CII National Award for Excellence in Energy Management - 2022

ITC Limited-Kidderpore Unit, India Tobacco Division

August 2022

Confederation of Indian Industry

Presented By :

R K Himanshu – Head of Engineering | N.M. Prasad – IC Electrical | Rahul Srinivasan – IC Projects

ITC: An Exemplar In Triple Bottom Line Performance

Environment

- **Water Positive :** 20 years in a row
- **Carbon Positive :** 17 consecutive years
- **Solid waste recycling positive :** 14 consecutive years
- Soil & Moisture Conservation to 1.2 million acres
- Renewable Energy share– 41 %
- Social & farm forestry initiative has greened over 8,76,000 Acres

Economic

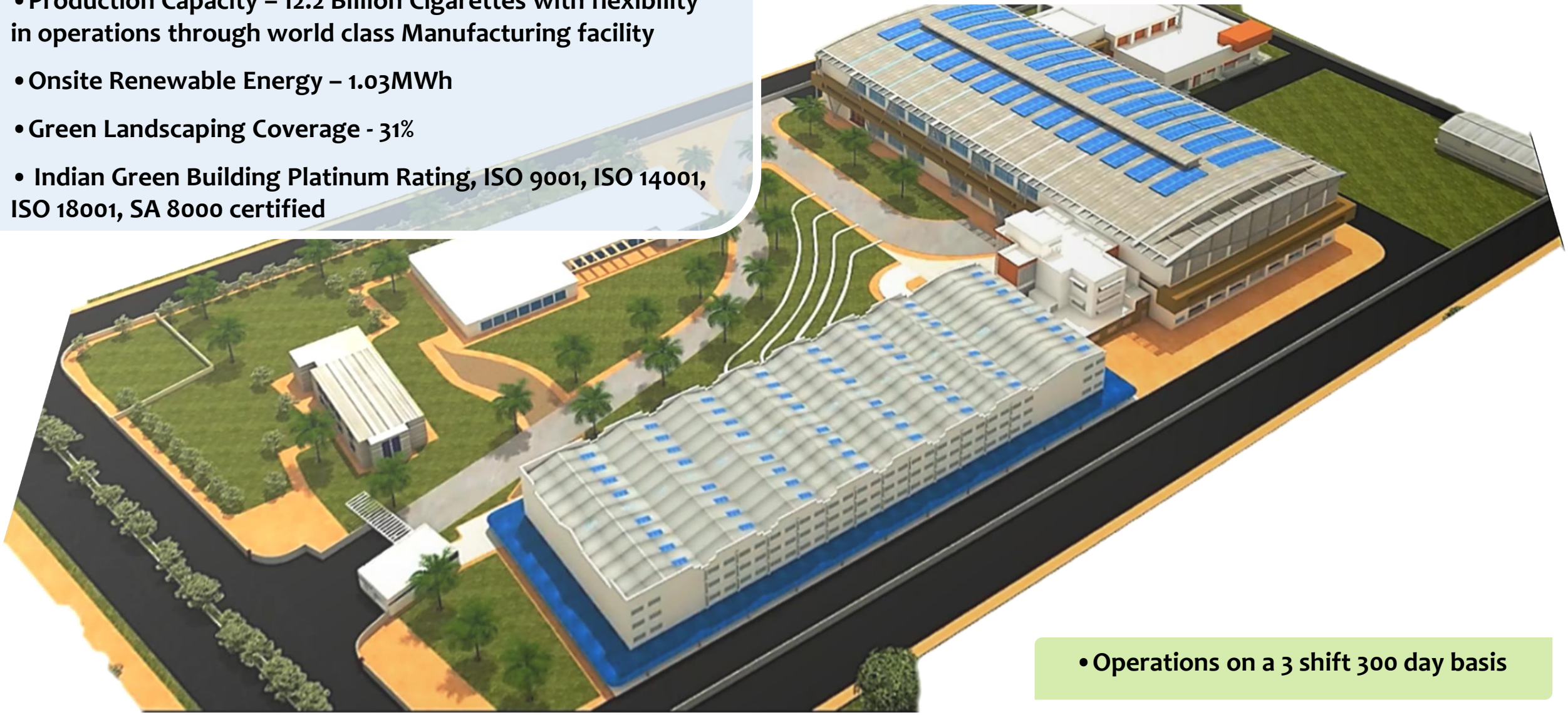
- Market Capitalization Over Rs.308882 Crs.
- Turnover: Over Rs. 59101.09 Crs.
- Powered by the vitality of world-class brands

