

**AM/NS  
INDIA**

ArcelorMittal Nippon Steel India

# ARCELORMITTAL NIPPON STEEL INDIA

## STEEL SERVICE CENTRE

### CHENNAI



**24<sup>th</sup>**  
**National Award for**  
**Excellence in Energy Management** **2023**  
13 - 15 September 2023 || HICC, Hyderabad

**Presented By:**

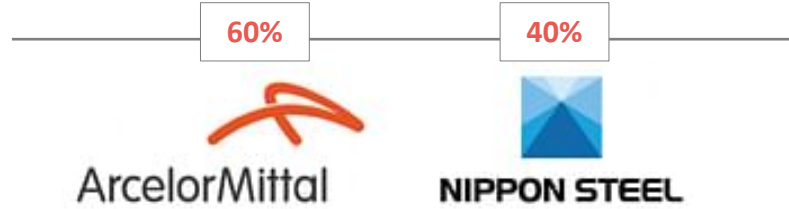
C Chitra (Plant Head)

Tonmoy Paul (Lead Production)

Gautam Kumar (Lead Electrical)

# About Us

A joint venture between ArcelorMittal and Nippon Steel



## India

Fastest growing large economy; second-largest steel producer

India's per capita consumption of steel is about one-third of the global average

## 300m

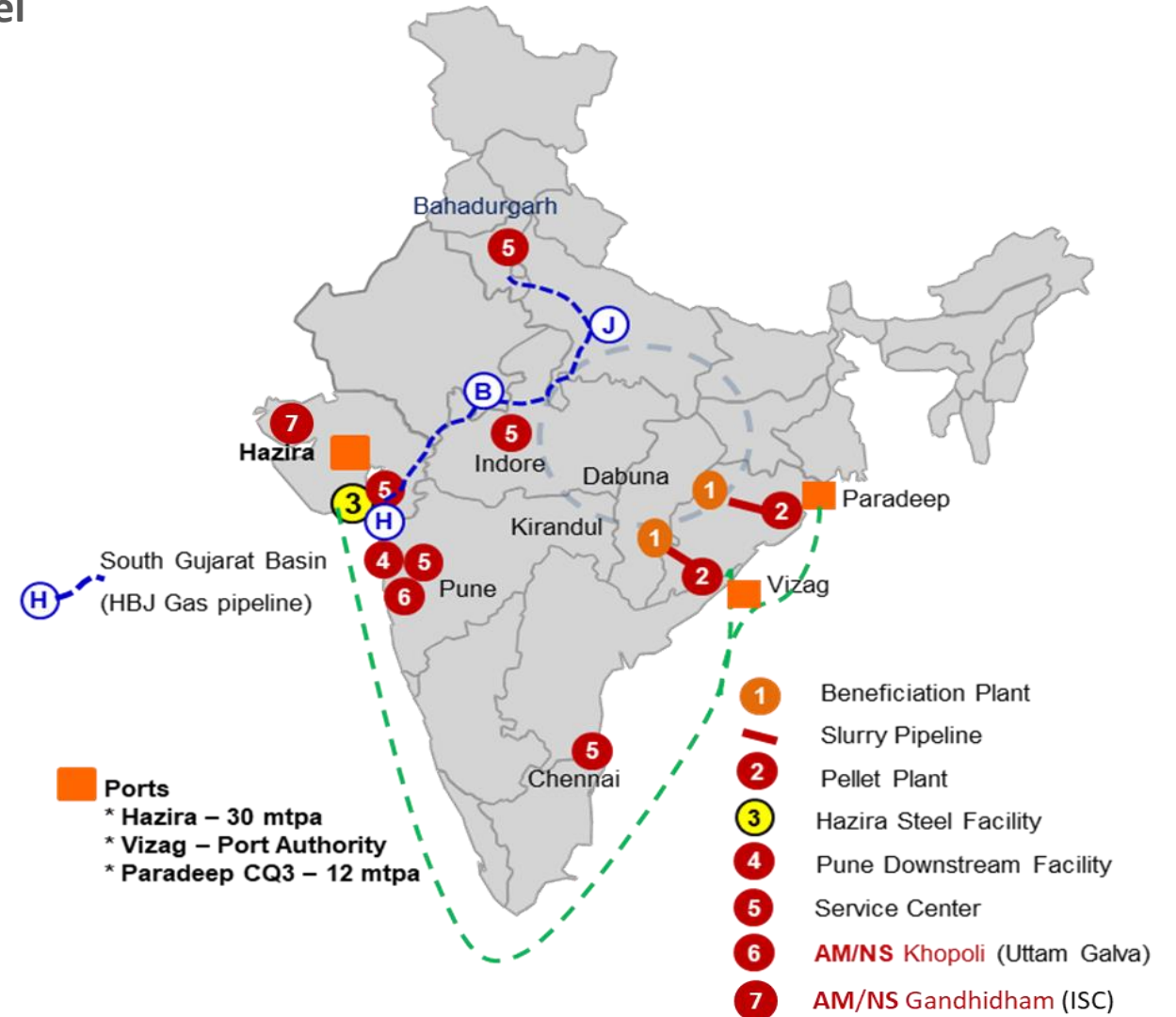
India's targeting three-fold increase in crude steel output to 300 million tonnes per annum by 2030

## AM/NS India

Hazira is one of the world's largest single-location flat steel plants

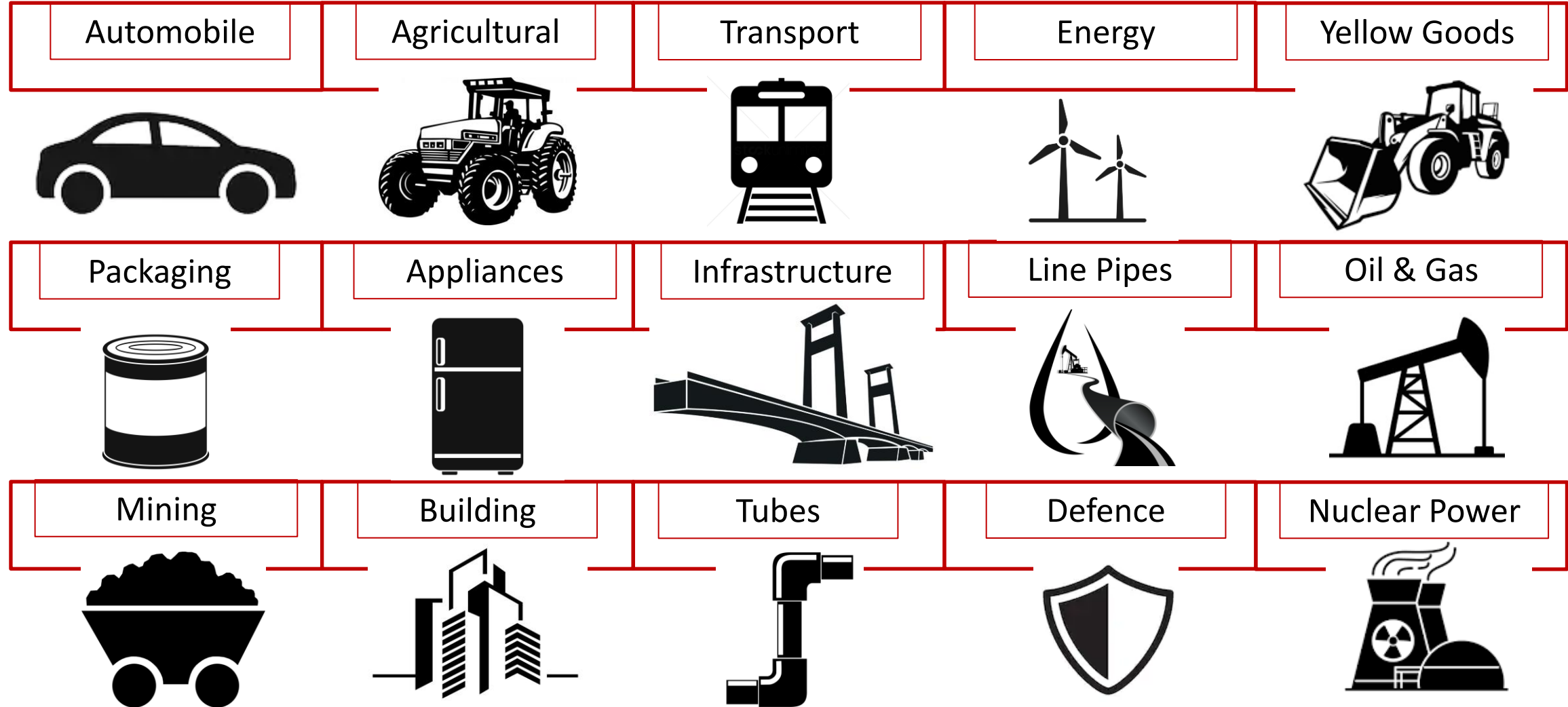
Complementary pelletising capability in eastern India with direct access rich iron ore reserves

Strong domestic distribution network to key industrial clusters across India.

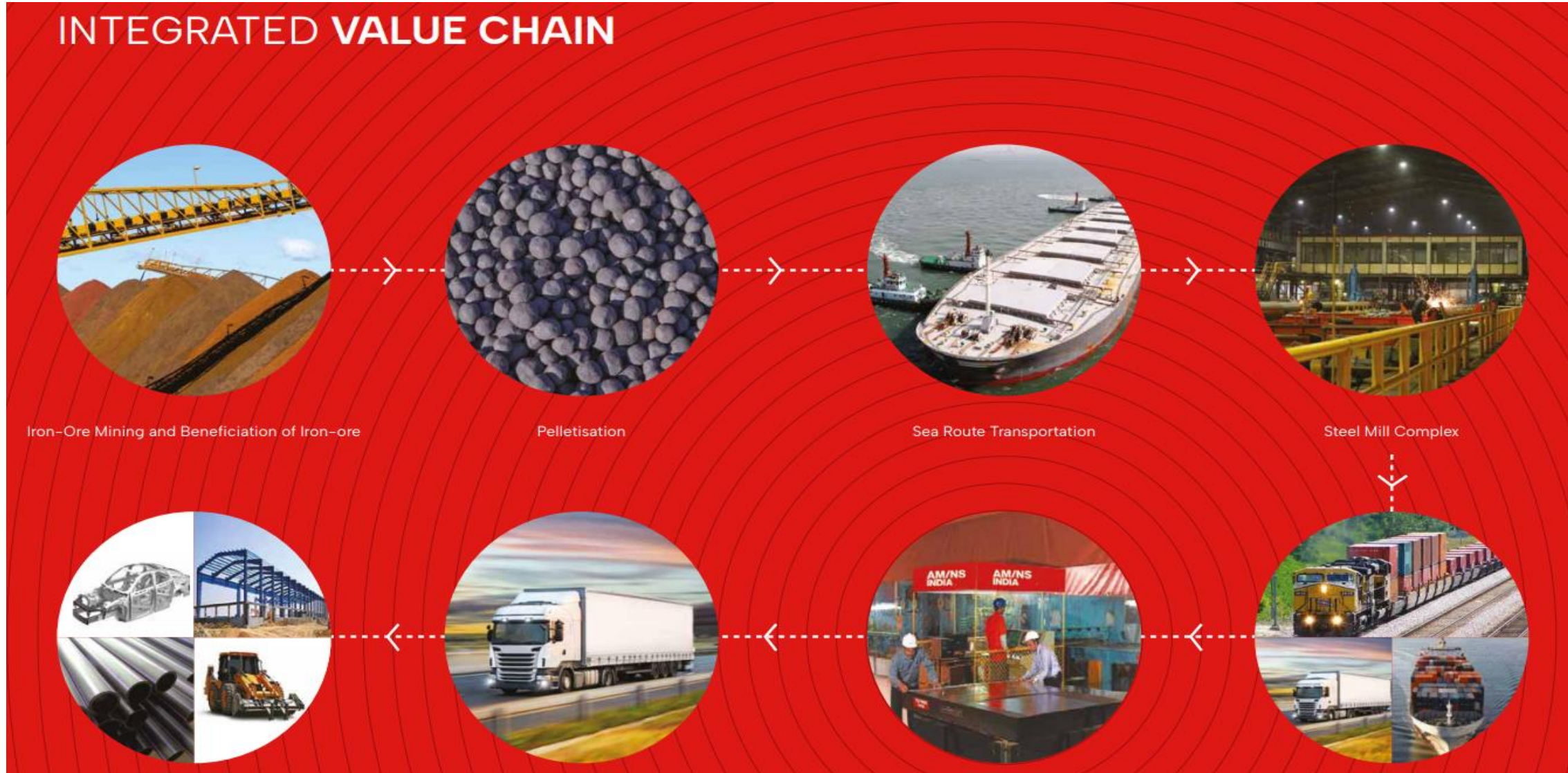


## KEY SEGMENTS

Wide spectrum of segment we cater to:



