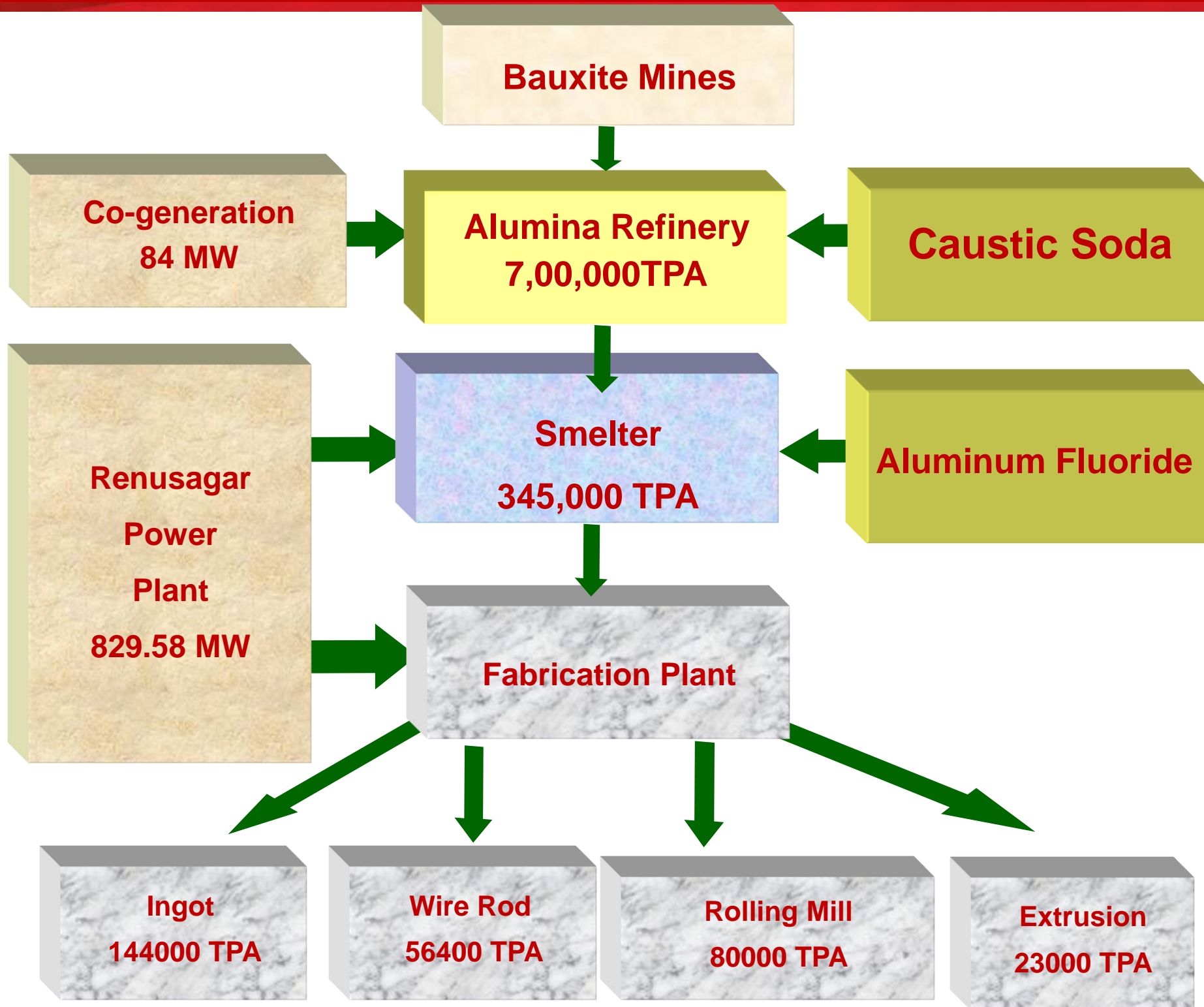
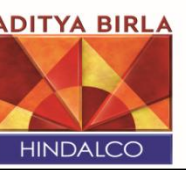
**Commitment : Deliver On The Promise**

**Passion : Energized action**

**Seamlessness : Boundary less in letter and spirit**

**Speed : One step ahead always**

# Capacities Overview & Salient Features of Hindalco Pot Lines



Pot line	Start up	Total No. of pots	Line Current at Start (KA)	Line Current at present (KA)	% Increase	Prod, MT/day (@94.8% CE)
1	1962 + FY 06 +FY07	166 + 2 + 6	50	65.5	31	87
2	1965	176	55	65.5	19	88
3	1967	176	55	65.5	19	88
4	1974+FY08+FY10	190 +10+6	60	70.0	17	110
5	1981 +FY08 +FY11	190 +10+6	60	70.0	17	110
6	FY91+FY08	190 +10	63.2	70.0	11	107
7	FY96 +FY08	190+10	63.2	70.0	11	107
8	FY98 +FY08	190+10	63.2	70.0	11	107
9	FY02+FY05	190+9	65	70.0	8	106
10	FY03 +FY04	190 +10	65	70.0	8	107
11	FY03 + FY08	199 + 2	65	70.3	8	108
Plant		2138	60.7	69	18	4 1125



# HIL's Energy Policy Focuses on...

- ❖ Reduction of specific energy consumption in all operations and activities.
- ❖ Adopt energy efficient technologies /equipment for all new projects.
- ❖ Replace old equipment and technologies with latest energy efficient technologies / equipment continually.
- ❖ Ensure control over energy consumption by periodic Management Reviews.
- ❖ Creating awareness amongst employees and Society.

## Honest Adherence to Policy's Themes



### ENERGY AND CARBON POLICY

We, at Hindalco Industries Limited, operating across the value chain in non-ferrous metals, understand that energy consumption and carbon emission are two most important issues that currently concern the country and the planet. We shall take responsible actions within the company for prudent and efficient use of energy sources to achieve continual improvement in our energy and carbon performance.

To achieve this and in consonance with the organization's purpose, we shall:

- Meet legal compliance and other requirements related to energy and carbon across all our operating units.
- Raise awareness on the responsible use of energy resources at all levels of our operations and encourage efficient utilization of such resources with focus on reducing the energy and carbon intensity of our operations.
- Ensure the availability of information and necessary resources to achieve objectives and targets on Energy & Carbon.
- Allocate sufficient resource such as organizational structure, technology and finance for implementation of the policy and for regular monitoring of performance.
- Support design activities that consider energy & carbon performance improvement.
- Explore and utilize renewable energy, waste heat and clean fuel wherever techno-economically feasible across our operations.
- Adopt economically viable new/efficient clean technologies and best practices for improving energy efficiency and for emitting less carbon.
- Continually improve energy performance and carbon management in our units by adopting nationally/internationally accepted management systems, including setting and reviewing targets and monitoring, measuring and reporting their progress.
- Support the procurement of energy efficient products and services that impact energy & carbon performance.
- Work in partnership with regulatory service authorities, relevant suppliers, contractors and all stakeholders, as applicable, to understand and initiate improvement projects.
- Measure, monitor and report direct and indirect energy usage and carbon emissions in accordance with internationally recognized protocols and set up systems for comparison and benchmarking across our units and operations.

This policy shall be made available to all employees, suppliers, customers, community, other stakeholders, as appropriate and shall be reviewed every 3 years for its suitability and updated as necessary.