Social

- Creating around 6 million sustainable livelihoods
- Educating 8,00,000 children
- Benefitting 4 million farmers by e-choupal
- 160 million person-days of employment generated

ITD Kidderpore

- Cigarette manufacturing operations by ITC commenced in 1935 in Kolkata Port Area
- Production Capacity – 12.2 Billion Cigarettes with flexibility in operations through world class Manufacturing facility
- Onsite Renewable Energy – 1.03MWh
- Green Landscaping Coverage - 31%
- Indian Green Building Platinum Rating, ISO 9001, ISO 14001, ISO 18001, SA 8000 certified



- Operations on a 3 shift 300 day basis

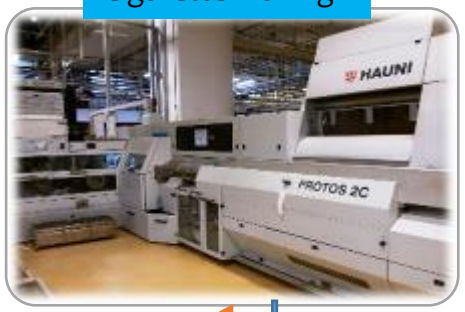
Manufacturing Process Flow – Cigarette

Encapsulated Flavour

Filter Mfg

Cut Tobacco

Cigarette Making



Dust Recovery System

Cigarette Packing

Finished goods storage

Spiral Conveyor

Kidderpore Factory Highlights – 21-22

- Reduction in Specific energy Consumption by 3.51 % despite Covid impact
- Sustenance of Specific Water Consumption despite Covid impact
- Renewable Energy share increased by 95% YOY
- First entity in WB to Wheel Green Energy through ISOA
- Total investment of Rs 2.50 Crores for RE and Energy Conservation Initiatives