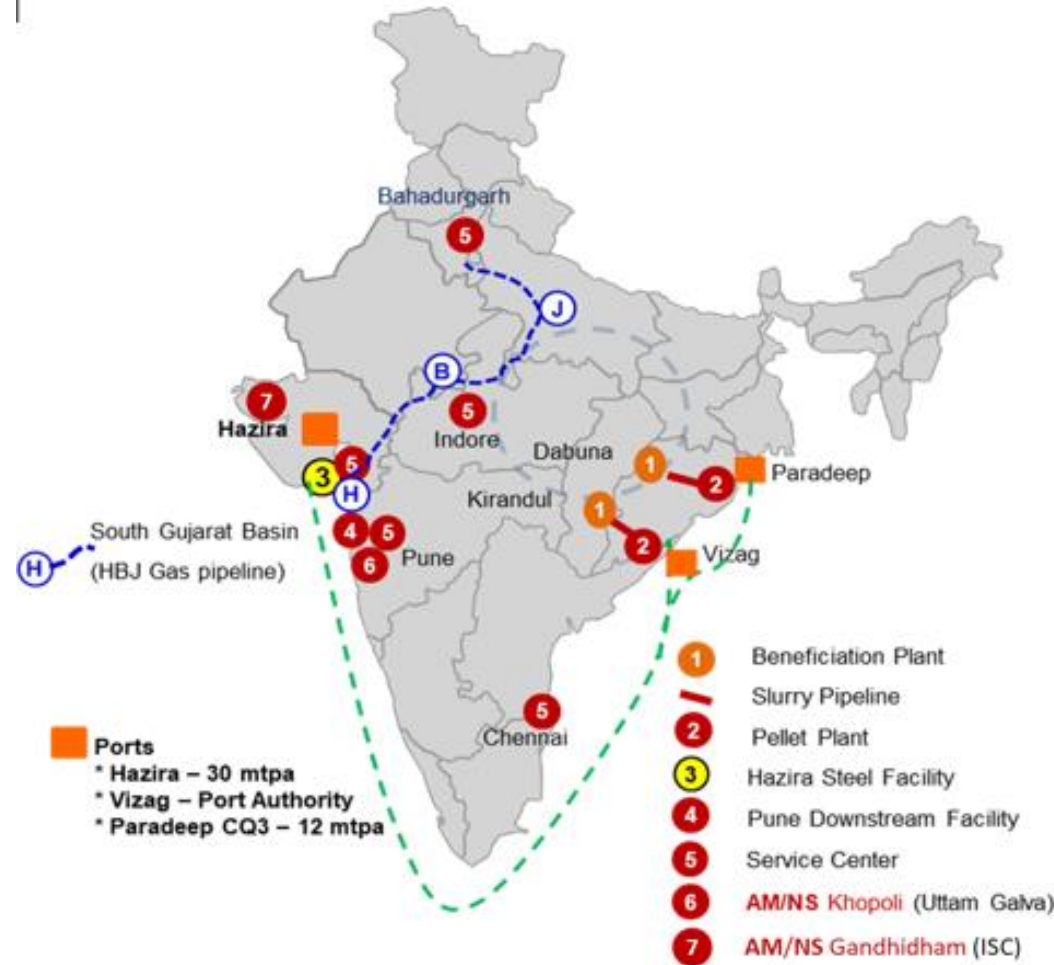




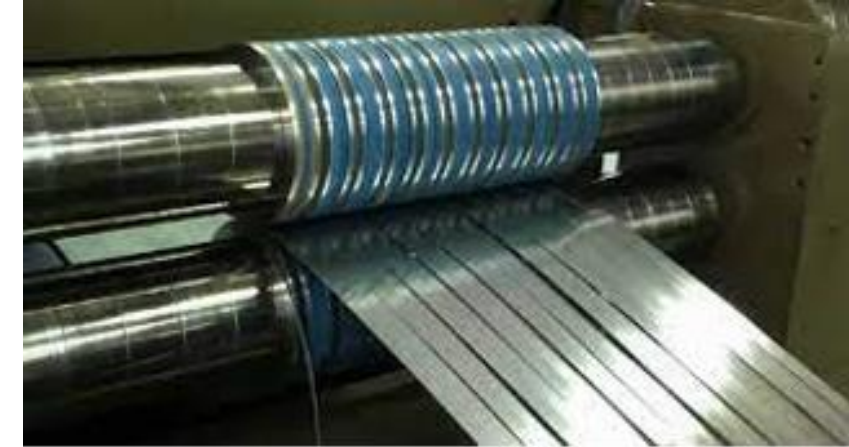
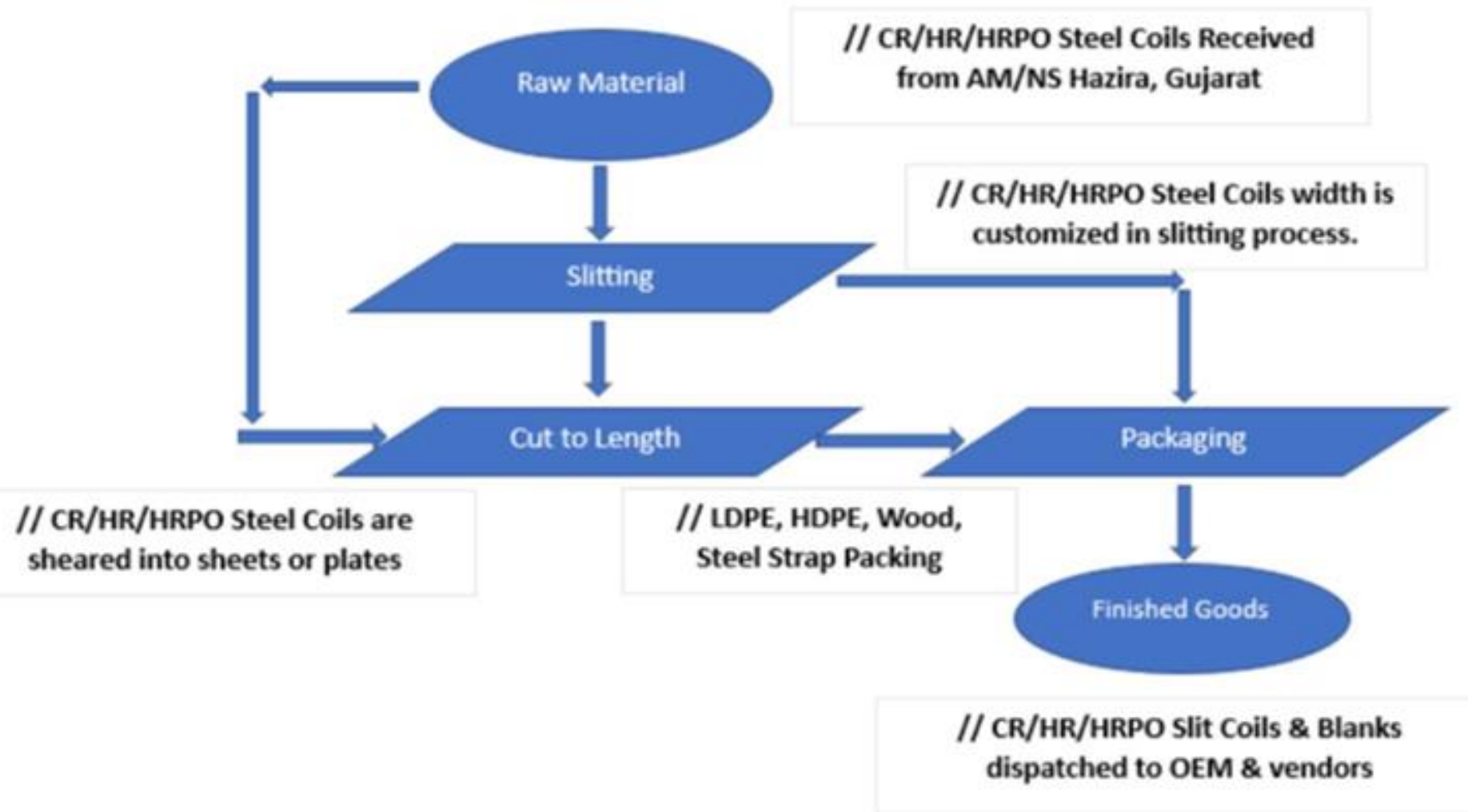


## CHENNAI SSC – BRIEF OVERVIEW

- 50KT/Month service center capacity in Chennai marketed as AM/NS India – Steel Processing & Distribution for supply of customized, Just-in-time processed steel solutions
- Facility located across major industrial hubs in close proximity of Automotive & yellow goods customers in Orgadam.
- Integrated service Centre with Diverse processing capability: Wide thickness range for Cut to Length, Slitting



## CHENNAI SSC – BRIEF PROCESS FLOW





## CHENNAI SSC – FACILITY OVERVIEW



**HR Slitter**

Thk: 2 – 12  
mm

Width : 2000  
mm

Capacity: 12.5  
KT PM



**HRNCTL**

Thk: 2 - 12  
mm

Width: 800  
mm

Capacity: 2.5  
KT PM



**HRWCTL**

Thk: 2 - 16  
mm

Width: 2000  
mm

Capacity: 10  
KT PM



**CR Slitter**

Thk: 0.3-  
3.2mm

Width: 1600  
mm

Capacity: 12.5  
KT PM



**CRWCTL**

Thk: 0.3-  
3.2mm

Width: 1600  
mm

Capacity: 10  
KT PM



**CRNCTL**

Thk: 0.3-3.2  
mm

Width: 600  
mm

Capacity: 2.5  
KT PM

### ERP

SAP HANA

L-2 Automation

### Packaging

Semi Automatic Slit Coil Packaging – 1  
No.

### Material Handling :

EOT Cranes

(10 Ton, 20 Ton, 30 Ton) – 11 no.

### Weighbridge:

100 Ton Weigh Bridge – 1 no.

### Other Utilities :

- STP – 12 KLD
- 1 MVA DG Set

# Environment Policy

AM/NS  
INDIA

## ENVIRONMENT POLICY

ArcelorMittal Nippon Steel India Limited (AM/NS India) operates all aspects of modern steelmaking as well as the associated iron ore mining operations. It produces a wide range of steel products to meet today's needs in all major customer markets.