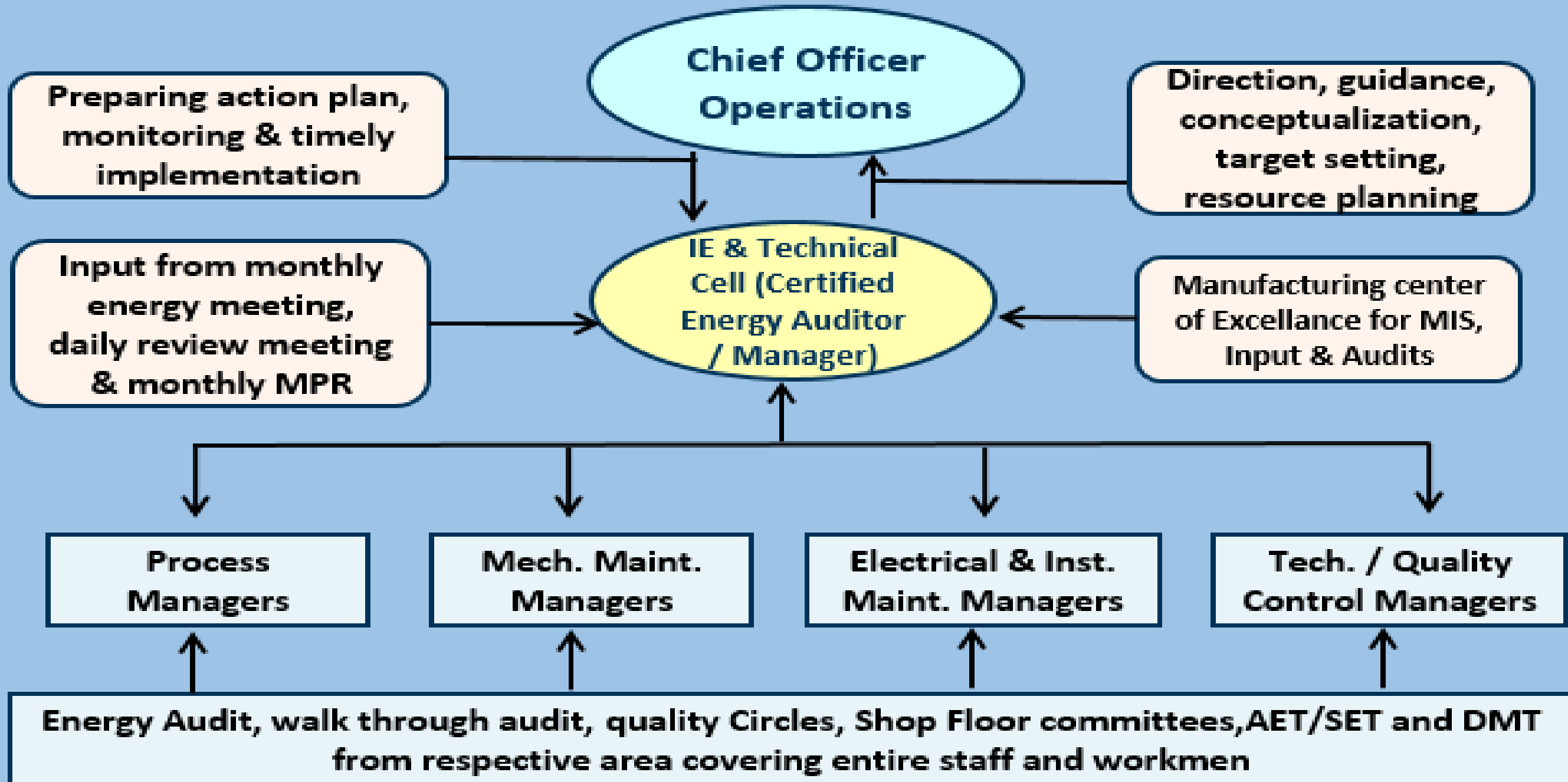
  
SATISH PAI  
MANAGING DIRECTOR

Date : 30 June 2020

HINDALCO INDUSTRIES LIMITED

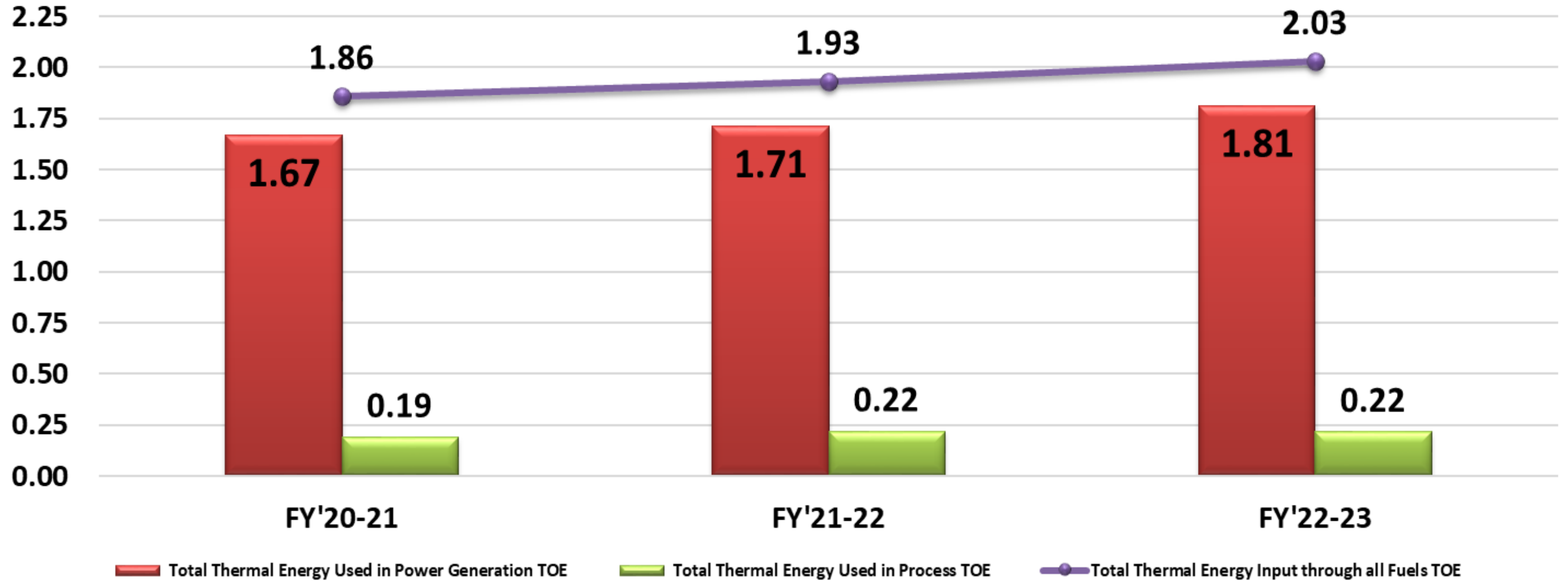
# Our Approach

## Top Down Bottom Up Approach



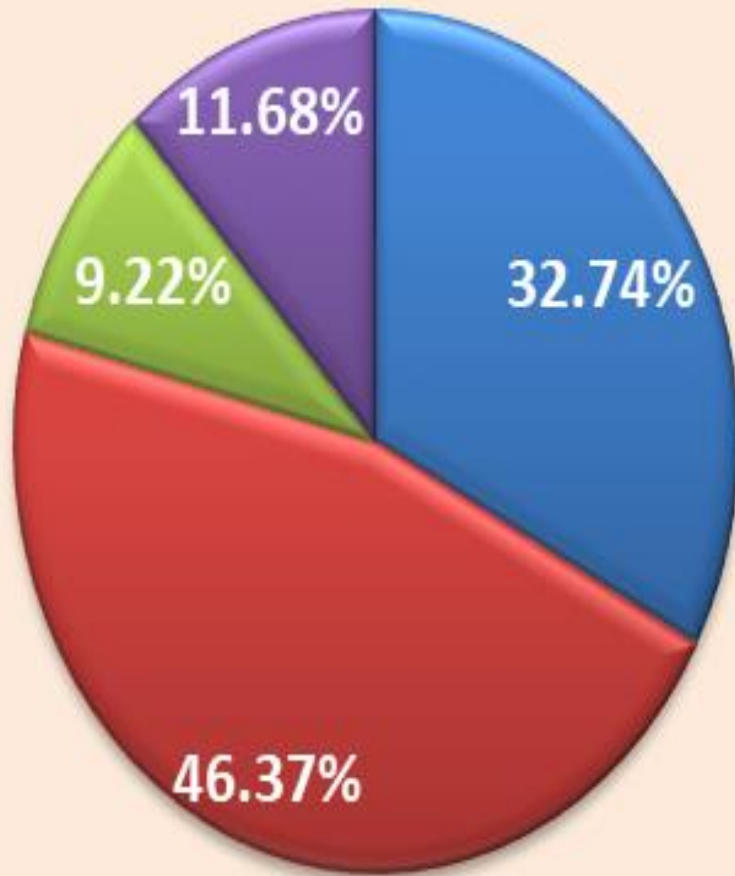
# Total Thermal Energy Consumption( FY'21-23)

Total Thermal Energy Input through all Fuels in million TOE



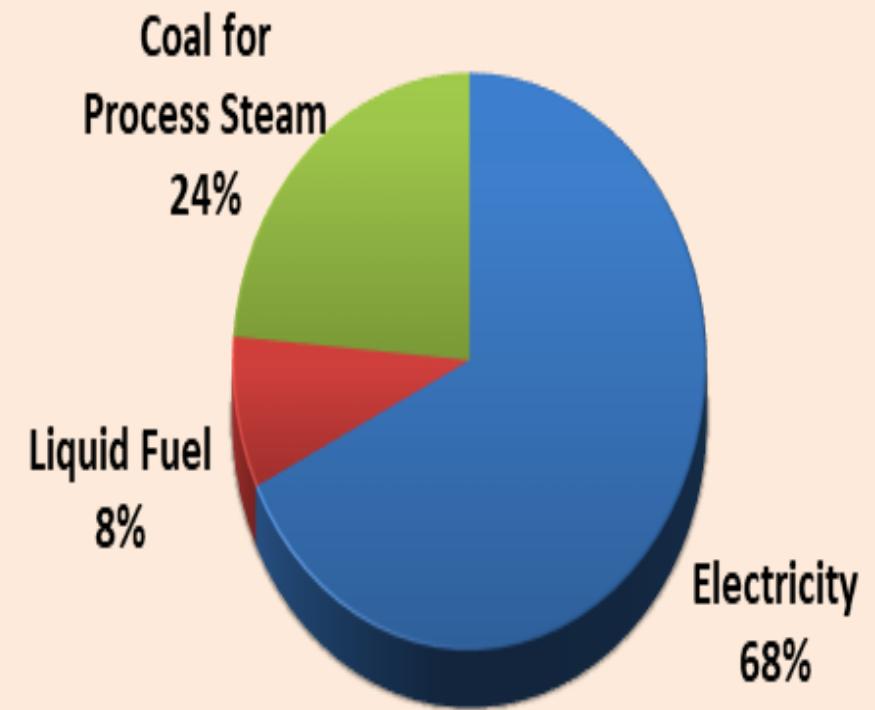
# AI. Manufacturing Cost : An energy Intensive Process ( FY'22-23)