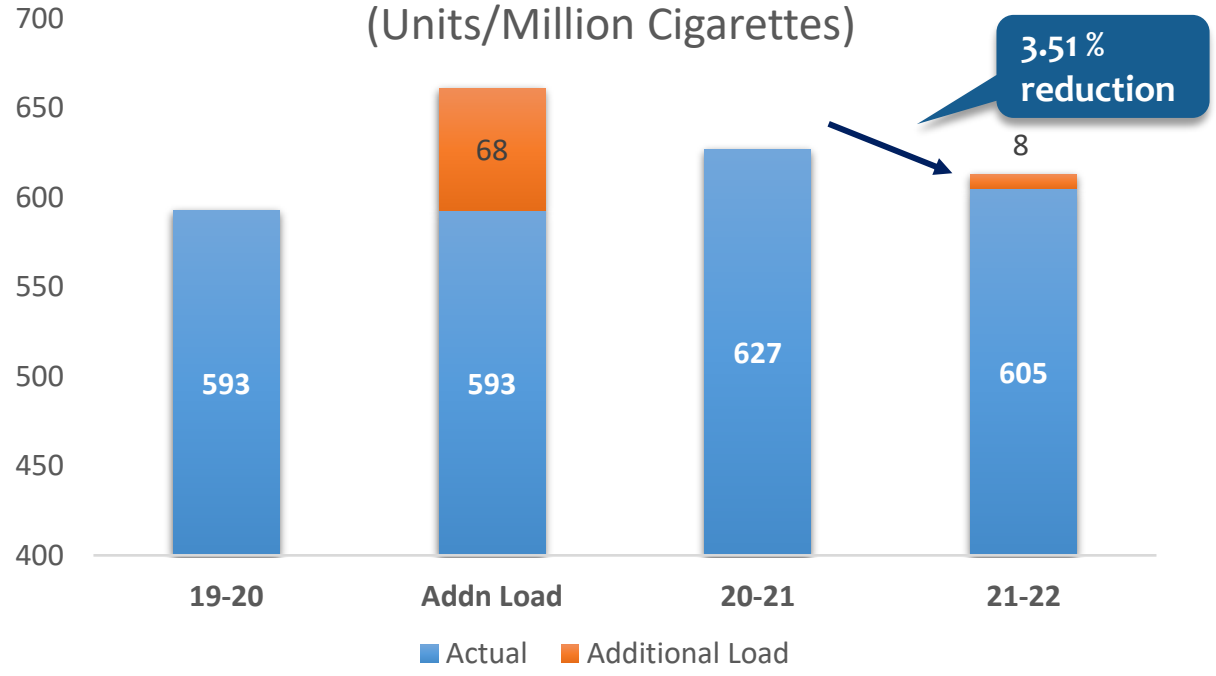
Energy Management

Energy Performance

Performance 2021-22

SPECIFIC ENERGY CONSUMPTION

(Units/Million Cigarettes)



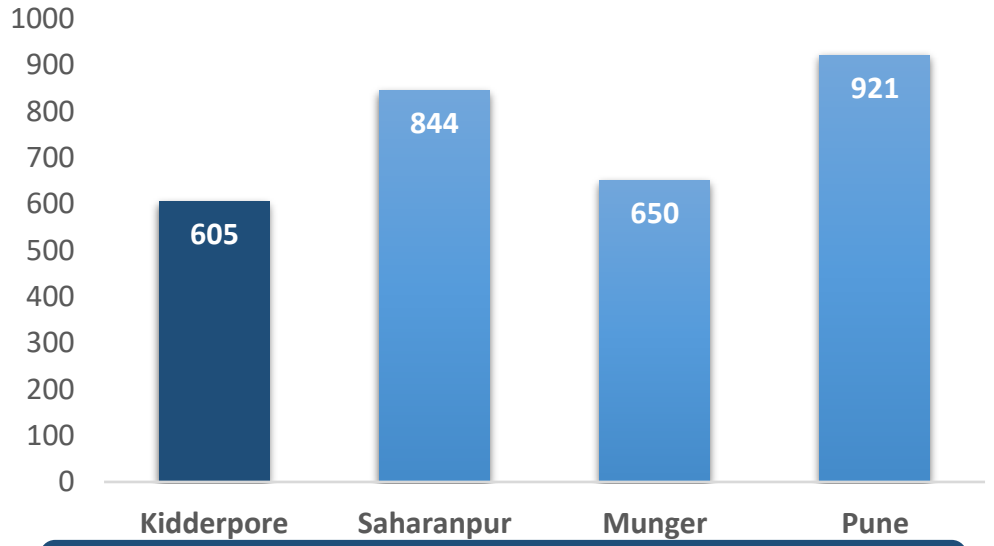
Additional Load

- Winnow Recovery DRF – 5 Units/MNC
- Precision AC in Quality lab – 3 Units/MNC

Initiatives Impact – 22 Units/MNC

NATIONAL BENCHMARKING

(Units/Million Cigarettes)



National Benchmark across ITD Units

Year	Production (Million Cigarettes)	Energy Consumption (MWH)
2019-20	9674	5737
2020-21	8525	5348
2021-22	8583	5196

Target SEC

Short Term & Long Term

Target SEC - Long & Short Term & Renewable Energy

- 4% reduction in SEC in 2022-23 through investment of Rs. 2.00 Cr in energy saving initiatives
- 30 % reduction in overall SEC by 2030 (baseline taken as 2018-19)
- 100% renewable energy (Electrical) by 2030

Road Map – Initiatives Under Planning Stage

- 20 MWp Offsite Solar Plant in Purulia, West Bengal
- Augmentation of onsite solar plant by 400 KWp
- Exploring latest technologies like robotic cleaning to improve PR of solar plant
- Evaluating the possibility of hybrid solar mill (Solar + Wind Mill)
- Digitization of shop-floor to optimize energy consumption