Steel is the material of choice for environmental protection; not only is it environmentally friendly but it also outperforms other materials because it is readily recycled. Environmental excellence, incorporated into all processing activities, is to be promoted by the following principles:

1. Compliance with all relevant environmental laws and regulations, and other company commitments.
2. Implementation of Environmental Management Systems (including ISO 14001 certification) for all production facilities
3. Conducting environmental impact assessments for major capital projects in accordance with good international industry practice (irrespective of local legal requirements)
4. Continual improvement in environmental performance, taking advantage of systematic monitoring and aiming at pollution prevention, and the use of Best Available Technology (BAT).
5. Development, improvement and application of low impact, environmental production methods taking benefit of locally available raw materials.
6. Development and manufacture of environmentally friendly products focusing on their use and subsequent recycling
7. Efficient use of natural resources, raw materials, energy, land, and water.
8. Respect protected areas and manage adverse impacts on biodiversity and ecosystem services in accordance with good international industry practice
9. Implementing a long-term GHG emissions reduction strategy to achieve net zero.
10. Employee commitment and responsibility in environmental performance.
11. Supplier and contractor awareness and respect environmental policy of AM/NS India.
12. Open communication and dialogue with all stakeholders affected by operations of AM/NS India.

This policy applies to all ArcelorMittal Nippon Steel India Limited's operations and covers all AM/NS India employees and contractors associated with performing the business with AM/NS India.



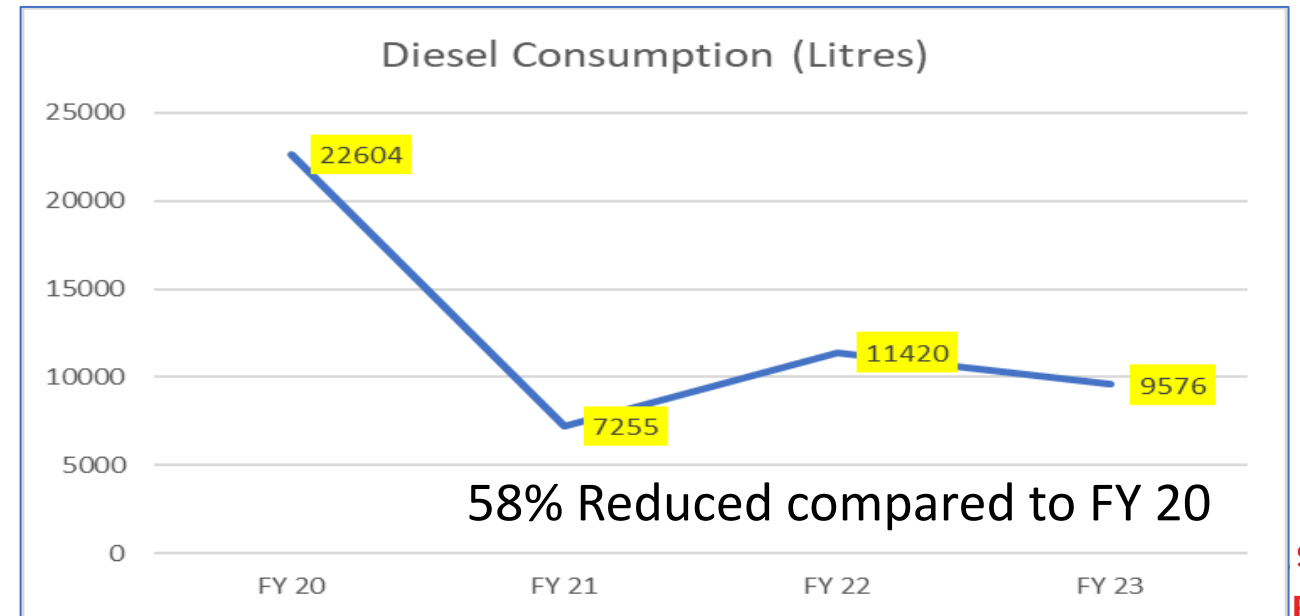
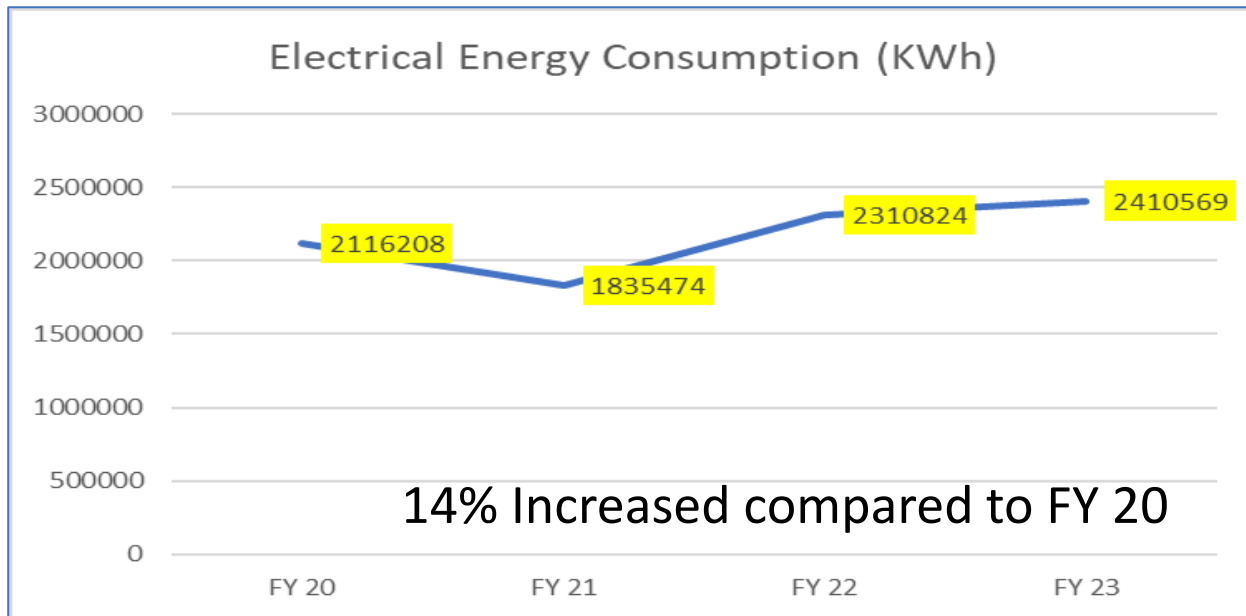
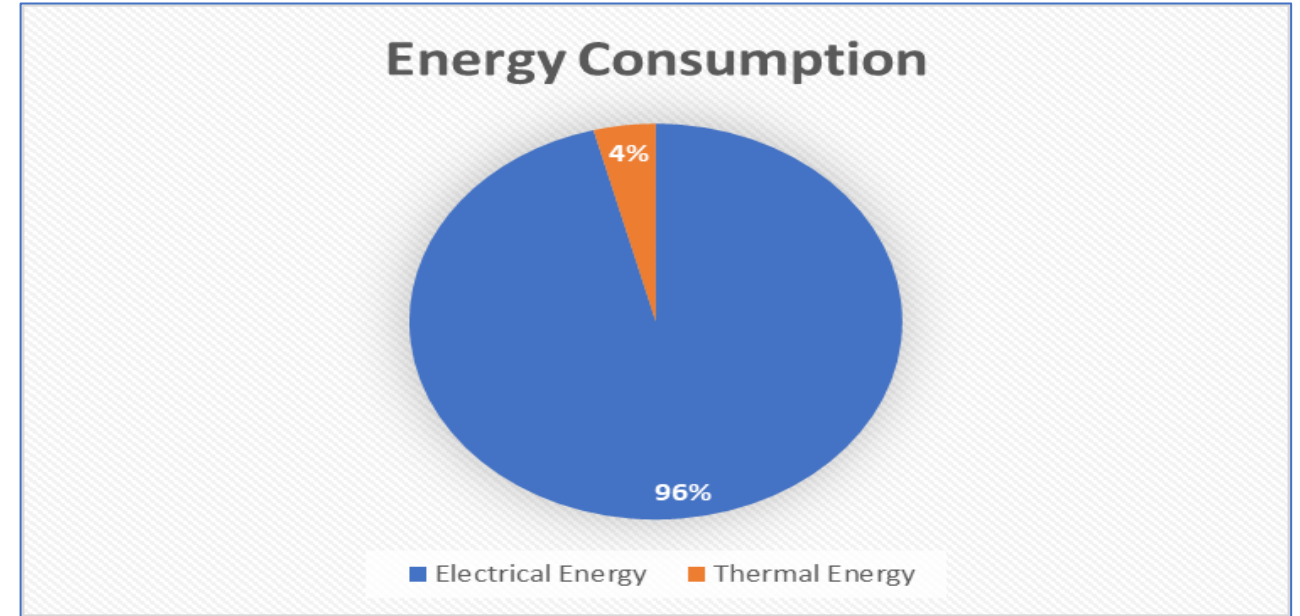
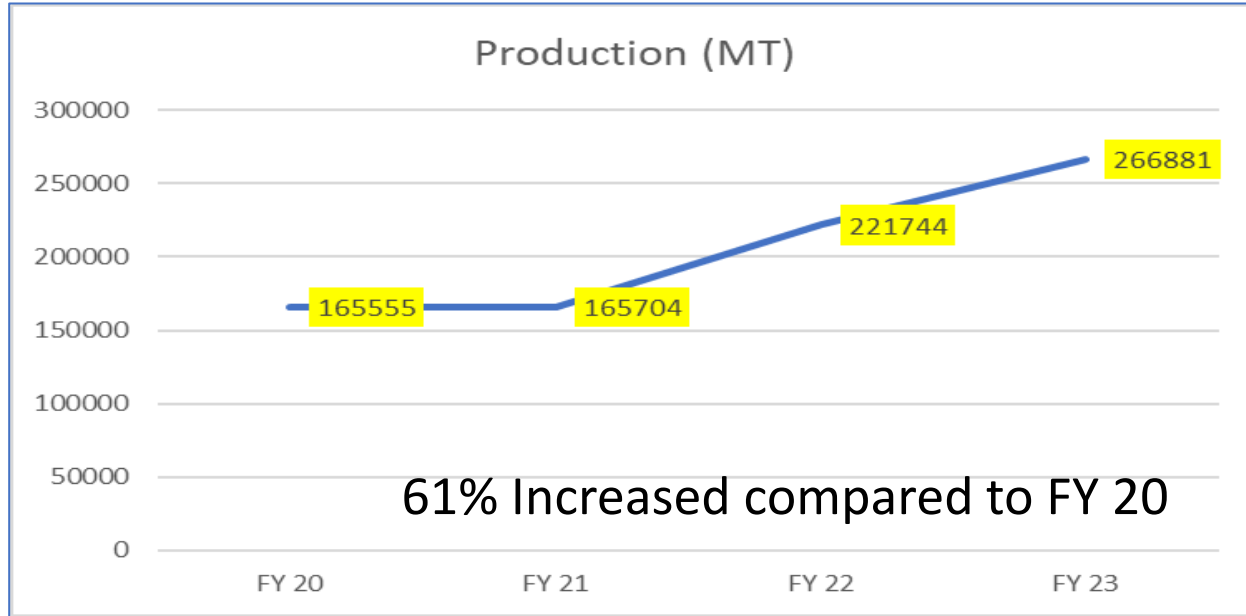
Dilip Oommen  
CEO / Occupier  
ArcelorMittal Nippon Steel India Ltd.