% sharing of manufacturing Cost in FY'22-23



■ Energy Cost ■ Raw material ■ salary & wages ■ others

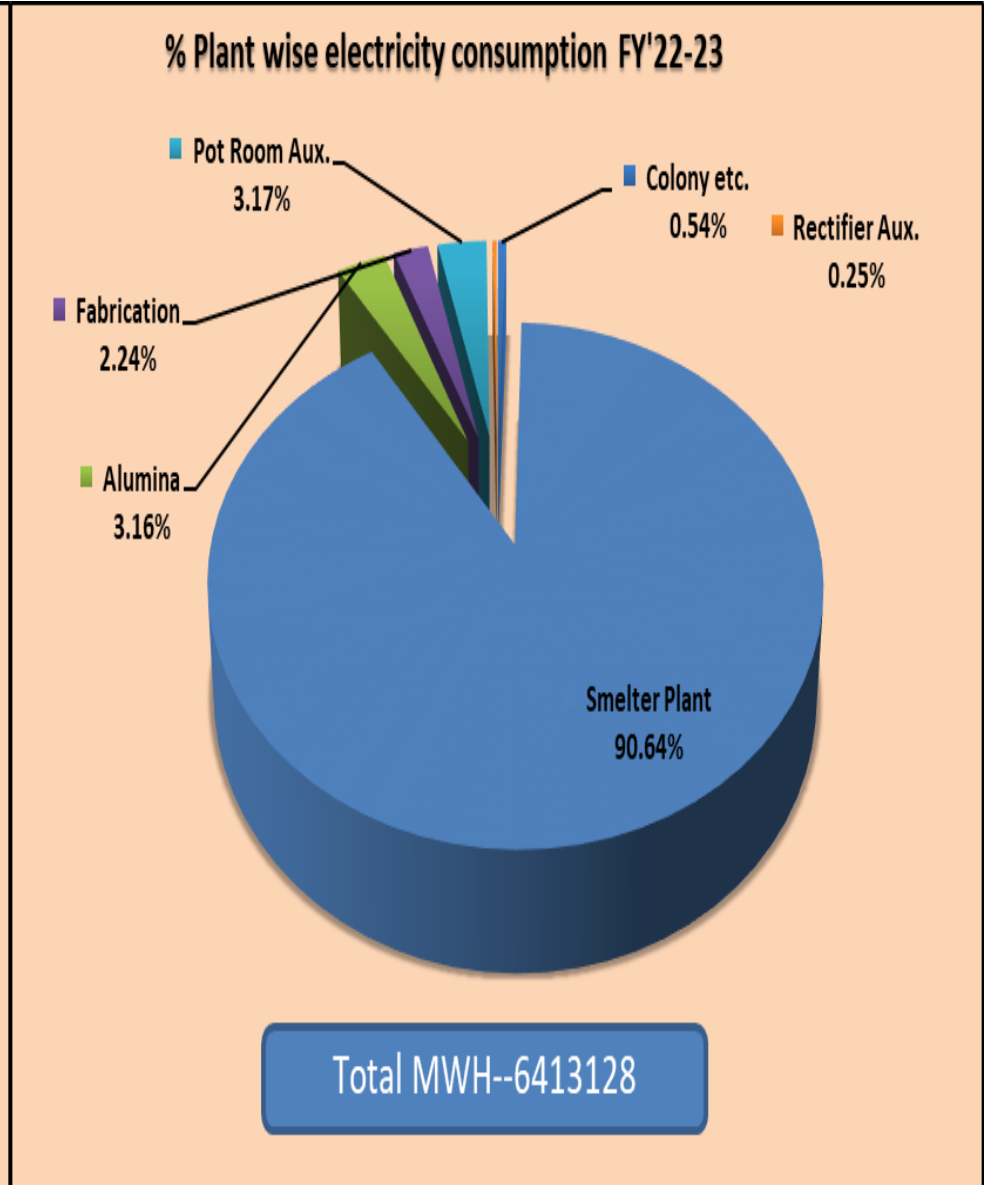
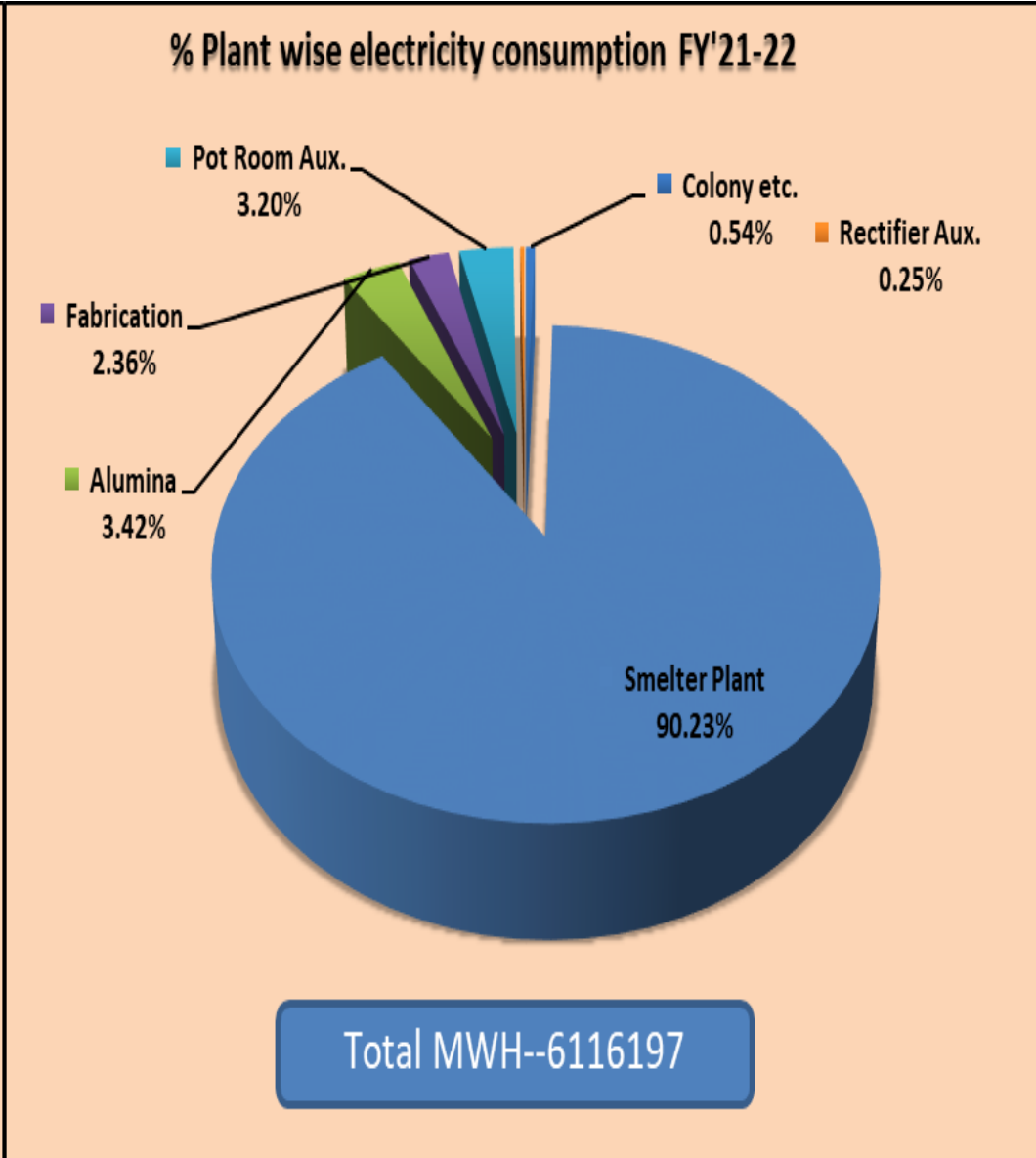
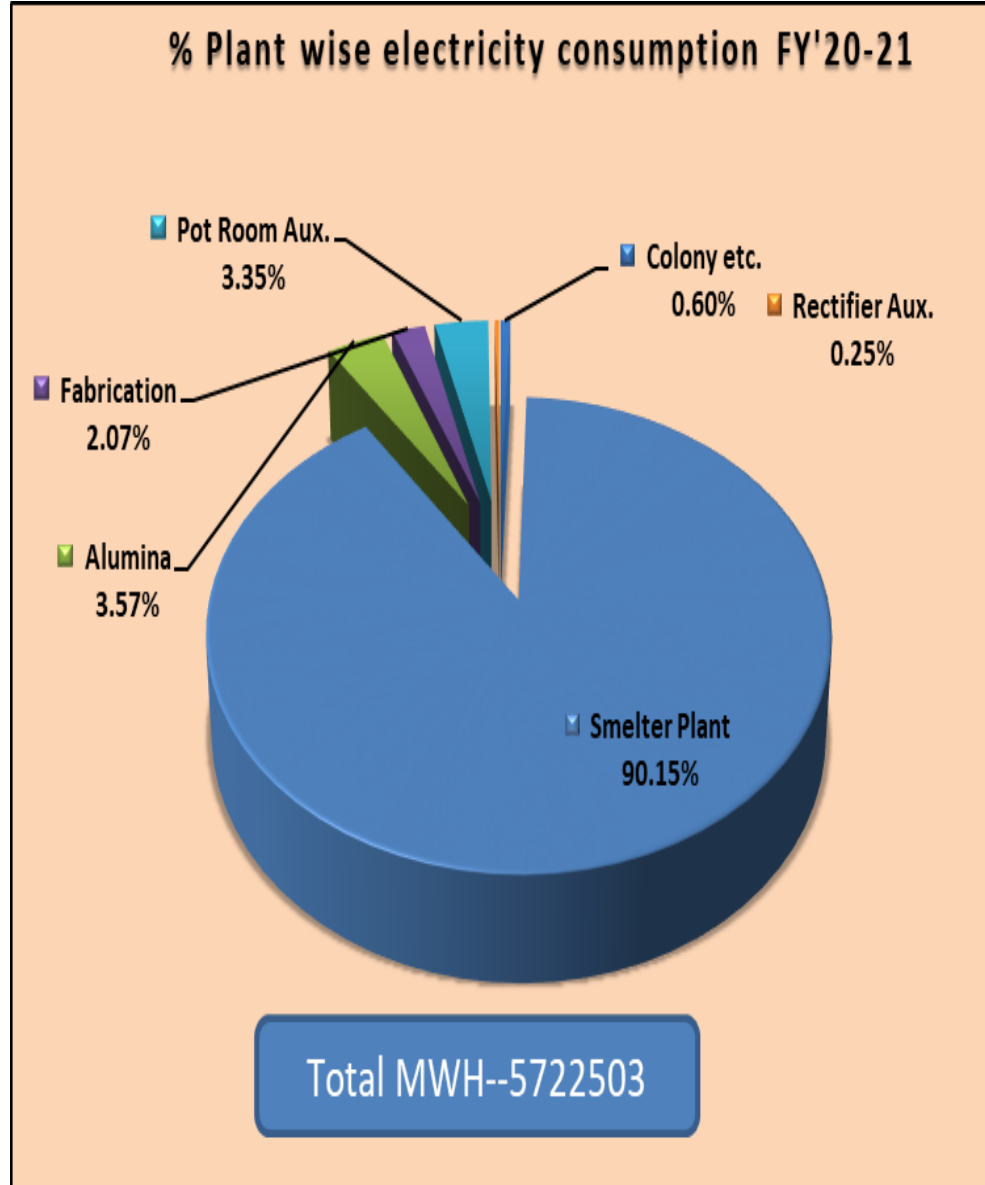
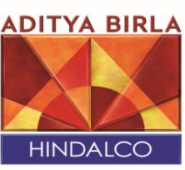
In FY'22-23-Total Energy Consumption (in %)