Encon Projects Planned in 2022-23

Total Investment:

₹ 2.00 Crores

Potential Energy Saving:

623 MWh

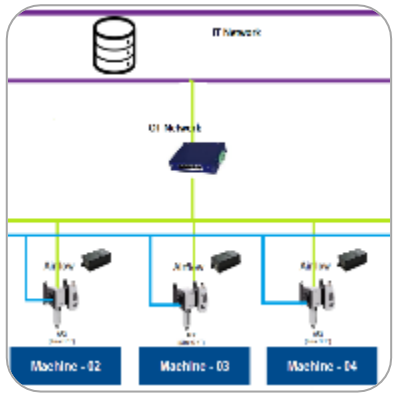
- R — Industry 4.0 based compressed air monitoring and control system
- R — Capsule plant digitization and energy management integration
- R — Compressed Air lines upgradation
- R — PIR lights at utilities
- R — Chemical less water treatment system for Cooling water
- R — Optimisation of motor runs through Smart Automation and machine PLC program modification

R: Replicable

Energy Management – Plan 2022-23

Compressed air line upgradation & monitoring system

- Use of IoT enabled AF2 flow sensors for online monitoring and reporting of compressed air consumption of individual machines
- Replacement of PU pipes with aluminum pipes to eliminate compressed air leakage



Investment:
- Rs. 105 Lacs
- Payback period : 60 months

Envisaged Benefits:
- Saving of 284 MWh

Capsule Plant Digitization

Real time machine performance data from the capsule and filter plant to aid in quick analysis and actioning

Investment:
- Rs. 80 Lacs
- Payback period : 53 months

Envisaged Benefits:
- Saving of 230 MWh

PIR Lights at Utilities

Installation of variable lumen lights for low movement areas

LED Lights with smart PIR sensor

Investment:
- Rs. 5 Lacs
- Payback period : 56 months

Envisaged Benefits:
- Saving of 14 MWh

Energy Saving projects implemented in last three years

Year	No. of energy savings projects	Investments (INR Million)	Electrical savings (MWH)	Thermal savings (Million Kcal/MTOE)	Savings (INR Million)	Impact on SEC (Units/MNC) (Electrical, thermal)
2019-20	13	4.61	255	NA	2.09	26.40
2020-21	9	37.38	1111	NA	8.68	130.30
2021-22	6	25.03	1690	NA	5.48	196.90

Major Encon Projects Implemented (21-22)

Total Investment:

₹ 2.50 Crores

Total Energy Saving:

1690 MWh

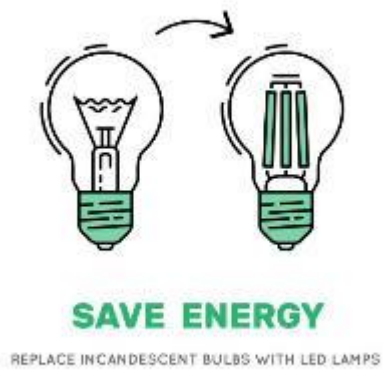
R: Replicable

- R — Industry 4.0 based OT & IT Integration of Shop floor machines, Utilities & Energy management system
- R — Implementation of Industry 4.0 (Use of AI and Data Analytics) in HVAC
- R — Replacement of 300 TR chiller cooling tower with energy efficient cooling tower
- R — Replacement of Diaphragm valves with Pulse valves in DRF
- R — Replacement of conventional lights with energy efficient LED lights
- R — Replacement of existing compressor with new 700 CFM high efficiency Variable speed Screw Compressor

Major Encon Projects Implemented (21-22)

Replacement of lights with energy efficient LED lights

Continued phase wise replacement of conventional lights with LED lights



Investment:

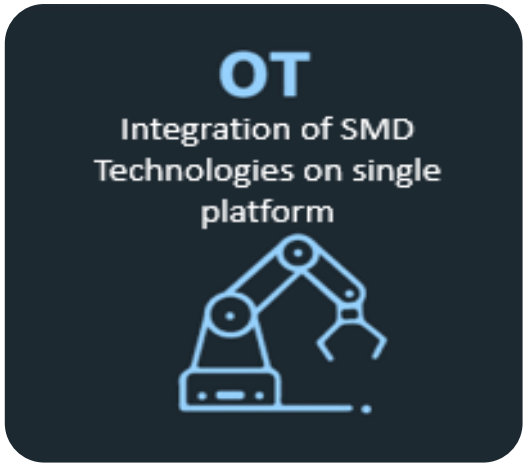
- Rs. 25 Lacs

Benefits:

- Generation of 1100 MWh

OT-IT Integration of shop-floor machines

Real time machine performance data from the shop floor which can aid in quick analysis and actioning



Investment:

- Rs. 100 Lacs

Benefits:

- Savings of 20 MWh

Implementation of Industry 4.0 in HVAC

Utilisation of Artificial intelligence and Machine learning tools for predictive control of chiller setpoint

Investment:
Rs. 48.3 Lacs

Benefits:

- 12% reduction in HVAC energy consumption

Upgradation to energy efficient compressor

Replacement of existing compressor with new 700 CFM high efficiency Variable speed Screw Compressor

Investment:

- Rs. 55 Lacs

Benefits:

- Savings of 50 MWh

Innovation

Innovative Projects Implemented - 1

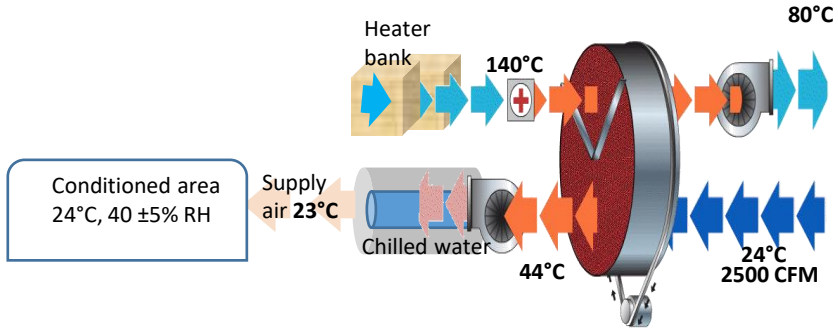
Waste heat recovery in de-humidifiers

Objective

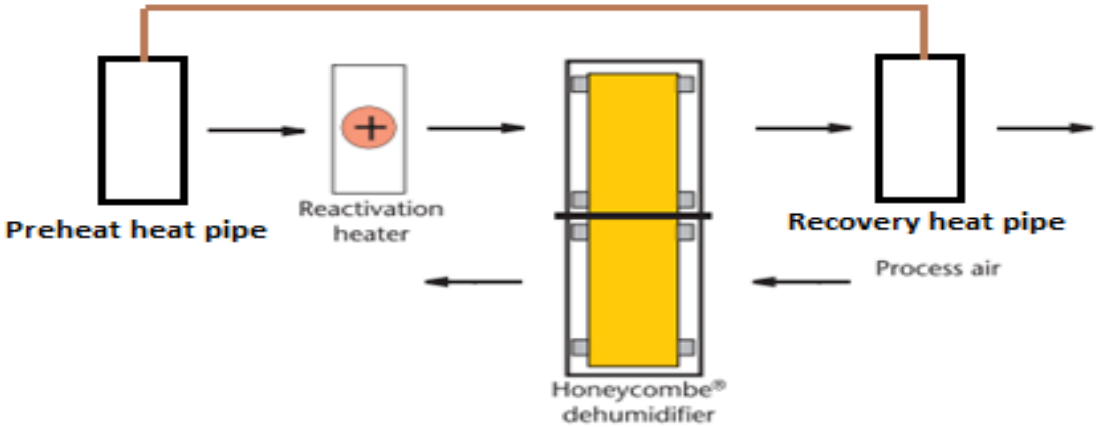
- Reduction in electrical heater load of de-humidifiers

Ideation and Evaluation

The reactivation air (at ambient temp) is heated using heater to 140 Deg C, this hot air absorbs moisture from the Desiccant wheel, and the warm, humid air is exhausted back into the atmosphere at around 80 Deg C.