Place: Hazira  
Date: March 2023

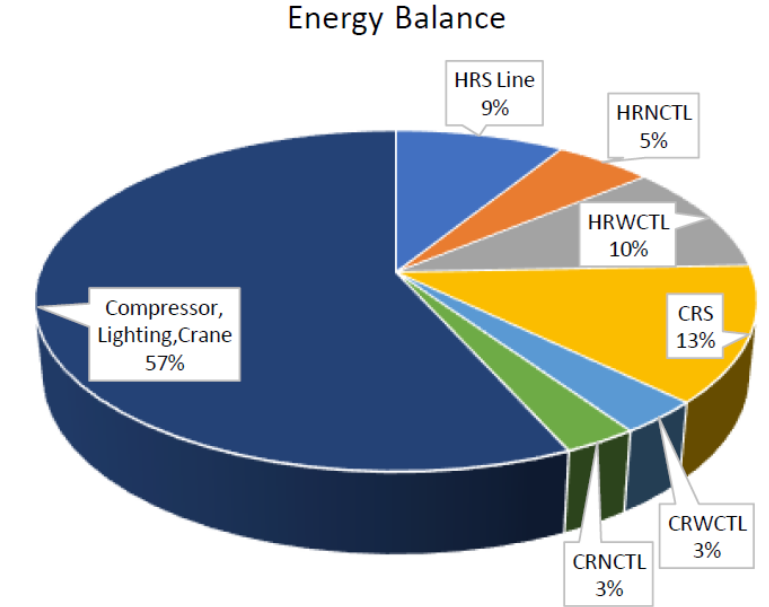
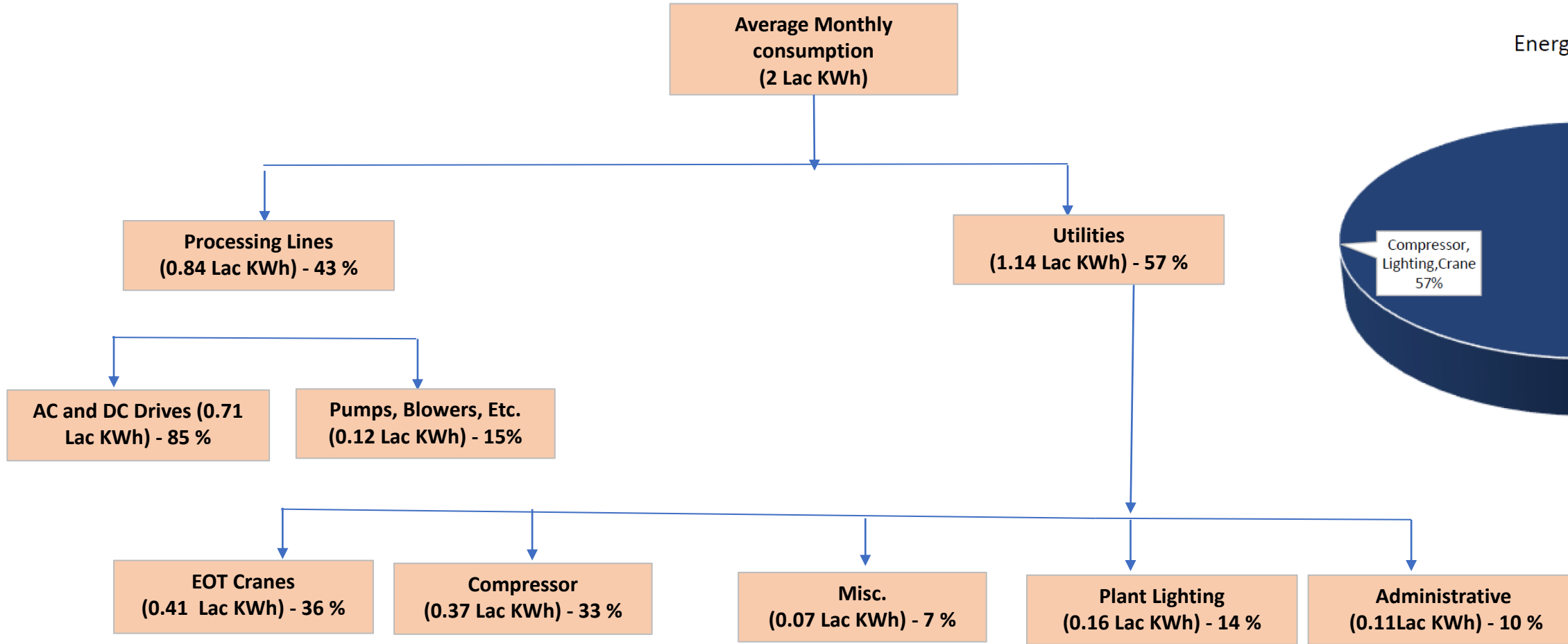
- Continual Improvement – Using the best Available Technology
- Efficient use of Natural Resources, Land, **Energy, Water**
- Environment friendly products and recycling
- Implementing a long term GHG Emission Reduction Strategy



# Energy Consumption

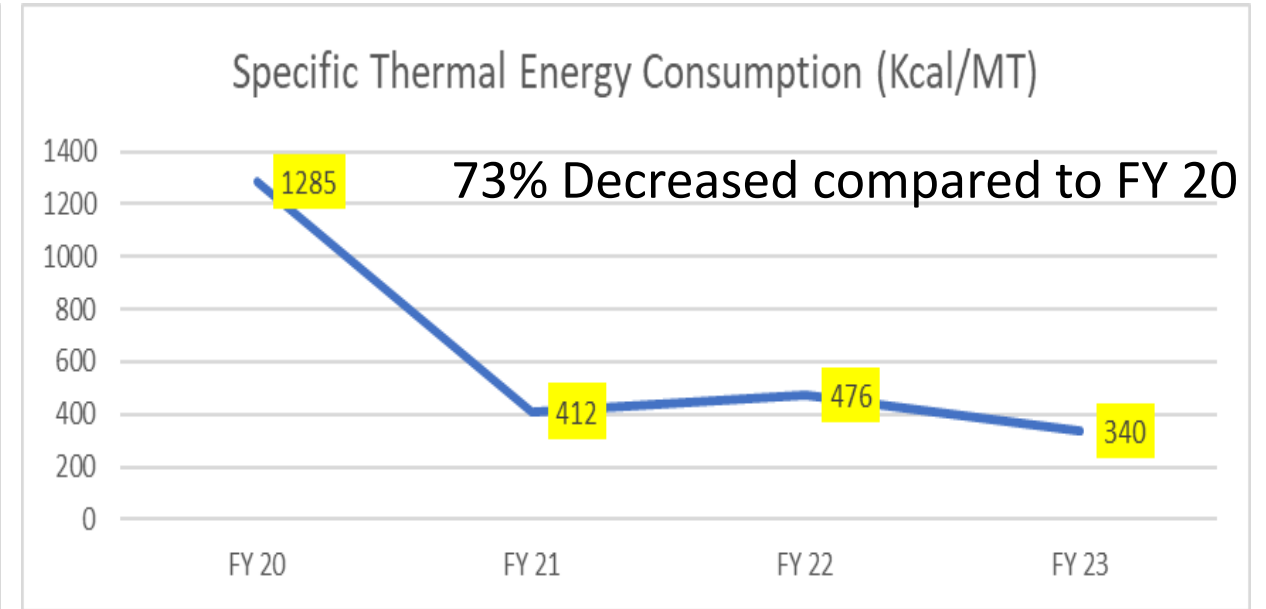
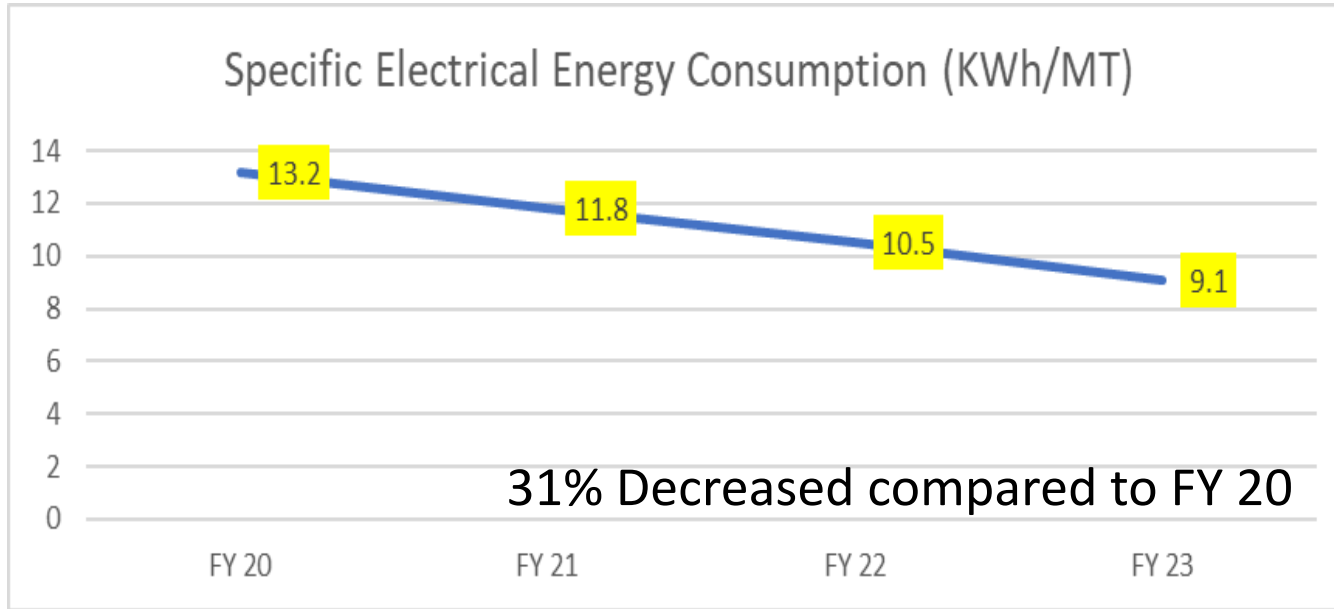