■ Electricity ■ Liquid Fuel ■ Coal for Process Steam

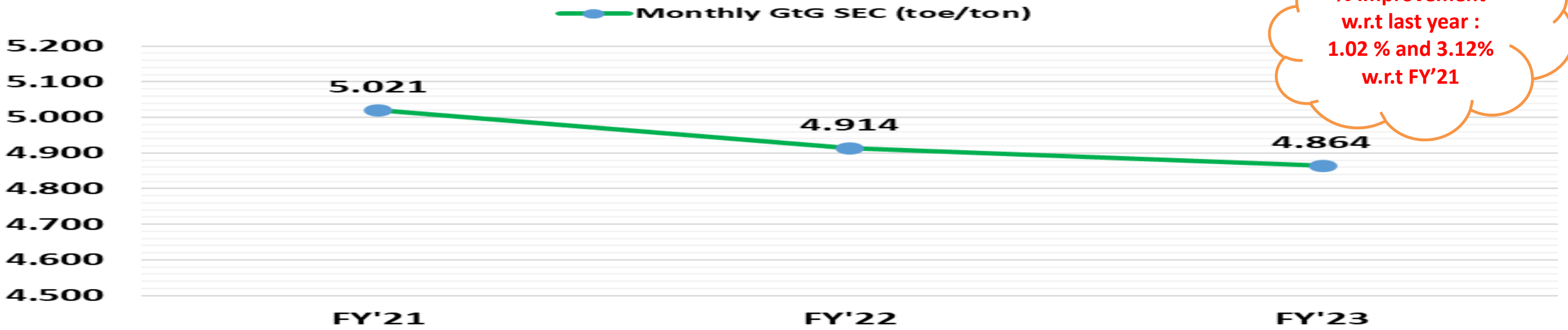


# Total Electrical Energy and it's distribution (FY'21-23)

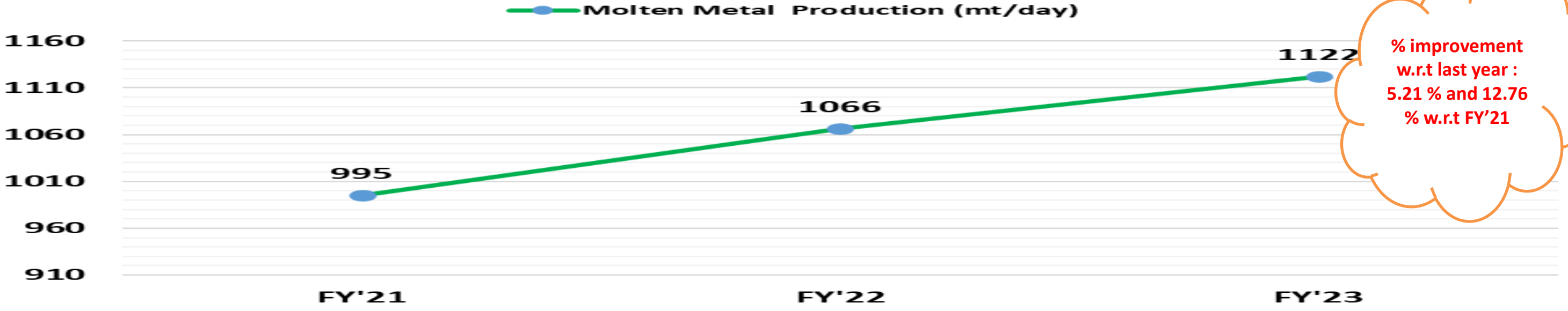


# Trend : Raw Energy Consumption @ GtG basis

## Gate-to-Gate Energy consumption



## Molten Metal Production Per day

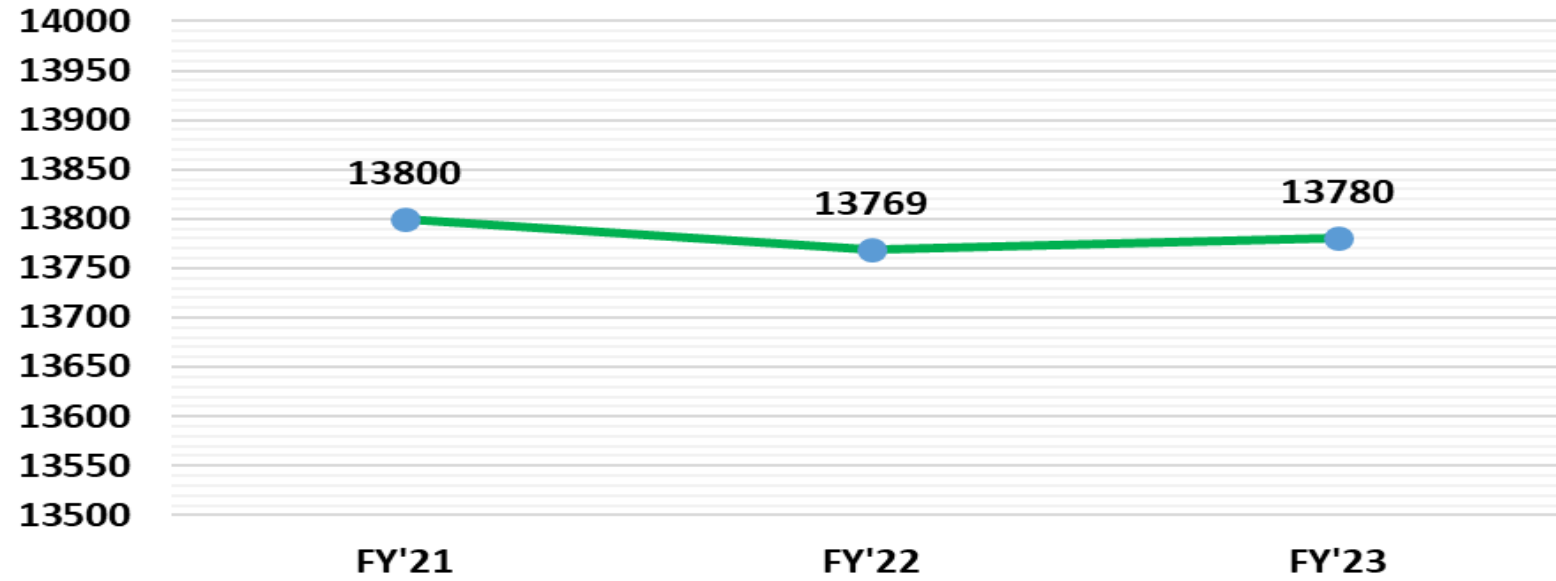




# Trend : Raw Energy Consumption @ GtG basis

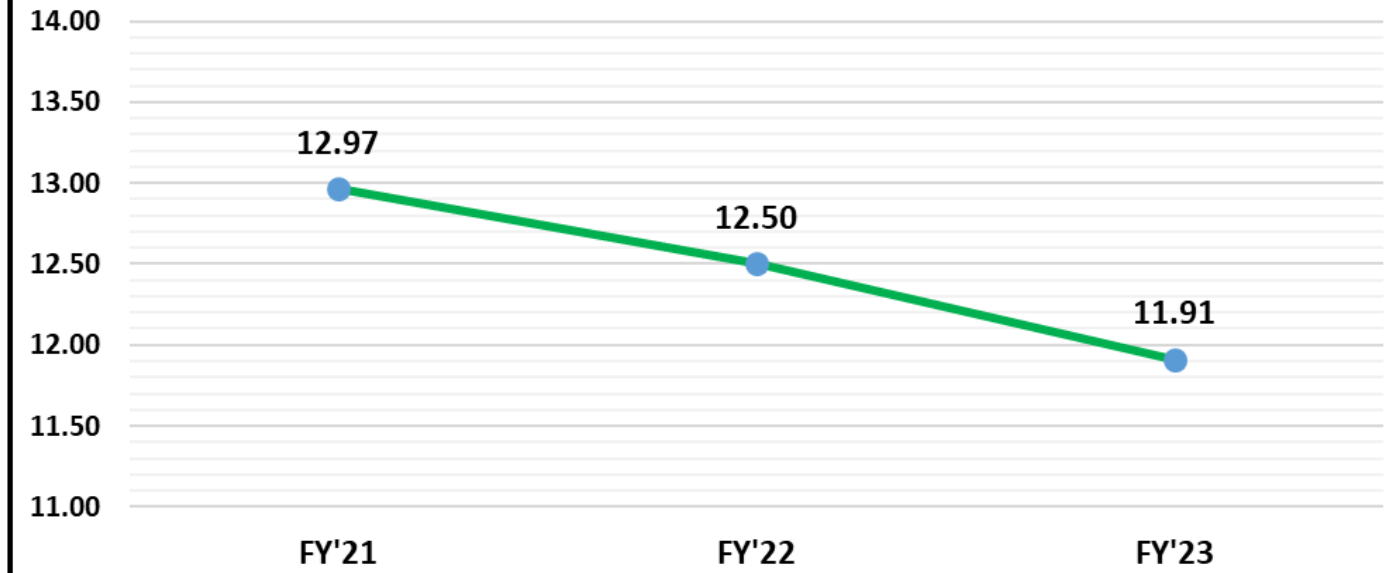
## Smelter Specific DC Power

Smelter : SPC (DC power-kWh/Ton) at delivered basis



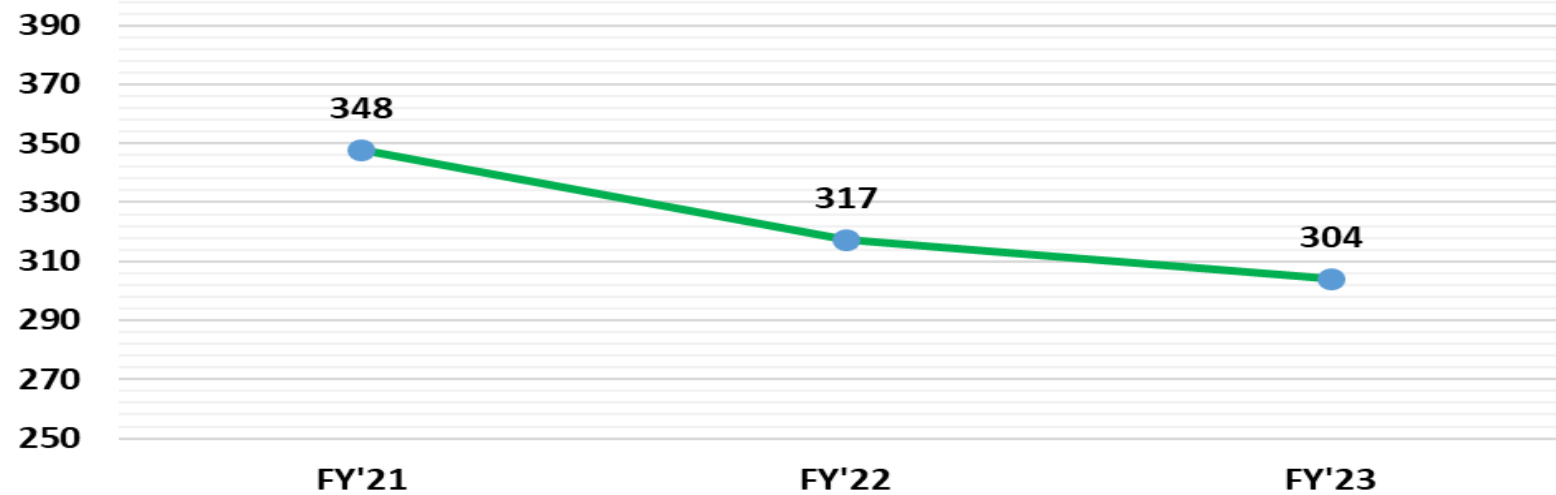
## Alumina Plant Specific Energy Consumption

Alumina : SEC (GJ/Ton)



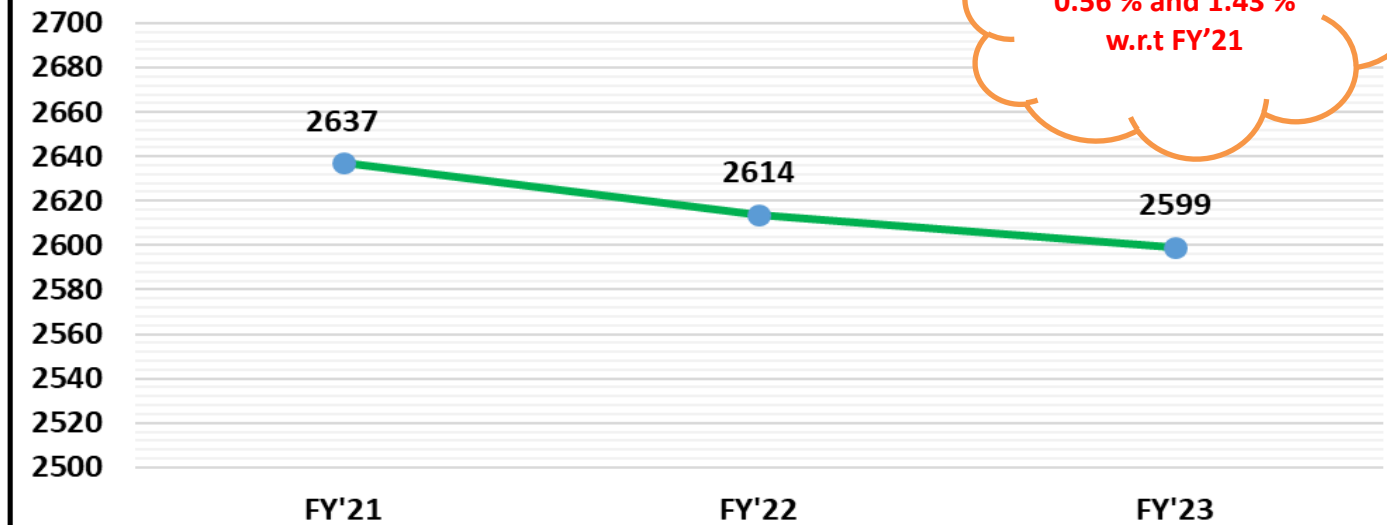
## Alumina Plant SPC @calcined basis

Alumina Plant : Specific Power Consumption @ at calcined basis (kWh/Ton)