Heat pipe system has been installed in the dehumidifiers to recover some dry heat from exhaust air to preheat the incoming ambient air to reduce the load on the heater.



Impact on energy consumption & replicability

- Investment – 22 Lakhs, Payback period – 18 months
- Potential Savings - 250 MWH/year
- Replicable across all capsule manufacturing units using de-humidifiers

Innovative Projects Implemented - 2

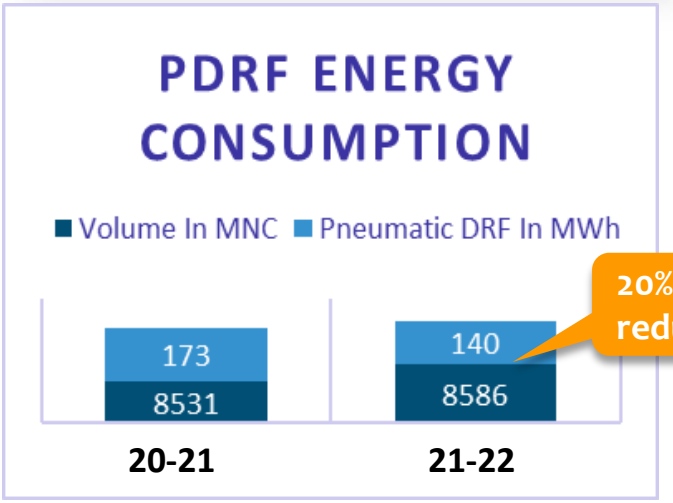
Closed loop control of PDRF (Pneumatic Dust Recovery fans)

Objective

- Reduction in energy consumption during idle run of fan

Ideation and Evaluation

- Pneumatic fans are used for conveying tobacco to makers making cigarettes.
- Identified a savings potential in the idle run of the fan when there is no tobacco is getting conveyed
- Maker demand signals were mapped with DRF PLC and Logical changes at both ends were done and also integrated with Variable frequency drives to ramp up the fan RPM when there is demand for tobacco from the maker to 45Hz



Impact on energy consumption & replicability

- Investment – 2.5 Lakh
- Potential Savings – 33 MWH/year
- Replicable across all cigarette manufacturing units

Innovative Projects Implemented - 3

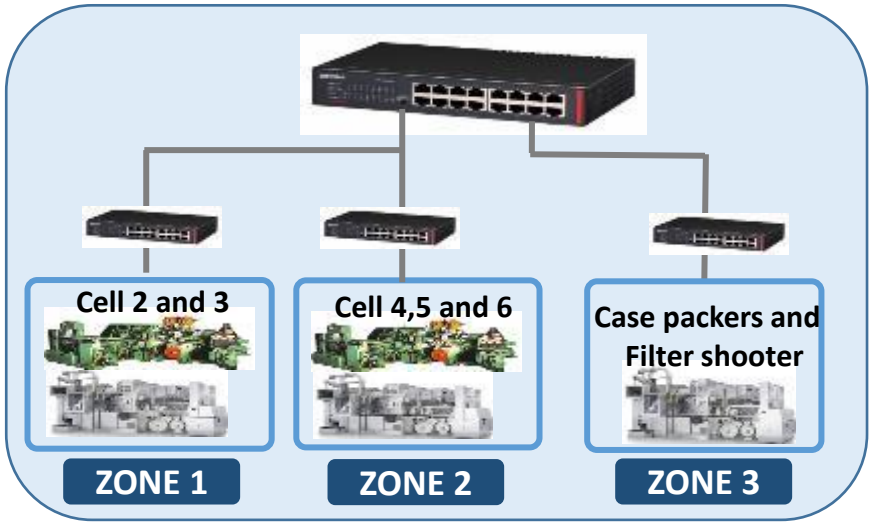
Industry 4.0 based integration of Shop floor technologies, Utilities and Energy Management Systems