# Electrical Energy Consumption Overview



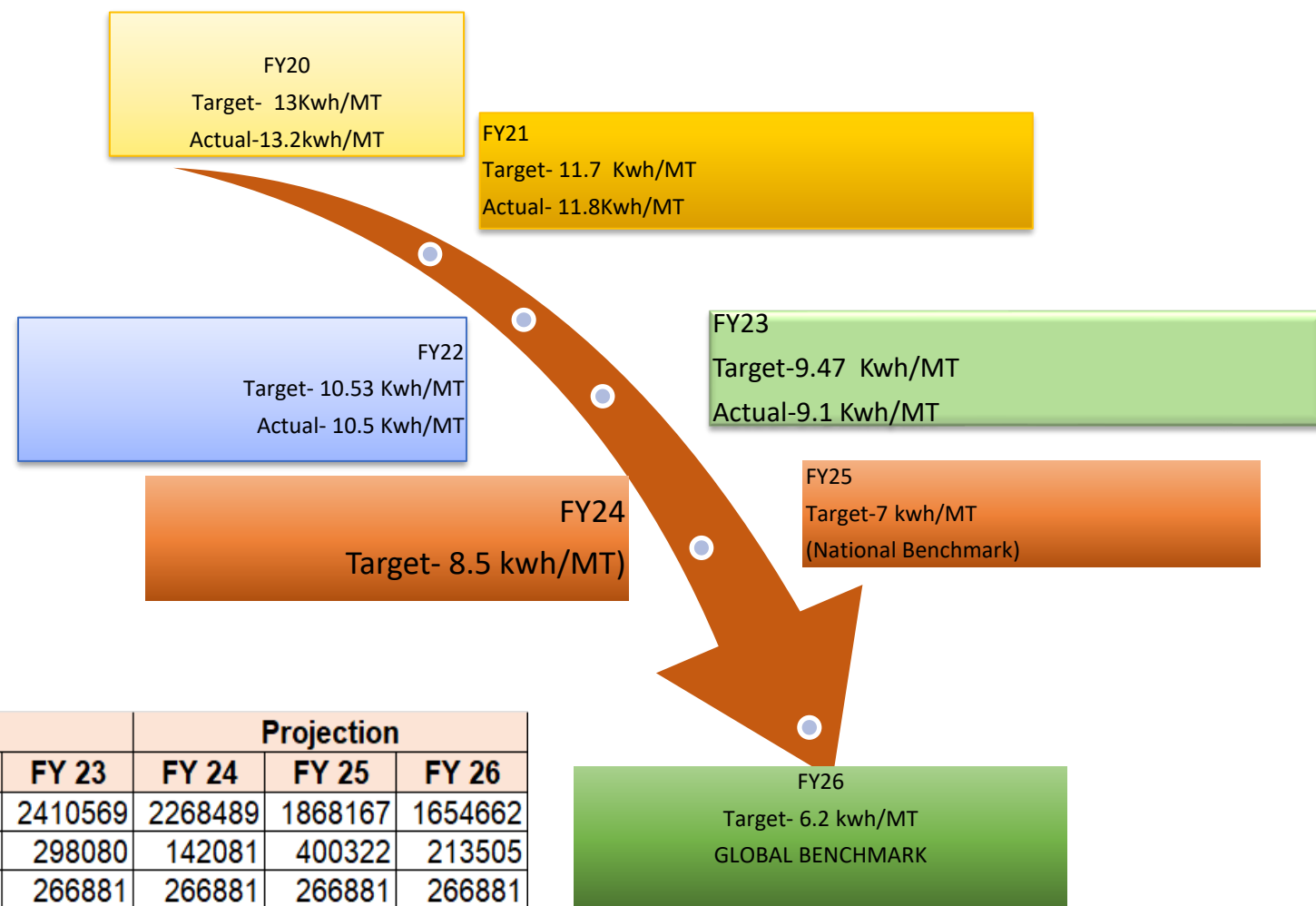
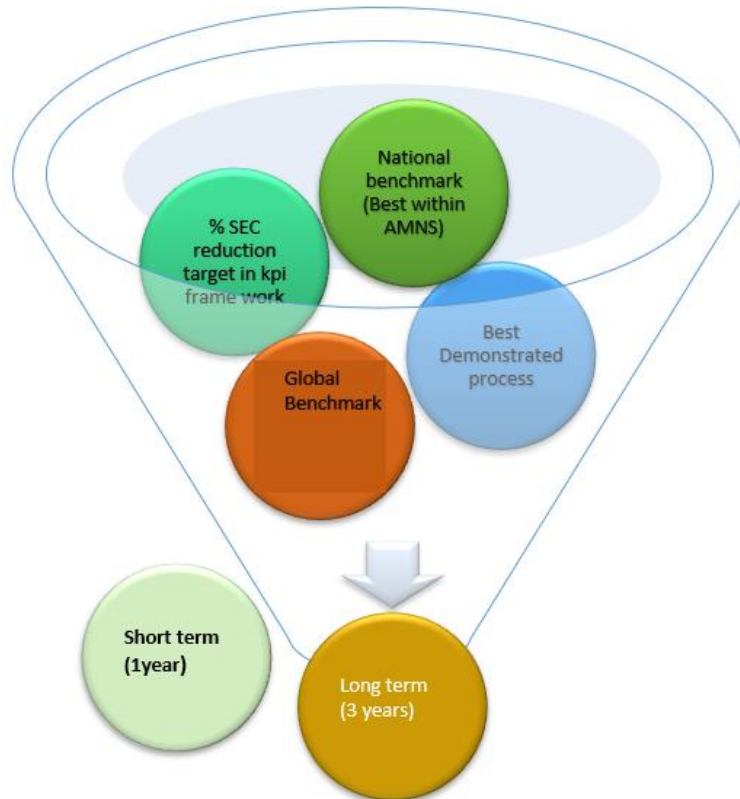


## Specific Energy Consumption



Year	SEEC (KWh/MT)	Change in SEEC from Last Year	STEC (KCal/MT)	Change in STEC from Last Year	Major actions taken to reduce Energy consumption
FY 21	11.8	-10.6%	412	-68%	<ul style="list-style-type: none"> <li>➤ Installation of VFDs in place of Conventional Drives.</li> <li>➤ replacement of Lighting system from Sodium vapour to LED.</li> </ul>
FY 22	10.50	-11%	476	+16%	<ul style="list-style-type: none"> <li>➤ Panel Ac control through thermostat and controller .</li> <li>➤ Modification of CRS scrap baller system.</li> </ul>
FY 23	9.12	-13%	340	-29%	<ul style="list-style-type: none"> <li>➤ Installation of coil tilter machine to reduce the utilization of crane.</li> <li>➤ Online line weighing system to reduce the double handling of material and so reduce the excess crane movement.</li> <li>➤ Replacement of 150 W LED lamp with 100 W. Day light harvesting.</li> </ul>

## How Close to Global Best in SEC



Particulars	Actuals				Projection		
	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Total Electricity Consumption (KWh)	2116208	1835474	2310824	2410569	2268489	1868167	1654662
Savings through Encon Projects (KWH)		368000	400412	298080	142081	400322	213505
Production (MT)	165555	165704	221744	266881	266881	266881	266881
Target SEC (KWh/MT)	13.0	11.7	10.5	9.5	8.5	7.0	6.2
Actual SEC (KWh/MT)	13.2	11.1	10.4	9.0	8.5	7.0	6.2
Change in SEC w.r.t previous FY		16%	6%	13%	6%	18%	11%
Savings in SEC (KWh/MT)		2.1	0.7	1.4	0.5	1.5	0.8



## How Close to Global Best in SEC

Sl.Nos	YEAR	No. of ENCON PROJECTS	Annual Electrical Saving (Million kwh)	Annual Thermal Energy Saving (Million KCal)	Annual Saving (Million Rs)	Investment (Million Rs)
25	FY23-24	Upgradation of HRW piler system from starter to VFD.	0.01		0.078	0.3
26	FY23-24	improvement of Pneumatic system to improve efficiency of compressor by improving unloading time.	0.22		1.40	0.5
27	FY24-25	replacement of 9 no's hydraulic power pack motor starter with VFD.	0.01		0.06	2.4
28	FY24-25	Installation of VFD drive for compressor in place of starter	0.01		0.07	0.4
30	FY24-25	Centralize light system to controlled on off mechanism.	0.12		0.75	0.5
31	FY24-25	Improvement of hydraulic power pack efficiency to improve loading & unloading cycle.	0.18		1.17	0.5
32	FY25-26	Upgrdation of crane motor with IE5 energy efficient motor.	0.396		2.57	3
33	FY24-25	Upgradation of Dust collector motor, Circular shaw machine Wood cutting machine , Grooving machine	0.00945		0.06	0.8
35	FY24-25	Upgradation of admin 2 start ac with energy efficient 4-star ac.	0.03672		0.23	1
33	FY25-26	Replacement of standalone shear with flying shear.(improvement of kwh/MT from 10 to 6)	0.004		0.02	50

# LIST OF ENCON PROJECTS IN LAST 3 YEARS

Sl.Nos	YEAR	No. of ENCON PROJECTS	Annual Electrical Saving (Million kwh)	Annual Thermal Energy Saving (Million KCal)	Annual Saving (Million Rs)	Investment (Million Rs)	Payback (Months)
1	FY20-21	10	0.368	136.000	3.823	1.477	4.6
2	FY21-22	5	0.400		2.603	0.507	2.3
3	FY22-23	4	0.526	16.000	4.032	4.864	14.5
			<b>1.66</b>	<b>288.00</b>	<b>14.28</b>	<b>8.33</b>	<b>7.0</b>



## LIST OF ENCON PROJECTS IN LAST 3 YEARS

Sl.Nos	YEAR	TITLE	Annual Electrical Saving (Million kwh)	Annual Thermal Energy Saving (Million KCal)	Annual Saving (Million Rs)	Investment (Million Rs)	Remarks
1	FY20-21	Replacement of 250 watt sodium vapour light with 150 watt led light	0.023		0.15	0.28	
2	FY20-21	Repalcement of 150-watt light with 100-watt LED type light	0.015		0.09	0.33	P.O Ref. No - 4500263014
3	FY20-21	Power factor improvement.	0.181		1.19	0.19	P.O Ref. No - 4500259261
4	FY20-21	Upgradation of motor starter with VFD DRIVE for 7.5 kw.	0.009		0.06	0.05	P.O Ref.No - 4500253406,4400148619,4500299776
5	FY20-21	Upgradation of motor starter with VFD DRIVE 3.5	0.020		0.13	0.03	
6	FY20-21	Replacement of 36-watt light with 18 watt led light	0.005		0.03	0.01	P.O Ref. No - 4500239694
7	FY20-21	Upgradation of motor starter with VFD DRIVE for 45 kw.	0.052		0.34	0.13	P.O Ref. No - 4900965211
8	FY20-21	Upgradation of motor starter with VFD DRIVE for 55 kw.	0.063		0.42	0.47	P.O Ref. No - 491172364
9	FY20-21	To avoid line running with DG in case of power failure.		92	0.95	0.00	
10	FY20-21	To eliminate use of Hydra/Farana on rental basis		44	0.45	0.00	

# AM/NS LIST OF ENCON PROJECTS IN LAST 3 YEARS

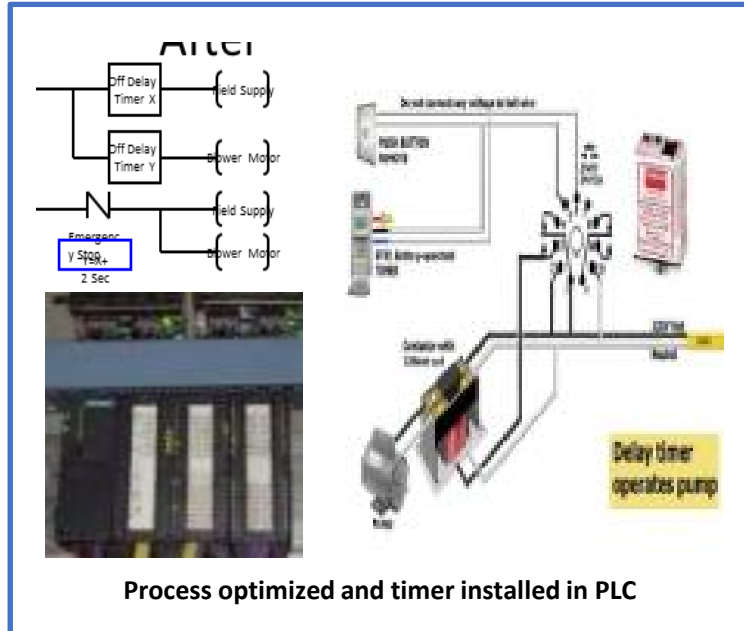
ArcelorMittal Nippon Steel India

Sl.Nos	YEAR	TITLE	Annual Electrical Saving (Million kwh)	Annual Thermal Energy Saving (Million KCal)	Annual Saving (Million Rs)	Investment (Million Rs)	Remarks
11	FY21-22	Replacement of 150 watt led light with 100-watt light	0.016		0.11	0.19	
12	FY21-22	Panel ac control through thermostat and controller .	0.315		2.05	0.04	P.O Ref. No - 4500307929
13	FY21-22	Variable drive based scarp baller system replacement in CRS.	0.025		0.16	0.18	
14	FY21-22	Sun light harvesting to reduce the usages of light in Day time.	0.041		0.27	0.10	
15	FY21-22	Lubrication motor of line is interlocked with hydraulic motor run to save energy during idle time.'	0.002		0.02	0.00	Interlocked through plc programme
16	FY22-23	Replacement of 150 watt light with 100 watt LED type light	0.017		0.11	0.77	
17	FY22-23	Installation of coil tilter machine to reduce the utilization of crane.	0.000		0.43	0.66	P.O Ref. No - 5300046197
18	FY22-23	Online line weighing system to reduce the double handling of material and so reduce the excess crane movement.	0.108		0.71	0.62	P.O Ref. No - 5300049375
19	FY22-23	Installation of Auto Wrapping Machine at HRS to avoid packaging of coils with the help of forklift		16	0.18	2.30	P.O Ref. No - 5300046677
			<b>0.89</b>	<b>152.00</b>	<b>7.86</b>	<b>6.34</b>	



## Reduction of Idle Running of Equipment in Processing Lines

Actual running time of Slitting lines is approximately 28 % of the total operating time. In the case of Cut-to-Length, the running time is around 40%. But the hydraulic motors and lubrication pumps keep running through-out the operating time.