## Gross Heat rate (RPD)

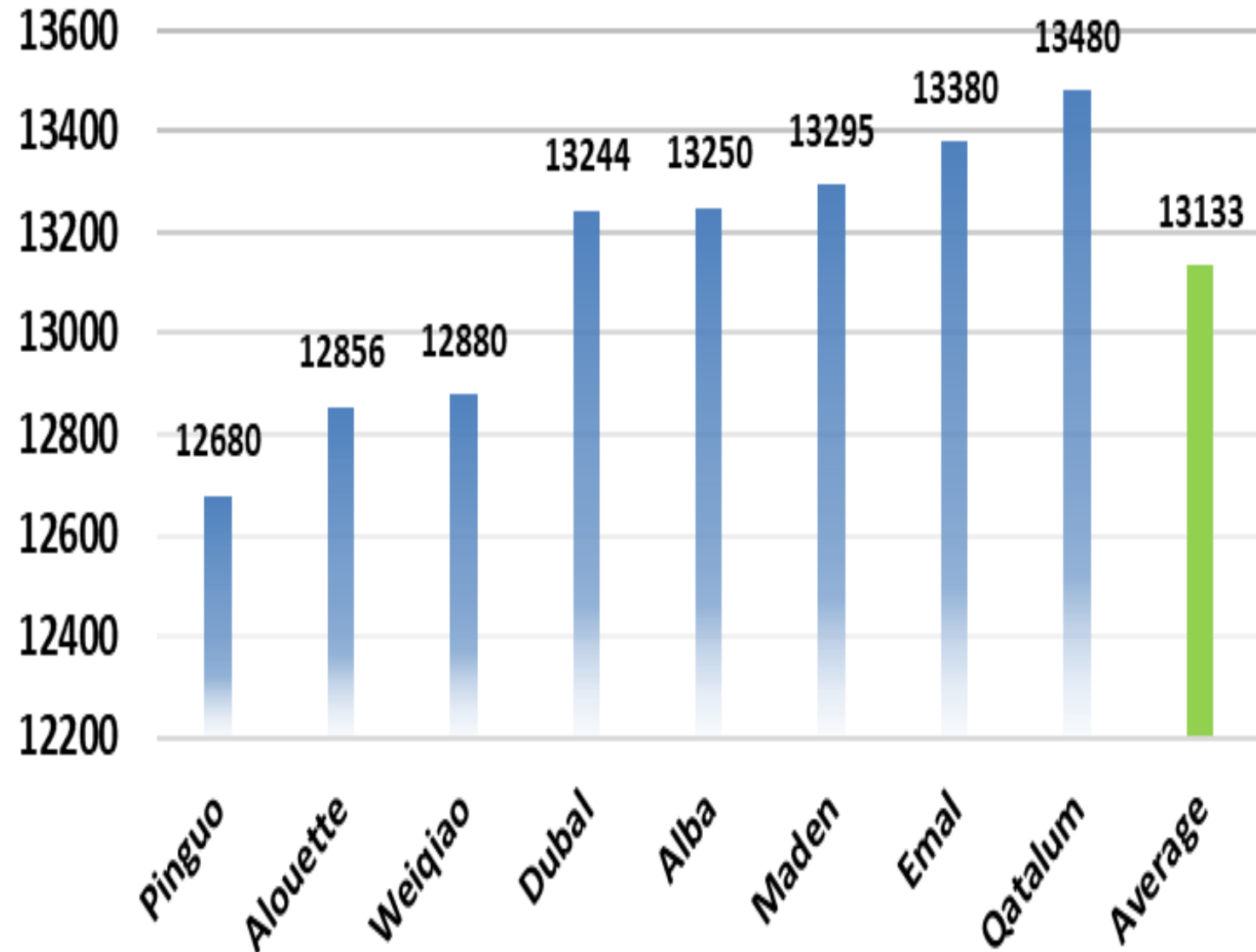
Gross Heat Rate (RPD) : kcal/ kWh



% improvement  
w.r.t last year :  
0.56 % and 1.43 %  
w.r.t FY'21

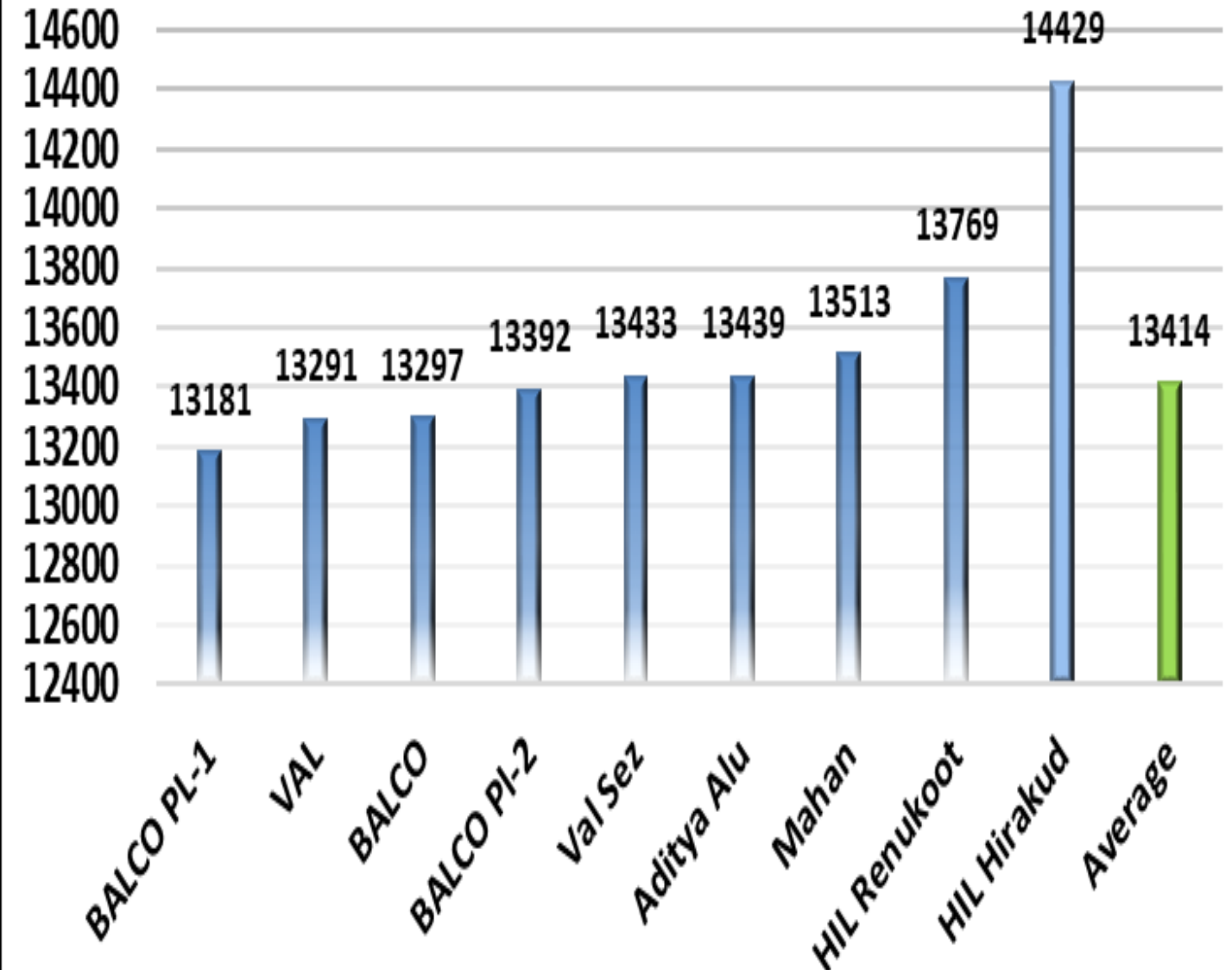
# National and International bench marking of DC power

## INTERNATIONAL BENCHMARK



Source of Data- IAI

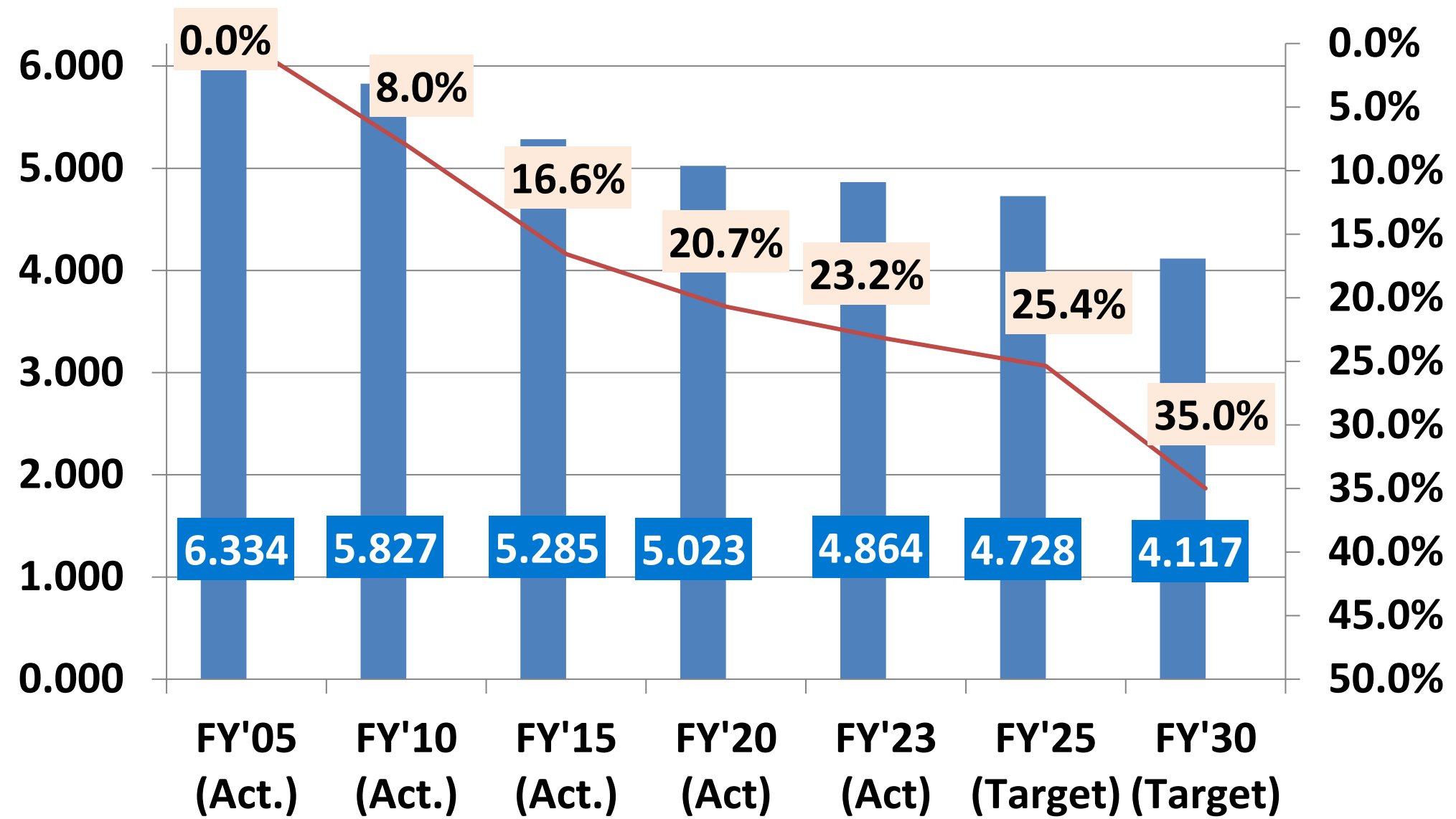
## NATIONAL BENCHMARK



Source of Data- BEE



# Road map : Specific Energy consumption trend and target @ integrated basis



- **Achieved 23.2 % reduction till FY'23**
- **Projects Identified to reach 25.4 % reduction upto FY'25**
- **More ideas being generated for remaining 10 %**

\* Specific Energy Consumption data upto FY'23 is Audited/Reported

**Long Term Objective : 35% reduction from FY'05 (base line) to FY'30**

## Ongoing Power Reduction Projects:

By Implementation of Solid Bus bar (Projected SPC reduction) : 158 kWh / Mt of Metal

By Implementation of Stepped Stub (Projected SPC reduction) : 100 kWh / Mt of Metal

Total Projected impact on SPC reduction : 258 kWh / Mt of Metal

**With the implementation of above projects, SPC will be 13522 kWh / Mt of Metal**

## **New initiatives & Trial to be taken for Energy reduction:**

➤ Use of 50% graphitic cathode blocks – 10mV /pot reduction in pot voltage:

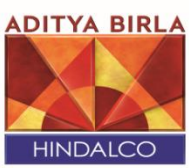
Potential saving 30 kWh /T

➤ Use of Ultra Low Resistivity Collector Bar having low Carbon content:

Potential saving 60 kWh /T



# Encon Projects for FY'2023-24



## Energy Project Plan FY23-24

SI	Plant	Project Description	Annual Potential Savings				
			Energy Type (Coal/FO/HSD/LNG/LPG /Propane/Electricity)	UOM (MT/KL/SCM /Mwh)	Value	Rs (in Lacs)	Capex / Project cost (in Lacs)
1	Alumina Plant	VFD Compressor	Electricity	Mwh	96	3.36	70
2	Alumina Plant	Evap 1 Circulation Pump VFD Installation	Electricity	Mwh	96	3.36	60
3	Alumina Plant	Procurement of Energy Efficient pumps against replacement of old and inefficient pumps	Electricity	Mwh	120	4.2	60
4	Alumina Plant	Procurement of Energy Efficient pumps against replacement of old and inefficient pumps	Electricity	Mwh	120	4.2	60
5	Cogen	Boiler #01 new energy efficient BFP	Electricity	MWh	205	11.33	60
6	Cogen	Install VFD in bad condensate transfer Pump in place of control valve to regulate pump flow based on tank level	Electricity	MWh	29.3	1.61	5
7	Cogen	Install New high efficiency ACW pump in Co-gen-1 to discharge water up to CT deck. It will also stop one surge tank transfer pump	Electricity	MWh	600	33.12	11
8	Cogen	Air compressor 2*2000 cfm	Electricity	MWh	407	22.47	200
9	Cogen	Installation of VFD in ID Fan of Boiler # 1	Electricity	MWh	483.84	26.7	95
10	Cogen	Replacement of Boiler#3 De-aerator Feed Pump with energy efficient vertical pump & motor	Electricity	MWh	76.8	4.24	8
11	Cogen	Procurement of Hydrotest Pump for Boiler maintenance	Electricity	MWh	96	5.3	15
12	Reduction	Cold Ramming paste utilization-saving in Oil consumption in paste plant	HSD	KL	25.6	23.04	In House
13	Reduction	Replacement of Gas conditioning tower of ABF-5	Electricity	MWH	21.9	0.7	In House
14	Reduction	Cu Insert collector bars	Electricity	MWH	11718.3	380.8	In House
15	Reduction	Solid Bus bar installation in Pots	Electricity	Mwh	8788.7	285.6	1700.0
16	Reduction	Replacement of cooling tower#3 at Rectifier-I with fan less cooling tower	Electricity	MWH	78.8	2.8	8.0
17	Reduction	Replacement of Conventional Ceiling fan with BLDC Fan	Electricity	Mwh	61.3	2.2	12.0
18	Reduction	Replacement of Convention Light with LED	Electricity	Mwh	153.0	5.0	10.2