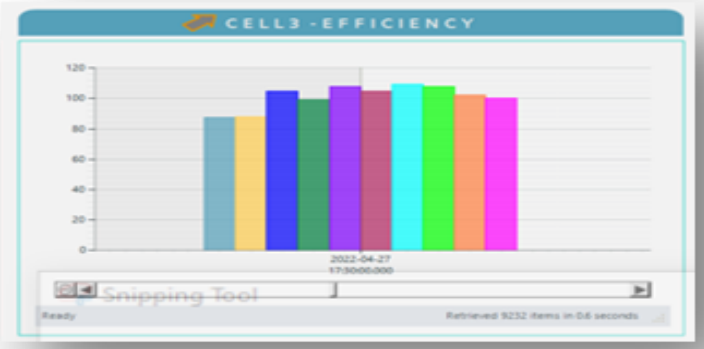
Objective

- Improvement in machine efficiency leading to reduced specific energy consumption

Ideation and Evaluation

- Entire Shop floor technology has been connected on 10GBPS Ethernet network along with fiber back bone for switches and server connectivity.
- Interactive Dashboards are developed for visualization of trends facilitating the team to take data driven decisions quickly
- Automated output booking into SAP, automated cut tobacco and Energy accounting & robust guided accounting systems etc.





Impact on energy consumption & replicability

- Investment – 100 Lakhs
- 6% reduction in SEC
- Replicable across all manufacturing units

Sustainability – RE Portfolio

“ITC aspires to meet 100% of its electrical energy consumption from renewable sources by 2030”

Utilization of renewable energy sources

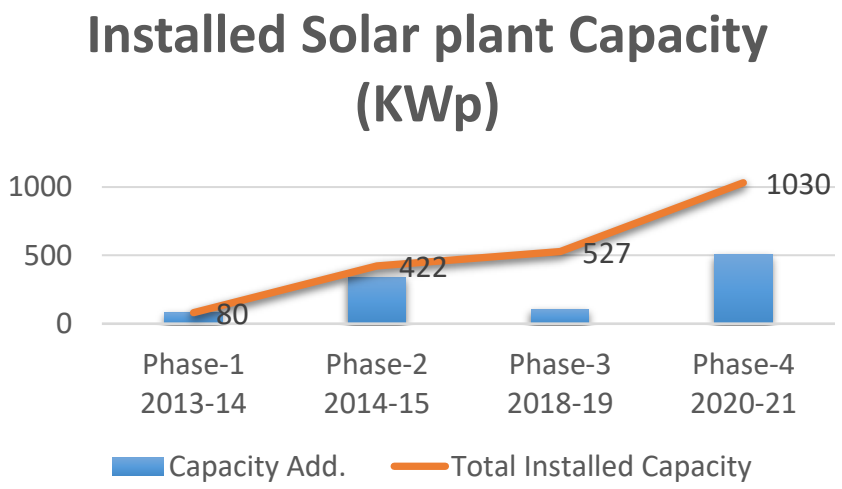
Year	Type of energy	Offsite/Onsite	Installed Capacity (MW)	Generation (MWh)	% of overall electrical energy
2019-20	Solar	Onsite	0.53	382.56	5
2020-21	Solar	Onsite	0.53	354.93	5
2021-22	Solar	Onsite	1.03	725.34	10

Year	Type of energy	Offsite/Onsite	Generation (MWh)	% of overall electrical energy
2019-20	Wind	Offsite	NA	NA
2020-21	Wind	Offsite	316.00	5
2021-22	Wind	Offsite	640.18	9