Monthly  
Saving of  
15840 kwh

PLC Program Modified to Reduce Idle Running of Motor in processing lines . Also Energy Saving Hooter/Temperature controller installed in Processing Lines and Utility equipment.

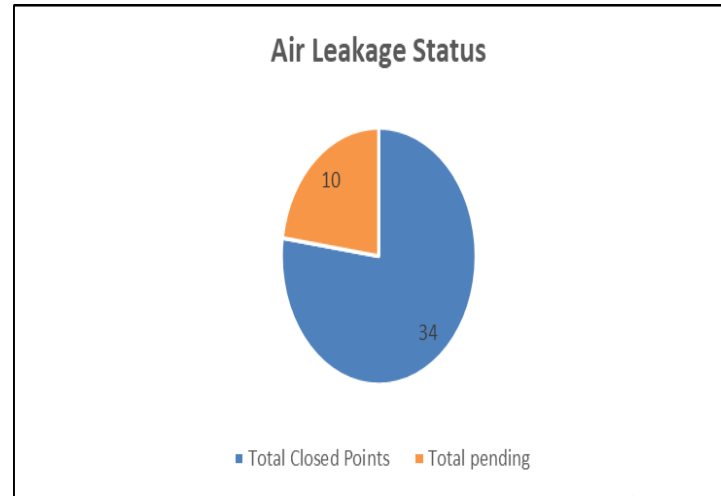
## Power Factor Improvement

Upgradation of capacitor bank and controller .Power factor improved from 0.88 to 0.99.



## Compressor Air leakage Arrest & Monitoring

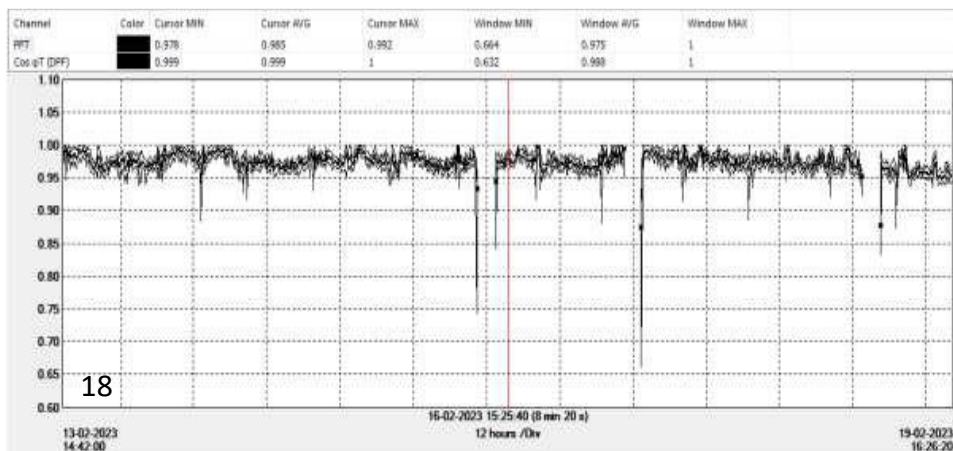
Air leakage arresting & Monthly audit control.



Sr. No	Images	Location	Status
1.		Location- Compressor Area HR section Line main receiver tank outgoing line valve	Completed
2.		Location- HRS Line HRS Line packing pipe	Completed
3.		Location- HRS Line HRS Line Leveler FLR unit valve	Completed
4.		Location- HRS Line HRS Line motor break valve	Completed
5.		Location- HRS Line HRS Line Recoller motor side FLR unit	Completed

661  
KWh/day  
saving

- Maximum power factor is 1, and Average power factor Is 0.975
- Trend was taken between 13-02-2023 to 19-02-2023.





## Reduction of Lighting Load



Reduction  
of Lighting  
load from  
150 W to  
100 W

## Day Light Harvesting

CRW Line – BC Bay



CRW Line – BC Bay



FG Area – AB Bay





# Energy Consumption Monitoring & Review

- ❑ Electricity consumption of individual processing Lines and utilities are captured from energy meters installed at different locations.
- ❑ Energy meter data is integrated with L2 automation.
- ❑ Cyclic energy meter data is being capture on real time basis and stored in L2 System.
- ❑ Electricity consumption of processing lines and utilities is monitored on daily basis
- ❑ Daily Auto mail for management review.
- ❑ Daily, weekly, Monthly review mechanism.

FW: Chennai SC PRODUCTION AND DELAY REPORT FOR Date: 20-08-2023 - Message (HTML)

File Message Help

Delete Archive Reply Reply All Forward Share to Teams To Manager Team Email Move Move Assign Policy Categorize Follow Up Tags Editing Read Aloud Immersive Reader Translate Zoom Viva Insights Report as Phishing

FW: Chennai SC PRODUCTION AND DELAY REPORT FOR Date: 20-08-2023

Arunmozhi, Siddharth - AM/NS India - SCM (Chennai)

To: #Team SSC - Chennai - AM/NS India (Chennai)

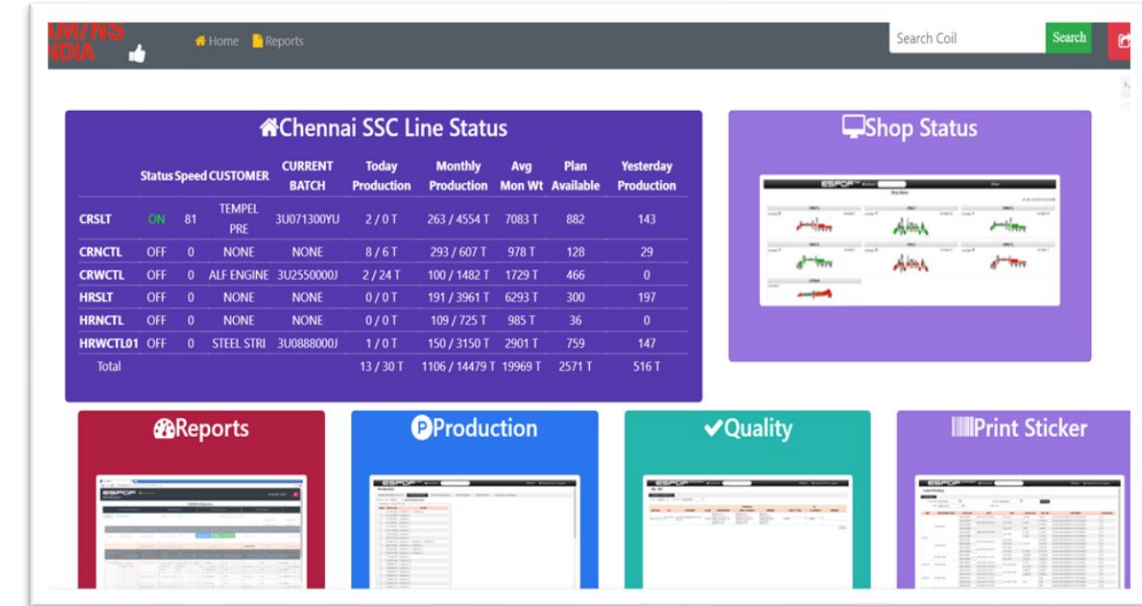
This message was AutoForwarded.

If there are problems with how this message is displayed, click here to view it in a web browser.

### ENERGY REPORT

LINE	Power consumption (in Kwh)	Production (MT)	Specific Power ( Kwh/MT)
CRSLT	723	143	5
CRWCTL	108	0	
CRNCTL	188	29	6
HRSLT	548	197	3
HRWCTL01	819	147	6
HRNCTL	31	0	
Total	2417	516	20

AM/NS INDIA Safety of people and the planet starts with me. I am committed to making safety at workplace and of the environment a priority in every action I take.



AM/NS INDIA Home Reports Search Coil Search

### Energy Reports

Production Report Delay Report Quality Report PDO Report Energy Report

Scrap Details Coil Track Details Schedule Release

From Date 08/21/2023 00:00:00 To Date 08/21/2023 23:59:59 Generate Export To Excel Energy Cyclic data

### Energy Data Cyclic Trend

Cyclic data Energy

Serial No.	UPD_TIME	CR_SLT	CR_NCTL	CR_WCTL	HR_WCTL	HR_NCTL	HR_SLT	PSL	CRW_UTILITY	CRNCTL_MAI
1	8/21/2023 12:00:37 AM	685865	188405	258854	53796	272295	519303	439496	--	371975
2	8/21/2023 12:01:37 AM	685865	188405	258854	53796	272295	519303	439496	--	371975
3	8/21/2023 12:02:39 AM	685865	188405	258854	53796	272295	519303	439496	--	371975
4	8/21/2023 12:03:35 AM	685865	188405	258854	53796	272295	519303	439496	--	371975

## Other Monitoring Systems & Platforms

### Centralized HSE Portal

The screenshot displays the 'HEALTH SAFETY AND ENVIRONMENT' portal. A user named 'Hello Tonmoy Paul' is reporting a 'Near Miss' for an operation on 05/15/2023 at 17:52:04. The form includes fields for 'Near Miss' (with a dropdown menu showing 'Near Miss', 'SAM', 'Safety Observation', and 'BBS Checklist'), 'Shift' (A), 'Plant' (Select Plant), and 'Occurrence Dept' (Select Department). There are text areas for 'NearMiss Description' (max 500 characters) and 'Possible Outcome' (max 250 characters). A section for 'How can this be prevented in future?' (max 250 characters) is also present. The form is titled 'Analysis' at the bottom.

### Centralized Legal Compliance Tool Portal





# Teamwork and Employee Involvement

## Tree Plantation & Awareness Session

## Participation in Ideation workshop



## Training to Shop floor employee



### Training on Spill Management & Plastic Usage Awareness\_SSC – Chennai



## Momentum of Active Participation





## Online Weight measurement & integration with L2.

### Problem Statement –

FG packets are lifted with the help of EOT crane from Piler conveyor and then weighed on the platform scale, weight is recorded manually and then shifted to the FG storage area. This engages crane and also there are chances of weighment recording error due to manual intervention.

### Innovation -

- Load Cells installed beneath the last conveyor of the Piler.
- Integrated with L-2 System



**Annual  
Recurring Saving  
INR 0.7 M**

### Project Achievements & Benefits

- Eliminated the NVA activities in the process.
- Crane utilisation improved
- Saving of Energy - 0.108 M KWh Annually
- Chances of wrong weight uploading eliminated.
- Improved Dispatches
- Eliminated Customer Complaints





### Auto – Coil Wrapping & Coil Tilter Machine

#### Problem Statement –

Narrow Slit Coils are packed with the help of EOT cranes or Forklift manually which engages EOT crane and also there is human intervention which is a safety hazard. While loading these coils are tilted to eye to sky position which is done by EOT crane which is again neither energy efficient nor safe.