# Encon Projects for FY'2023-24





## Energy Project Plan FY23-24


SI	Plant	Project Description	Annual Potential Savings				
			Energy Type (Coal/FO/HSD/LNG/LPG /Propane/Electricity)	UOM (MT/KL/SCM /Mwh)	Value	Rs (in Lacs)	Capex / Project cost (in Lacs)
19	Reduction	Fan less cooling tower Installation at Cooling Tower #2A at Rectifier-II	Electricity	MWh	176.9	5.7	12.0
20	Reduction	Installation of VFD at Cooling Tower #3 pumps (1 No.) at Rectifier-II	Electricity	MWh	481.8	15.7	20.0
21	Reduction	Replacement of air conditioning system (Replacement of 40 TR AC single Compressor with Multiple Scroll Unit)	Electricity	MWh	151.2	4.9	18.0
22	Reduction	Implementation of Solid cathode ring and riser bar provision in Pot room in phase manner	Electricity	MWH	Under Evaluation		
23	Reduction	Energy saving by optimizing cycle time of Induction Furnaces	Electricity	MWH	Under Evaluation		
24	Reduction	Trial for use of 50% Graphitic Cathode Block in Smelter to reduce voltage drop	Electricity	MWh	Under Evaluation		
25	Reduction	Trial for use of Low resistivity collector bar in pot cell	Electricity	MWh	Under feasibility study		
26	Reduction	FCS modification in ABF-5 for oil consumption reduction	LSHS	KL	Under feasibility study		
27	Reduction	Replacement of Regulating Transformer (For RO,Plant-1)	Electricity	MWh	281.853	8.85	550
28	Reduction	Replacement of Power Transformer (For T # 04)	Electricity	MWh	1176.1614	36.93	630
29	CPP	Replacement of CHP-3 Crusher i.e. 6.6 KV RGE crusher with an energy efficient 415V GA /GB crusher in order to reduce Auxiliary Power Consumption by approximately 90 KW.	Electricity	MWh	1310000	13.1	54
30	CPP	Partial Retubing of Condenser tubes (4500 Nos.) of TG #3.	Coal	Kcal	10560000	105.6	194
31	Fabrication	Installation of new cell type Die Oven	Electricity	KWh	43800	1.42569	125
32	Fabrication	Crane 1 MV Lamp have to be change with LED light.	Electricity	MWh	3.456	0.097	In House
33	Fabrication	Old Lights to be replaced with LED light	Electricity	MWh	40	1.26	In House
34	Fabrication	Improve Heating Cycle of 25 MT Homo Furnace by arresting heat loss in Billet Casting	Electricity	MWh	Under feasibility study		
35	Fabrication	Installation of new technology energy efficient cabin AC 2 nos, 4 KW in cutting way EOT crane.	Electricity	MWh	Under feasibility study		
36	Fabrication	Reduction in Fuel 5% by process optimization in DC Casting	LSHS	MT	Under feasibility study		

# Summary of last three years Project :

S.N	Year	No. of Energy saving Project	Investment (INR million)	Electrical Saving (in million kWh)	Thermal Saving (in million Kcal)	Saving (INR Million)	Impact on SEC w.r.t Previous Year
1	FY'20-21	37	404.27	60.875	133723.40	298.31	-0.04%
2	FY'21-22	28	1592.8	105.853	770453.42	935.70	-2.13%
3	FY'22-23	28	324.07	20.83	128505.022	333.59	-1.02%
	Total	93	2283.09	200.560	1101100.60	1487.89	-3.19%

 Energy Saving Project FY'2020-21

 Energy Saving Project FY'2021-22

 Energy Saving Project FY'2022-23



# Energy Saving Innovative Projects



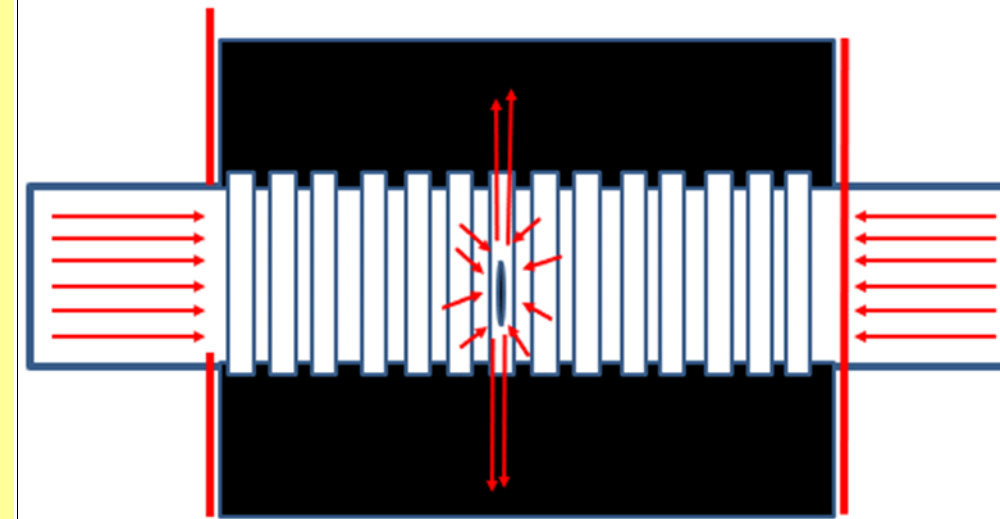
# Project Title : Adoption of New Methodology for APH Leakage Identification

Problem / Concept Description	Approach	Result / Implementation Status	Value / Financial Benefits	Time Period
<p>Smoke test to identify APH tube leakages leaving room for error and creating occupational health hazard.</p> <ul style="list-style-type: none"> <li>• Bottleneck in Boiler full load operation.</li> <li>• Inadequate heat transfer in APH and high Dry flue gas loss.</li> <li>• Dependency on higher capacity PA fan.</li> <li>• Boiler#4 ESP performance guarantee test could not be done due to high temperature at ESP inlet</li> </ul>	<p>Flue Gas Path Analysis, Data Collection, Analyzing The Problem, Root Cause Analysis, Brain Storming, <b>In- house SOP Revision &amp; Execution</b></p>	<p>Primary Air duct pressurized up to <b>100 mmWC</b> to detect tube leakages in APH.</p> <ul style="list-style-type: none"> <li>• By using smaller PA fan &amp; optimizing ID fan damper, auxiliary power consumption was reduced by 3.6 MW per day.</li> <li>• Unburnt carbon in fly ash and dry flue gas loss were reduced, increasing boiler efficiency by 1.2%.</li> </ul>	<p>Approx. <b>Saving of Rs. 2.46 Crores/Annum</b> by improvement in Boiler efficiency and Auxiliary power saving.</p> <p>Total Reduction CO<sub>2</sub> Emission (30% Carbon per kg coal): 4023Tons per annum</p>	<p><b>From July-22 to Oct-22</b> (Data Collection to Overhauling)</p>

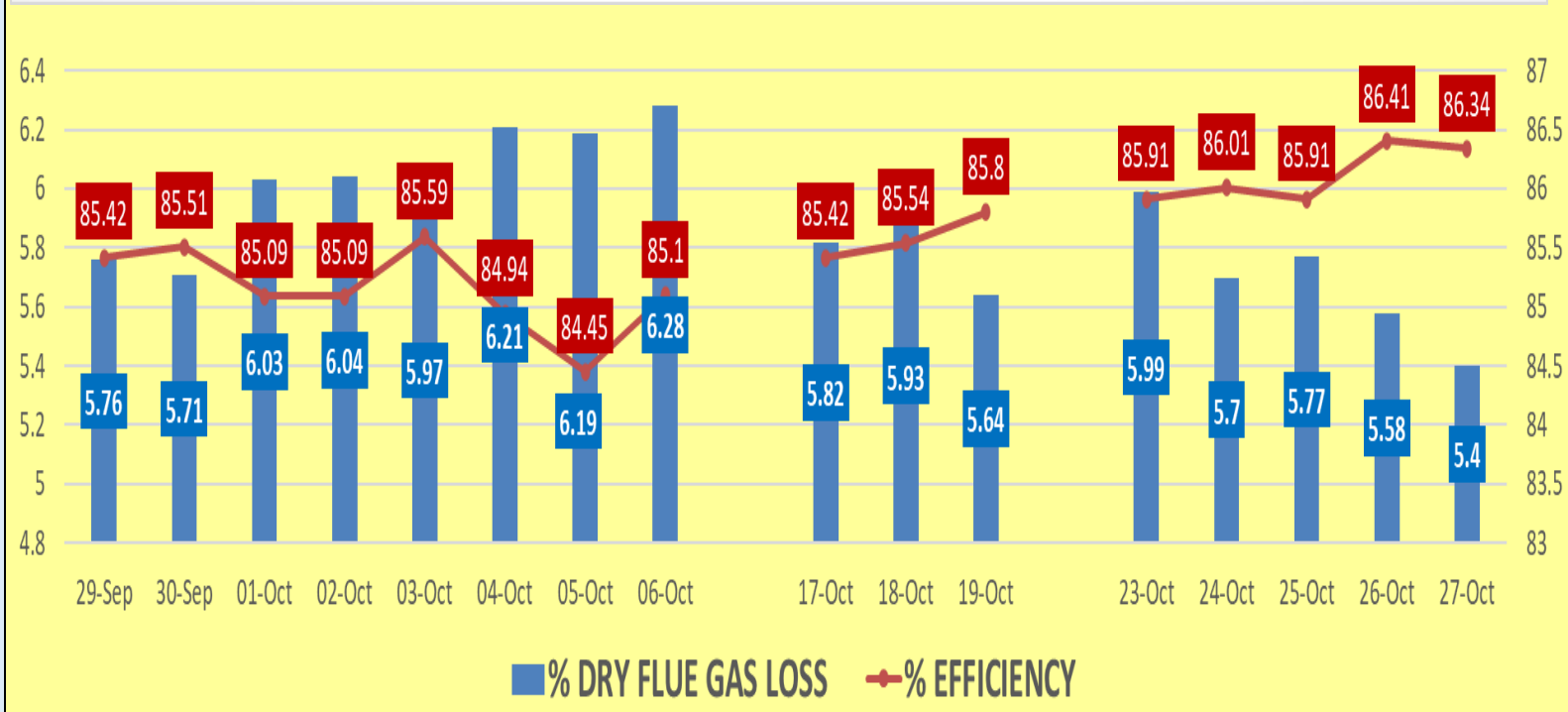
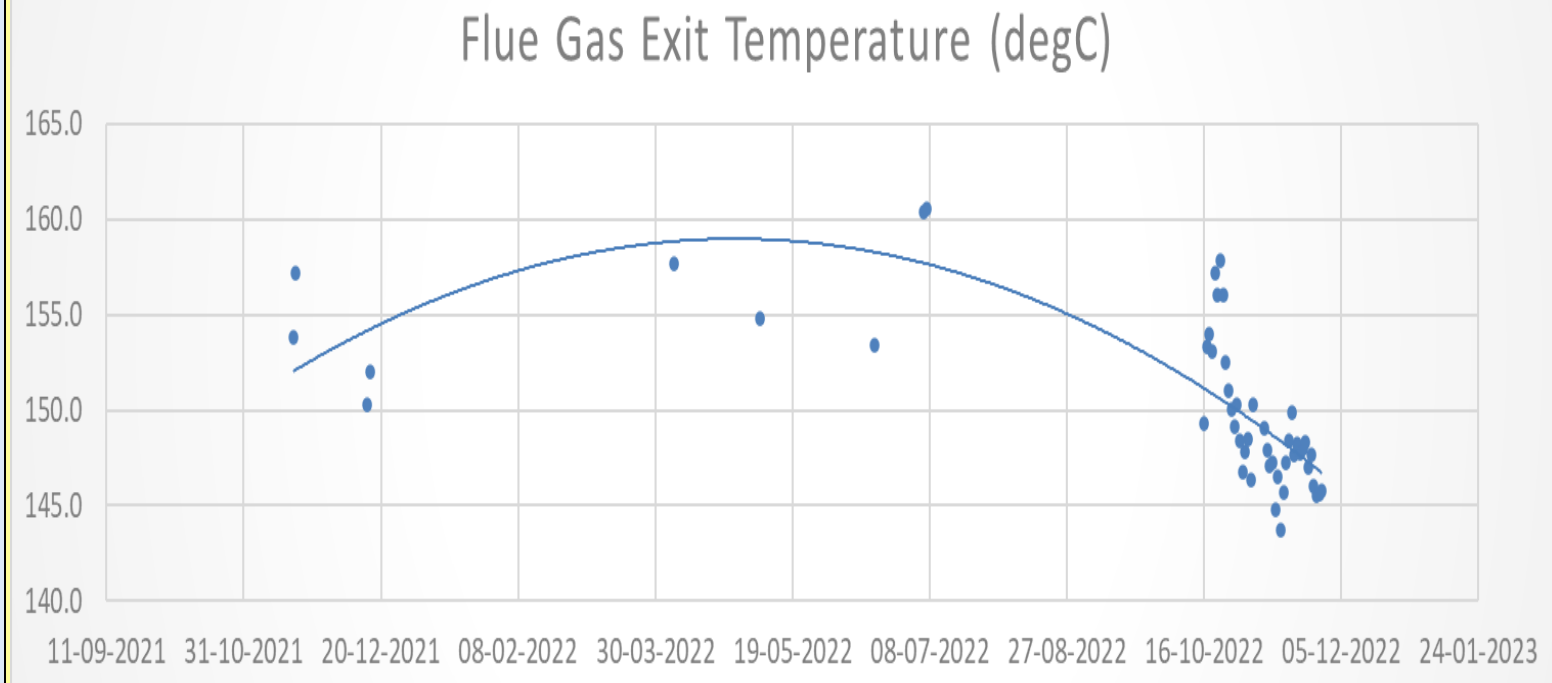
# Project Title : Adoption of New Methodology for APH Leakage Identification