#### Innovation -

- Custom make wrapping and tilting machine to suit requirement.
- Can wrap up to 2000 mm OD coils
- Auto gripping and cutting facility.
- Weighment Facility available
- Integrated with L-2

#### Project Achievements & Benefits

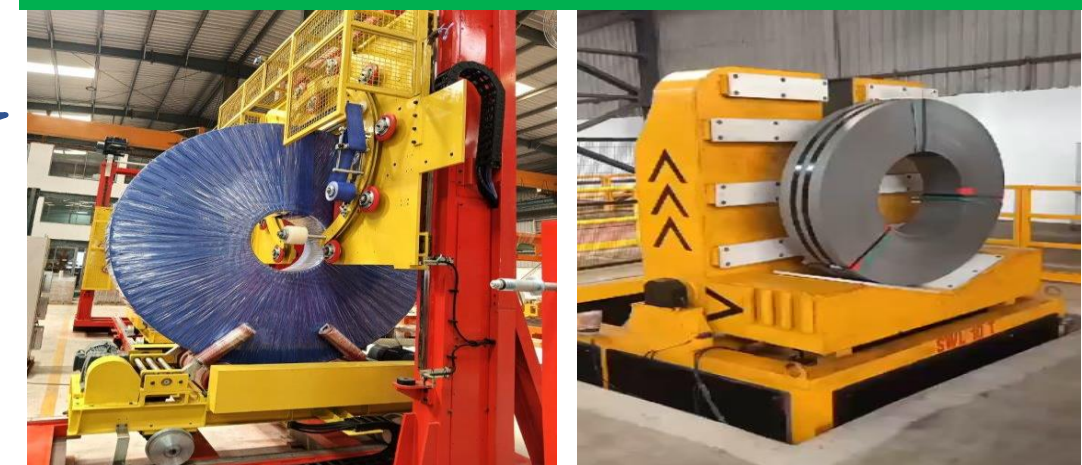
- Improved Safety
- Saves Time - Increased Productivity
- Save on HDPE / Film Costs
- Faster Packaging
- Energy Efficient Product Wrapping – Savings of 64800 KWh/annum

**Annual  
Recurring Saving  
INR 1.14M**

Before



After



## Modification of CRS Scrap Baller System

### Problem Statement –

Trimming of CR Slitter Machine is rolled in scarp baller. There is frequent breakdown and line stoppage due to failure of scrap baller unit. Low production resulted in rise in SEC of CRS line.

### Innovation -

Inhouse designed developed ,which can withstand existing load requirement with reduced in over all dimension leading to reduction in overall load. Which results is reducing motor power from 55kw to 22 kw.

### Tangible Benefits

- No of Breakdowns in CR Slitter lines are reduced from **24** Nos to **12** Nos
- Average shift production is increased from **92.3** Tons to **107.4** Tons
- Maintenance time is reduced for Scrap baller system from **45** Minutes to **20** Minutes
- Scrap removal time is reduced at Scrap pit from **2** Hours to **1** Hour

### Intangible Benefits

- Workplace safety is improved at CR Slitter line scrap baller area

Reduction  
of Power  
from 55kw  
to 22kw

Before



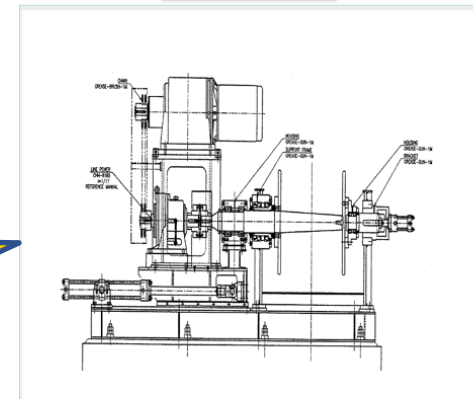
Scrap Baller with full load of Trimming coil

After



Scrap Baller with half load of Trimming coil

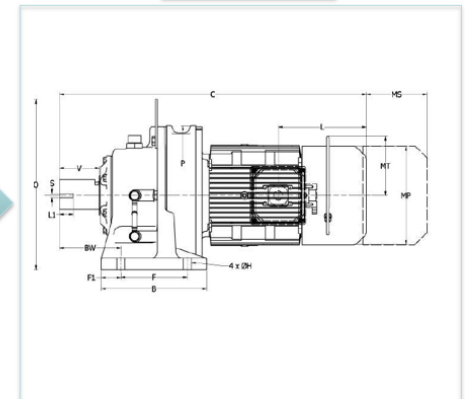
Before



Magnet coupling with chain sprocket assembly

Countermeasure: 1

After



After: Cyclo mechanism with VFD



## 600KWp- Roof Top Solar Power Project: Under Progress

Already implemented at our Pune & Bahadurgarh Service Centers.



Solar PV Modules Rooftop Installation



### Solar roof top project status:-

- 600 kw rooftop Solar plant purchased order issued to vendor.
- Site Visit & Layout, BOQ preparation complete.
- Project is planned for 2023-2024, Date of completion is Oct-2024.

ArcelorMittal Nippon Steel India Limited		AM/NS INDIA			
<b>AMNS India Ltd (CHN)</b> Plot No A6, GPCOT Industrial Growth Center Sriperambathur Taluk, Dist Kancheepuram-602105 Tamil Nadu, India. Ph : 9871989343 E-mail : sambhav.gupta@becquer.co		<b>PURCHASE ORDER</b> VAT/LST NO : 33940301099 CST NO : 97683 EOC NO : AAACE1741PXM001 SERVICE TAX REGN NO : AAACE1741FST001 RANGE : RANGE -1, 2ND FLOOR, SAMRUDHI NANPURA, SURAT-365001 PAN NO : AAACE1741P CIN:U27100GJ1976FLC013787			
<b>SUPPLIER'S NAME &amp; ADDRESS - VENDOR CODE 172724</b> Mr. BECQUER ENERGY INDIA SALES OFFICE PRIVATE FIRST FLOOR, W-3, GREEN PARK, DELHI, SOUTH DELHI DELHI-110016 Delhi-110016 Delhi, India. Ph : 9871989343 Fax : E-mail : sambhav.gupta@becquer.co		<b>PLEASE SUPPLY THE FOLLOWING MATERIALS</b> As per the terms & conditions mentioned below. General terms & Conditions mentioned at the end, form a part of purchase order. Please acknowledge receipt of the Purchase Order and send your unconditional acceptance to abide the terms and conditions of the order. Contact for this PO : Mr. Pankaj Singh Tel. : 91-8000025233 Fax : 91- Email : pankaj.singh@associatehazira.amns.in			
Your Person Responsible : Sambhav Telephone : 9871989343 Your GSTIN With Us : 07AAHCB0927B1Z6					
For Prompt Payment supplier should send Tax Invoice (original for Recipient) along with material to our respective stores at, AM/NS India Ltd (CHN). Please mention place of supply : State Name & code in invoice as mentioned against items/PO without fail. Eg. Place of Supply: Gujarat-24 (In case of Supply to H&M or else according to delivery plant) Always quote PO-No and material code in original copy of Challans, Invoice and in all your correspondence with us.					
SR.NO.	MAT.CODE	QTY	UNIT	RATE/UNIT (INR)	AMOUNT (INR)
00010	300860144	1	Lot	17,930,000.00 / 1 LO	17,930,000.00
SYS_OT_608KWDCSOLARROOFTOPLANT SYSTEM ONE TIME DETAILS-608 KW DC SOLAR ROOF TOP PLANT DETAILS-1:470 WP SOLAR PV MONO CRYSTALLINE MODULES 1296 NOS DETAILS-2:100 KW SOLAR INVERTOR 6 NOS DETAILS-3:MPPT VOLTAGE RANGE 200-800 VOLTS DETAILS-4:LANDSCAPE ORIENTATION DETAILS-5:MODULE DIMENSION 2182 X 1029 MM DETAILS-6:WALKWAY 720 MM AND CABLE TRAY 200 MM DETAILS-7:4P, 1000A ACDB PANEL WITH 6 NOS OF 200 AMP MCCB FEEDERS INCLUDES 1000/5 A CT, MFM DETAILS-8:VARIOUS SIZES OF AC & DC CABLES AS PER PROJECT REQUIREMENTS DETAILS-9:STAIR CASE FOR ROOF TOP AS PER SITE REQUIREMENT DETAILS-10:CAPEX NO : 22-SC-09					
Please deliver the above materials ( 00010 )					

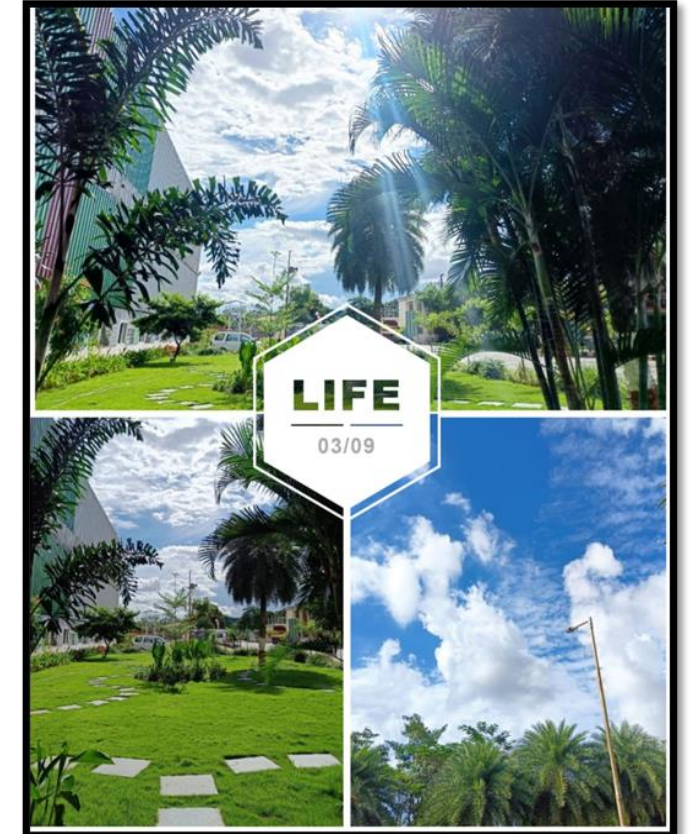
## Waste Utilization & Management

Type of Scrap	FY 21	FY 22	FY 23	UoM	Disposal
Wooden Scrap	29.57	16.87	36.7	MT	Sale through auction
Plastic Waste	11.69	5.49	14.27	MT	Sale to Authorised Recycler through Auction
Steel Scrap	4698	3991	4565	MT	Sale through auction





## Storage & Reusage of STP Treated Water



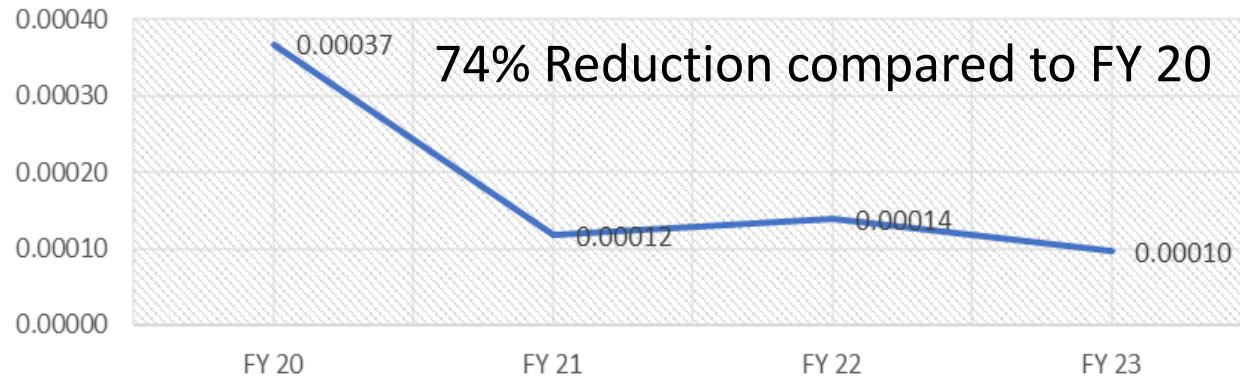
- We have 12 KLD STP
- For Construction of tank (25000 liters) - 6,00,00/-
- Submerge Pump (1 Quantity, 2800 RPM) – 1,10,000/-
- Haier branded pop sprinklers (180 Quantity) – 680 per each – total – 1,22,400/-
- Finolex pipe (2100 mts) – 112 per each meter – total – 2,35,200/-
- For Drip irrigation System – 40,000/-
- Total Investment – 11.07 lacs // Yearly Savings = 4.11 lacs
- Payback Period – 2.5 years