Project



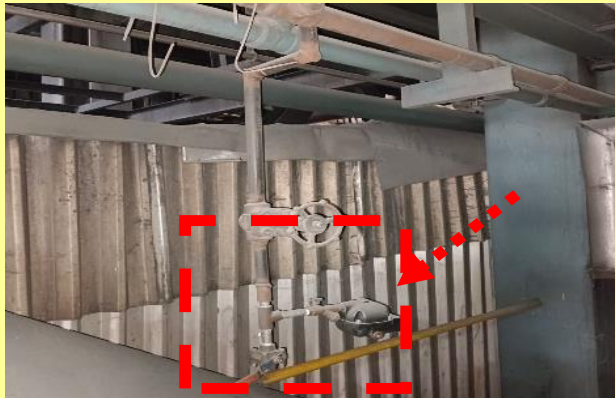

PRESSURIZED PA DUCT TO DETECT TUBE LEAKAGE



Please attach high resolution images related to the initiative (2 nos)



# Project Title : Specific Oil consumption optimization in Boiler Operation

<b>Major Objectives of the initiative</b>	To bring down the Specific Oil Consumption in Boiler w.r.t FY22.
<b>Targeted stakeholders</b>	Operation & Maintenance Team
<b>Please explain the initiative in brief</b>	Multiple initiatives were taken to optimize the specific oil consumption in boiler Operation without compromising plant day today activity that includes planned and unplanned shutdown. The initiatives involve innovative actions in operational activities, regular maintenance and new logic development that helped in reducing the specific oil consumption in the unit.
<b>Description/ Methodology of the initiatives</b>	<ol style="list-style-type: none"> <li>1. Pre-heating of Boiler water thru Feed Pump discharge of Unit#1 for raising the water temperature up to 100 ° C during every boiler cold start-up.</li> <li>2. Development of Soft Dry Test Button in Blr #3&amp;4 for testing of oil gun without using oil to enhance operational reliability.</li> <li>3. Parallel changeover of Turbines.</li> <li>4. Moisture trap provided in service air line to absorb line moisture and taking the oil Gun in service.</li> <li>5. Oil Gun Nozzle tip hole size optimization after detailed study for effective oil atomization.</li> </ol>
<b>Benefits observed due to the initiative</b>	The Specific Oil consumption for the FY 23 is 0.189 ml/kwh against the P & B of 0.284 ml/kwh, which is not only lower than the previous best achieved figure of 0.203 in FY 22 but also it is everlowest since inception of plant.
<b>Outcome of the initiative in FY 2022-23</b>	Due to multiple initiatives in all the fields to maximise the opportunity, the outcome has been the everbest specific oil consumption figure achieved in the FY 23.
<b>Please attach high resolution images related to the initiative (2 nos)</b>	 <p data-bbox="588 1605 1204 1666"><b>Moisture Trap for Oil Guns</b></p>  <p data-bbox="1472 1576 2642 1637"><b>Nozzle-Tip Diameter changed from <math>\phi</math>3.0 mm to <math>\phi</math>2.5 mm</b></p>

## Monitoring & review System

- Dedicated Energy Cell
- Established Energy Management System for capturing live data and analysis.
- Daily review through Standing committee meeting  
Chaired by COO
- Daily performance review meeting Chaired by Plant heads
- Performance assessment of Energy Intensive Equipment i.e. Air Compressors, cooling Towers, Pump and fan etc.
- Monthly Energy review meeting Chaired by Plant heads
- Monthly Energy webinar @ metal business level
- MPR Chaired by COO
- MBR Chaired by MD

## Employee Involvement-

Projects completed through kaizen in FY'23 :

- No. of implemented project : 2779
- No. of Employee participation : 10298
- Investment : 53.34 million Rs
- Expected saving : 864.32million Rs

## Onsite Generation

Year	Technology(Solar/Wind/Biomass etc)	Installed Capacity (MW)	Consumption (million kWh)	% of Overall Electrical Energy Consumption
FY 2020-21	NA	NA	NA	NA
FY 2021-22	Solar	3.0	2.033	0.03%
FY 2022-23	Solar	3.0	4.036	0.06%

## Offsite Generation

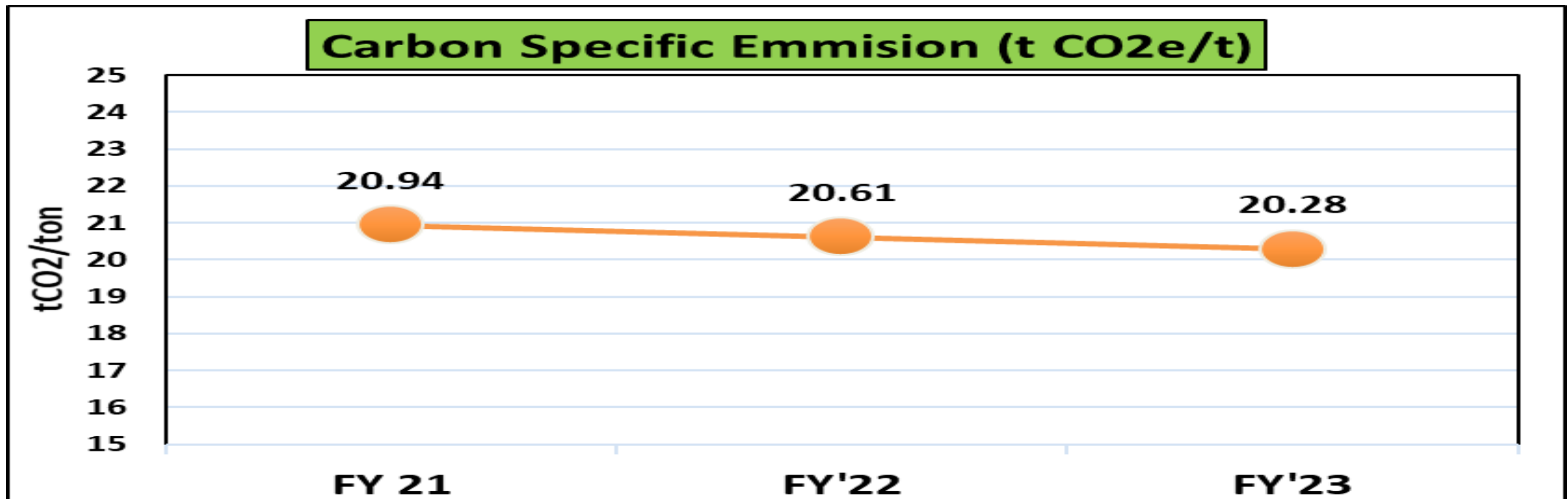
Year	Technology(Solar/Wind/Biomass etc)	Installed Capacity (MW)	Consumption (million kWh)	% of Overall Electrical Energy Consumption
FY 2020-21	-			
FY 2020-22	-			
FY 2020-23	-			
		<b>Investment Made</b>	<b>11.1 Crore</b>	
		<b>RPO Obligation</b>	<b>NO</b>	
		<b>Solar &amp; Wind Energy Installed in Group*</b>	<b>100 MW</b>	
		<b>Sharing % of Plant</b>	<b>3%</b>	

\* Metal Business



# GHG Inventorisation

- Information on GHG Inventorisation and public disclosure – Its consolidated data reported in sustainability report of Hindalco
- Scope of Emission – I and II
- Short term Target and action Plan for CO<sub>2</sub> emission reduction – We have target to reduce Specific emission by 9.4 % from the level of FY'17 (22.03 tCO<sub>2</sub>e/ton) by Identified Major Project i.e. Solar Power Plant, uses of Biomass, 400kV Grid connectivity, Smelter & Power Plant Project etc..
- Initiative on carbon capture and other reduction Measures – It is already in process to Exploring the Vendor under feasibility study from C to M, C to E etc.



## ➤ **ISO 50001: 2018 Certification—**

- ✓ **ISO 50001:2018- Certified by DNV-GL in 2019**
- ✓ **ISO 50001:2018- Re-certified by LRQA in 2022**

## ➤ **% Investment of Energy saving Project on Total turnover of the company in FY'22-23 : 0.31 %**

**(Annual Sales Turn Over-105132.78 million Rs & Energy Capex -324.07 million Rs)**

- **Learning of new developments / initiatives implemented in different plants.**
- **Interaction with different plant's participants**
- **Interaction with Technology supplier for new developments.**
- **Create competitive culture in the plant & business.**
- **Platform for show casing our Energy Excellence.**
- **Create Energy Conservation Awareness in the plant & Society.**
- **Motivation & recognition.**



# Mandatory Energy Audit & PAT status

PAT Cycle	Year	Base line SEC	Target SEC	Required Reduction	Achieved SEC	Achieved Reduction in %	E-certificate claimed & issued
				in %			
PAT Cycle-1	FY'2012-15	5.858	5.512	5.91%	5.374	8.26%	53664
PAT Cycle-2	FY'2016-19	5.221	5.044	3.40%	4.875	6.63%	70835
PAT Cycle-3	FY'2022-25	4.951	4.728	4.50%	<b>Assessment Year FY'2024-25</b>		

Description	Duration	Conducted by	Report submitted to BEE
MEA # 1	10 <sup>th</sup> Nov'14 to 24 <sup>th</sup> Nov'14	CTES Team	5 <sup>th</sup> Sep'15
MEA # 2	2 <sup>nd</sup> May'18 to 21 <sup>st</sup> May'18	Mott MacDonald	10 <sup>th</sup> Oct'18
MEA # 3	20 <sup>th</sup> July'21 to 31 <sup>st</sup> July'21	Mott MacDonald	1 <sup>st</sup> Nov'21

# Awareness on Energy Conservation & Efficiency :

## **Activities Performed :**

- ✓ Display of Energy Conservation Banners at prominent places in Plant & Township.
- ✓ Sharing of Energy Saving Tips through Communication Mail to all Users – Daily.
- ✓ Flag march by Employees from Vishwakarma Temple (Plant Main Gate).
- ✓ Energy Pledge.
- ✓ Distribution of Energy Badges & Energy Conservation Card
- ✓ Energy Model Exhibition - Prepared & Display by School Children.
- ✓ Announcement on Energy Conservation through vehicle in township and Society
- ✓ Painting Competition at School level in all Schools .
- ✓ Awareness & Quiz Competition on Energy Conservation among all employees.
- ✓ Awareness & Quiz Competition on Energy Conservation for Housewives.
- ✓ Painting Competition at School level and Renukoot Level for School Children in 3 Groups.
- ✓ Awareness and Pamphlet distribution to villagers by CSR & Energy Team.
- Announcement and display of Banner on Energy Conservation through vehicle in Colony.