# GHG Inventorisation

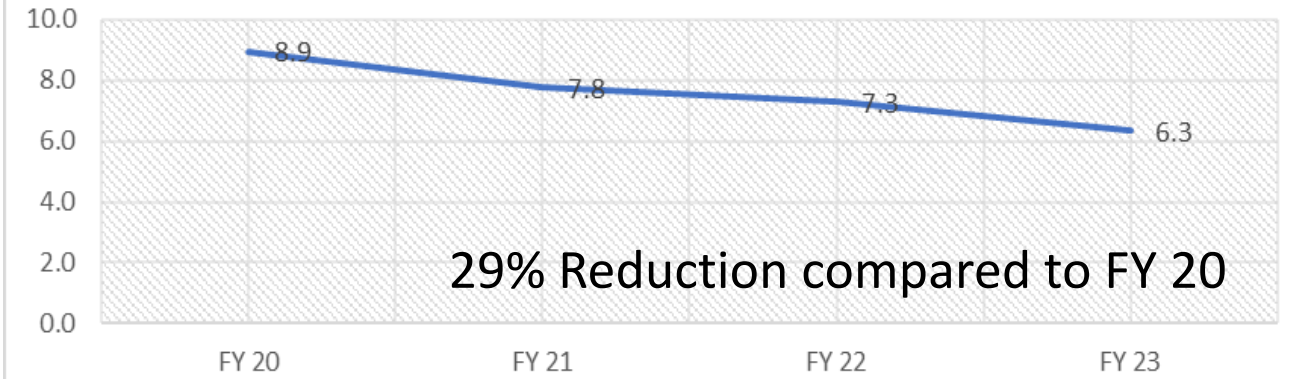
## Diesel – Used in DG, Forklift, Farana

### Sp Scope 1 Emissions (KgCO<sub>2</sub>e/MT)



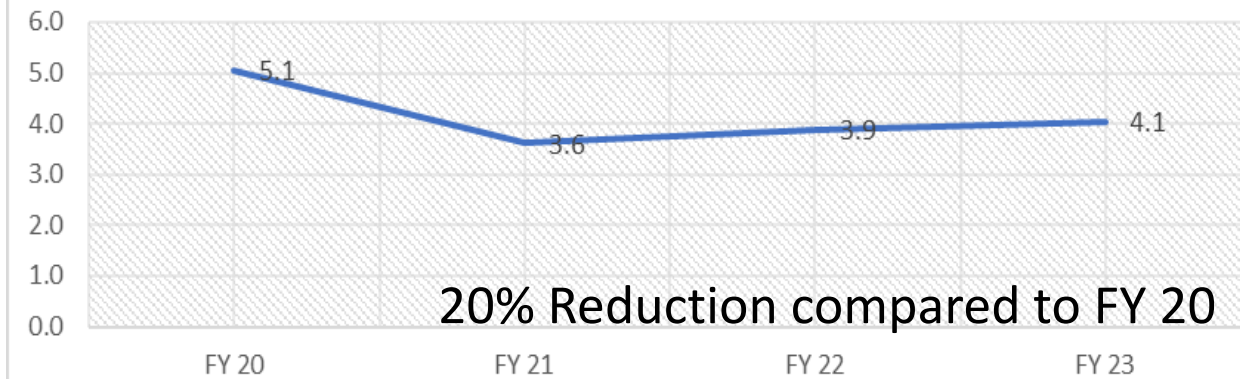
## Electricity – From TNEB

### Sp Scope 2 Emissions (KgCO<sub>2</sub>e/MT)



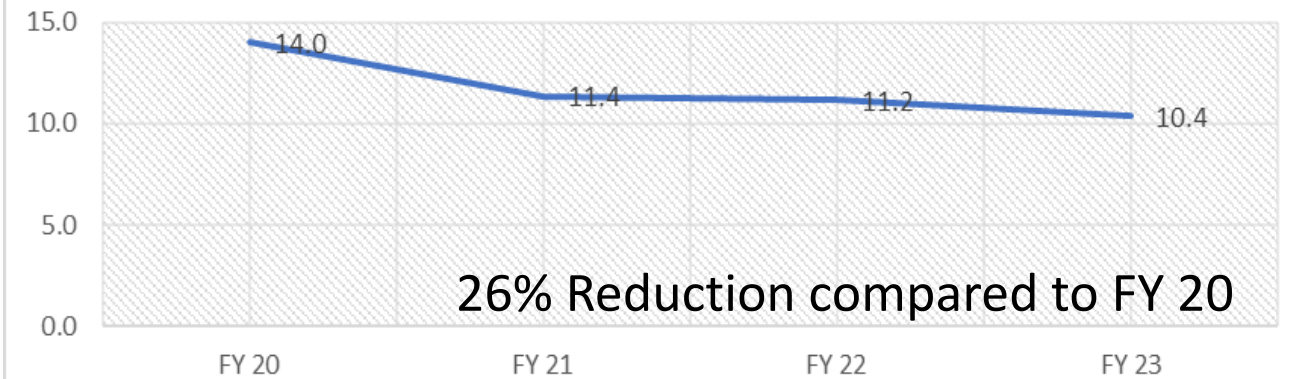
## Outbound Logistics, Scrap Disposal, Hired Vehicles

### Sp Scope 3 Emissions (KgCO<sub>2</sub>e/MT)



## Overall Emissions

### Specific Emissions (KgCO<sub>2</sub>e/MT)



# Green Supply Chain

At AM/NS India our Procurement Policy encompasses several policies like -

- Responsible Sourcing Policy
- Sustainable and Ethical Procurement Policy
- Strategic Purchasing – Driving Savings through TCO concept etc.

**The entire supply chain is driven through this policy and is very much committed to greening the supply chain.**

#### Key roles of a strategic purchaser

- Devising a category specific sourcing strategy based on market intelligence, spend analysis and existing/future demand projections
- Developing demand & supply management strategies to ensure zero stockouts/avoid excess stock accumulation & enable timely delivery of requested products/services
- Ensuring regular study of supplier market and comprehensive discovery of prices
- Driving savings – Optimizing Total Cost of Ownership (TCO) by utilizing advanced sourcing techniques such as should costing, auction, cost-value engineering, volume consolidation, etc.
- Establishing a strategic supplier base for each category and ensuring overall supplier development and relationship/performance/risk management
- Tracking category-specific strategic purchasing Key Performance Indicators (KPIs)
- Managing & utilizing data/information (contracts, bid evaluation reports, spend, savings tracker, strategy documents, etc.) for driving smarter sourcing decisions

#### 2.2.2. Policies

##### *a. Responsible Sourcing Policy*

For AM/NS India, Responsible Sourcing is about ensuring smooth access to the desired products and services in a way that takes social, ethical and environmental issues into consideration.

Key objectives of Responsible Sourcing include:

- Managing a supply chain that is in line with Company's corporate social responsibility policy
- Advancing procurement solutions that are compliant with needs and expectations of all stakeholders
- Building long-term value to reduce the risk to both the Company and its business partners

The Code for Responsible Sourcing (Code) forms the basis for this policy. Both purchasers and suppliers are expected to follow the guidelines detailed in the policy and ensure commitment as per the Code.

##### *c. Sustainable and Ethical Procurement Policy*

This policy is to ensure that purchasing decisions at AM/NS will be taken in a manner that is both ethically responsible & sustainable. The Company expects that both employees & suppliers will commit to consider:

- Environmental aspects like green procurement, energy emissions & materials used in manufacturing, product sourcing & lifecycle apart from economic factors like savings cost, true cost of manufacturing, supply, consumption and disposal of a product
- Impact of procurement on social issues such as poverty eradication, labor conditions and human rights
- Improvement in resource efficiency (recycle/reuse of materials), reduction in waste generation, extension of product lifespan and selection of environment friendly materials
- Fostering an environment of transparency, business ethics and integrity
- Ensuring all purchases are given appropriate safety considerations by establishing material safety data sheets (MSDS) for hazardous materials

## Net Zero Commitment

**From:** CEO - AM/NS India <[ceo.mailing@amns.in](mailto:ceo.mailing@amns.in)>  
**Sent:** Wednesday, November 3, 2021 6:34 PM  
**To:** AM/NS Global Users <[AMNSglobalusers@amns.in](mailto:AMNSglobalusers@amns.in)>  
**Subject:** COP26: Towards Net Zero

Dear Colleagues,

The 2021 United Nations Climate Change Conference (COP26) is underway in Glasgow, Scotland at present (31 October – 12 November).

COP is the most important annual event when it comes to climate change. It brings together almost every country for a global climate summit. While this has been going on for nearly three decades – well before climate change became a global priority, the recent local changes in weather patterns being witnessed world over, have made it a reality that can no longer be ignored.

This is also the first time since the COP in Paris, where every country that agreed to work together to limit global warming to well below 2 degrees, (also known as the Paris Agreement), is expected to come back with an updated plan.

Progress in the next decade is absolutely critical to achieving net zero by 2050. This makes COP26 also the most significant COP for companies and the finance sector, reflecting the growing expectations of both, to play key roles in enabling decarbonisation in line with the Paris goals.

Taking the agenda to the next level, Prime Minister Modi has raised India's Nationally Determined Contribution (NDC) towards the goal through five key commitments on the world stage. He presented these as the **Panchamrit** or the five nectar elements to deal with climate change.

1. Non-fossil fuel-based energy capacity of the country to be raised to 500 GW by 2030.
2. 50% of the country's energy requirements to be met using renewable sources within the same timeframe.
3. Total projected carbon emissions of the country to be reduced by one billion tonnes between now and the year 2030.
4. The carbon intensity of the economy to be reduced by more than 45% by 2030.
5. And finally, India to become carbon neutral and achieve net zero emissions status by the year 2070.

On our part, you are all aware that ArcelorMittal has committed to a reduction in carbon emission intensity of 25 per cent by 2030, and to achieving net zero by 2050. Several initiatives towards that are being made under the XCarb programme of ArcelorMittal. At AM/NS India also we are tracking our energy conservation efforts, and so far we have achieved over 33% reduction in carbon emission intensity per tonne crude steel since we started the initiative in 2015.

In an [op-ed penned for Business India magazine](#), our Chairman and CEO of ArcelorMittal, Mr. Aditya Mittal, shares his vision and the path that the companies under his leadership will take towards zero emission steel.

I encourage you all to [read the article](#) and educate yourself on this most important goal of the company, and come forward to share ideas and innovative solutions to meet the vision.

Dilip Oommen  
CEO, AM/NS India

- Commitment of 25% Carbon Intensity Reduction by 2030
- Achieve Net Zero by 2050

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## Awards & Certifications

- ❖ ISO IATF:16949 Certified Unit
- ❖ Greentech Award for Environment – 2014
- ❖ Greentech Award for Safety – 2015
- ❖ 8 Awards won in QCFI – Coimbatore Chapter – 2022
- ❖ Received Best Performance in Innovation from Ashok Leyland – 2023
- ❖ Received Best Performance in Business Alignment from Ashok Leyland – 2023
- ❖ 10 Awards won in QCFI – Bengaluru Chapter – 2023
- ❖ Best of Best Safety Award 2023 from TNSPWA
- ❖ IMS – ISO 45001 & ISO 14001 – Under Implementation - 2023
- ❖ Participated in NSC – 2023 OHSE Awards – Awaiting Results





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