# Glimpses of Awareness on Energy Conservation :





# Glimpses of Awareness on Energy Conservation :





# Glimpses of Awareness on Energy Conservation :





## हिण्डाल्को में ऊर्जा संरक्षण सप्ताह का आगाज, दिलायी शपथ

जनसंदेश न्यूज

रेणुकूट। हिण्डाल्को प्रबंधन द्वारा संस्थान में कार्यरत कर्मचारियों एवं उनके परिवारजनों तथा रेणुकूटवासियों को ऊर्जा संरक्षण के लिए प्रेरित करने के उद्देश्य से 8 से 14 दिसम्बर तक ऊर्जा संरक्षण सप्ताह के रूप में मनाया जा रहा है। इसी परिप्रेक्ष्य में हिण्डाल्को प्लांट के विश्वकर्मा मूर्ति से ऊर्जा बचत एवं उसके महत्व को बताती स्लोगनों की तस्वीर लेकर संस्थान के कर्मचारियों ने एक रैली निकाली जो कि हिण्डाल्को प्रशासनिक भवन लॉन में आकर समाप्त हुई।

इसके उपरान्त हिण्डाल्को प्रशासनिक भवन लॉन में आयोजित एक संक्षिप्त कार्यक्रम में हिण्डाल्को क्लस्टर के सीओओ एन नागेश के निर्देशन में संस्थान के एनर्जी सेल के राजीव सिंह ने सभी को ऊर्जा शपथ दिलाई। वहीं ऊर्जा संरक्षण संबंधित मॉडल प्रतियोगिता का आयोजन



विजेता प्रतिभागियों को पुरस्कृत करते सीओओ एन नागेश

किया गया जिसमें आदित्य बिड़ला पब्लिक स्कूल, आदित्य बिड़ला इण्टरमीडिएट कॉलेज, निर्मला कॉन्वेंट हाईस्कूल, केसरी देवी कनोरिया विद्यामंदिर एवं डीसी लिविस विद्यालय के छात्र-छात्राओं

द्वारा ऊर्जा संरक्षण से संबंधित मॉडलों का सजीव प्रदर्शन किया गया। एन नागेश ने अन्य वरिष्ठ अधिकारियों के साथ सभी मॉडलों का अवलोकन किया। नागेश ने सभी को ऊर्जा संरक्षण हेतु प्रेरित करते हुए

### आयोजन

स्लोगनों की तस्वीर लेकर संस्थान के कर्मचारियों ने एक रैली निकाली

कहा कि ऊर्जा की बचत करके हम अपने प्राकृतिक संसाधनों की बचत कर सकते हैं। मॉडल प्रतियोगिता के ज्यूरी सदस्यों पॉल गुप्ता, एचआर सिंह, विभव उपाध्याय एवं कैलाश प्रधान ने निर्मला कॉन्वेंट हाईस्कूल की टीमों को प्रथम एवं द्वितीय तथा आदित्य बिड़ला इण्टरमीडिएट कॉलेज की टीम को तृतीय पुरस्कार के लिए चयनित किया, जिन्हें नागेश ने ट्रॉफी प्रदान कर सम्मानित करते हुए सभी प्रतिभागी विद्यार्थियों को सर्टिफिकेट प्रदान किया। इस अवसर पर वरिष्ठ अधिकारी एनएन राय, विवेक श्रीवास्तव, सौरभ श्रीनेत्र, संदीप खन्ना, यशवंत कुमार आदि उपस्थित रहे। एनर्जी सेल के दीना जायसवाल ने धन्यवाद ज्ञापित किया।

## पुरस्कार वितरण के साथ हिण्डाल्को में ऊर्जा संरक्षण सप्ताह सम्पन्न

रेणुकूट (ज्ञानशिखा टाइम्स)। हर वर्ष की भांति इस वर्ष भी हिण्डाल्को में राष्ट्रीय ऊर्जा संरक्षण दिवस के उपलक्ष्य में ऊर्जा संरक्षण सप्ताह का आयोजन पूरे जोश के साथ किया गया। इस दौरान कर्मचारियों, परिवार की महिलाओं एवं विद्यार्थियों के लिए एनर्जी मॉडल, पेन्टिंग, एनर्जी क्रिज़ जैसी कई रोचक प्रतियोगिताओं का आयोजन किया गया साथ ही म्योरपुर स्थित आदित्य बिड़ला रूरल टेक्नोलॉजी पार्क के सभागार में आस-पास के ग्रामीणों के लिए ऊर्जा संरक्षण जागरूकता कार्यक्रम का आयोजन किया गया। पूरे सप्ताह तक चले कार्यक्रमों का समापन पुरस्कार वितरण समारोह के साथ हुआ। पुरस्कार वितरण समारोह के मुख्य अतिथि हिण्डाल्को प्रोजेक्ट डिवीज़न के संयुक्त अध्यक्ष विनोद ठाकुर ने पेन्टिंग प्रतियोगिता के विजेता केसरी देवी कनोरिया विद्यामंदिर, आदित्य बिड़ला पब्लिक

स्कूल एवं आदित्य बिड़ला इण्टरमीडिएट कॉलेज के विद्यार्थियों को ट्रॉफियां प्रदान कर सम्मानित किया साथ ही अन्य प्रतियोगिताओं



के प्रतिभागियों को भी सम्मानित किया। सभी को ऊर्जा बचत के लिए प्रोत्साहित करते हुए श्री ठाकुर ने कहा कि ऊर्जा उत्पादन में हमारे प्राकृतिक संसाधनों का सर्वाधिक उपयोग होता है और ये सभी प्राकृतिक संसाधन चाहे वो कोयला हो या कच्चा तेल

सभी के भण्डार बहुत सीमित हैं और यदि हम इनका समझ-बूझ के साथ इस्तेमाल नहीं करेंगे तो कुछ वर्षों बाद जब इनके भण्डार समाप्त होने लगेंगे तो हमारे आने वाली पीढ़ी का जीवन बहुत ही कठिन होगा। उन्होंने कहा कि ऊर्जा बचत के साथ ही हमें रिन्यूएबल एनर्जी के उत्पादन की तरफ ज्यादा से ज्यादा ध्यान देना होगा जिससे कि हम अपने मूल्यवान प्राकृतिक संसाधनों को संरक्षित कर अपने आने वाली पीढ़ी का भविष्य सुरक्षित कर सकें। इसी क्रम में वरिष्ठ अधिकारी सौरभ श्रीनेत्र ने कहा कि पूरे विश्व में जनसंख्या तेजी से बढ़ती जा रही है और साथ ही ऊर्जा की मांग भी बढ़ रही है। हमें सबसे पहले अपने घर से शुरुआत करते हुए अपने घरों

में अनावश्यक बिजली, पानी का उपयोग रोकने की आदत डालनी होगी जिससे की ऊर्जा की बचत हो सकेगी। कार्यक्रम के प्रारंभ में हिण्डाल्को एनर्जी सेल के राजीव सिंह ने सभी को ऊर्जा संरक्षण की शपथ दिलाई तथा दीना जायसवाल ने ऊर्जा संरक्षण सप्ताह के दौरान आयोजित कार्यक्रमों का चलाचित्र के माध्यम से विस्तृत जानकारी दी। कार्यक्रम का समापन एनर्जी सेल के रजनीश सिंह के धन्यवाद ज्ञापन से हुआ। कार्यक्रम के दौरान वरिष्ठ अधिकारी विभव उपाध्याय, कैलाश प्रधान, हंसराज, राजीव झुनझुनवाला, समीर देशाई, गोपाल राठौड़, पॉल गुप्ता सहित विभिन्न विद्यालयों के विद्यार्थी, आदित्य बिड़ला पब्लिक स्कूल एवं इण्टरमीडिएट कॉलेज के प्रधानाचार्य क्रमशः डेफनी अंगर एवं दयानंद शुक्ला सहित अन्य विद्यालय के शिक्षक एवं शिक्षिकाएँ उपस्थित रहे।



# Reward & Recognition:

## FY 2020 – 21

- PAT Cycle 2 Best Achiever award by Ministry of Power UP State
- 3rd Prize – on-line Energy Conservation Award by UPNEDA

## FY 2021 – 22

- Platinum Award – SEEM – National Energy Management Award
- 1st Prize in State Level Energy Conservation Award

## FY 2022 – 23

- CII – Excellent Energy Efficient Unit
- Topmost Award in State Level Energy Conservation by UPNEDA
- India Manufacturing Excellence Award - Gold
- Top Performer in PAT Cycle-2 in Aluminium sector



# Energy Award in FY'2022-23

**CII – Excellent Energy Efficient Unit Award 2022**  
**Awarded by- Ashok Kumar (I.A.S)-Dy.Director General BEE**



**Topmost Energy Conservation Award 2022 in Aluminium Sector by UPNEDA**  
**Awarded By- Smt. Neelam – Secretary UPNEDA**





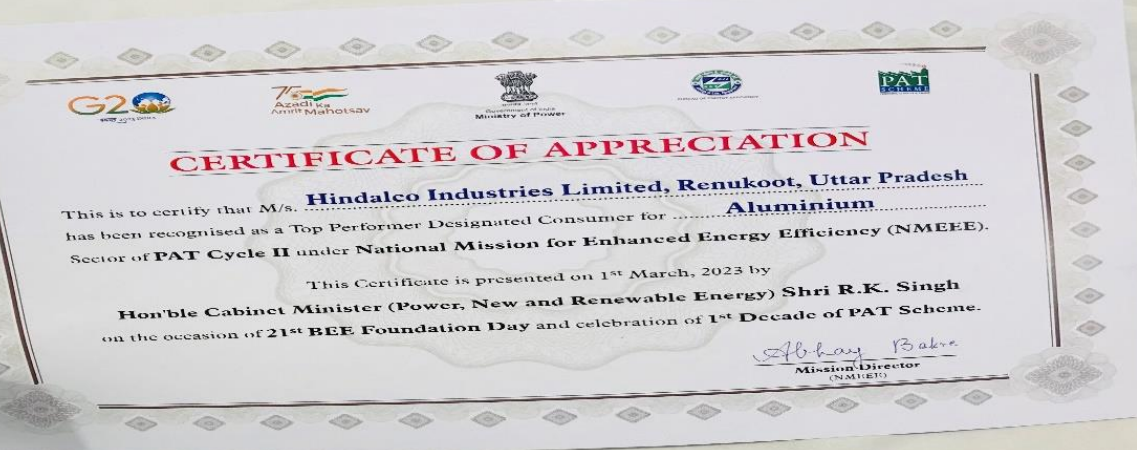
# Energy Award in FY'2022-23

## Top Performer in PAT Cycle-2

Awarded by- Cabinet Minister Mr. R.K.Singh (Power and New & Renewable Energy)

## India Manufacturing Excellence Award - Gold

Awarded By-







# Thank You

## Contact Person

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