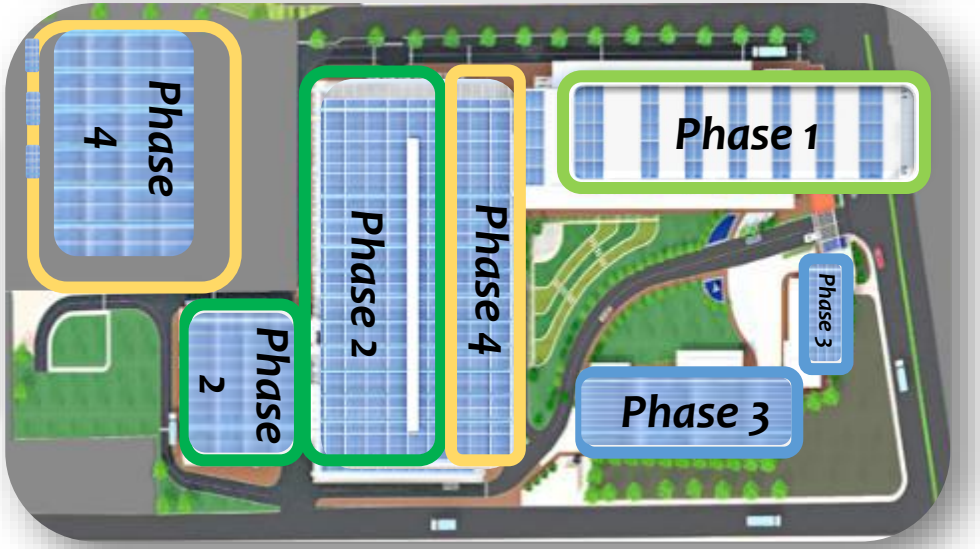
Phase wise Investment made for Onsite Solar

2013-2019
Phase-1,2 & 3

2020-21
Augmentation by 0.5Mwp



Capex Investment ~ Rs 2.9 Crores



Key Features

- Modules Mounting Structure Designed considering Seismic Zone and Amphan Cyclone Wind Load
- **Industry 4.0 based Online monitoring system**

Waste Utilization

Year	Type of waste generated	Quantity of waste generated (MT/Year)	Disposal method
2019-20	Aluminium Foil	0.16	Sent For Recycling
2020-21	Aluminium Foil	0.44	Sent For Recycling
2021-22	Aluminium Foil	2.18	Sent For Recycling

Year	Type of waste generated	Quantity of waste generated (MT/Year)	Disposal method
2019-20	CFC Waste	703.10	Sent For Recycling
2020-21	CFC Waste	651.34	Sent For Recycling
2021-22	CFC Waste	580.87	Sent For Recycling

Year	Type of waste generated	Quantity of waste generated (MT/Year)	Disposal method
2019-20	Cigarette Paper	3.14	Sent For Recycling
2020-21	Cigarette Paper	6.17	Sent For Recycling
2021-22	Cigarette Paper	5.02	Sent For Recycling

Year	Type of waste generated	Quantity of waste generated (MT/Year)	Disposal method
2020-21	Filter rod	55.80	Co-processing
2021-22	Filter rod	56.88 *	Co-processing

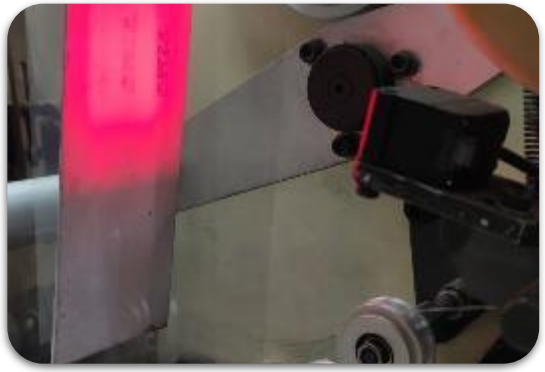
Initiative for Filter Waste Disposal

- Dalmia Cement is using Filter waste as alternate fuel in Cement Kiln
- Calorific value of Filter waste is 4200 Kcal/KG
- No Solid Waste Generation

Dalmia

Waste Management

Waste Reduction Innovations



Interlock of machine with PCT rejection system

Machine run interlocked with PCT rejection system in order to stop machine in case of high machine rejections.

Vision system for printing defects in PWM

Machine run interlocked with vision system for BOPP in order to stop machine in case of high BOPP misprint rejections.

Vision system centralization

Centralization of rejection data of vision systems to evaluate and reduce false rejections

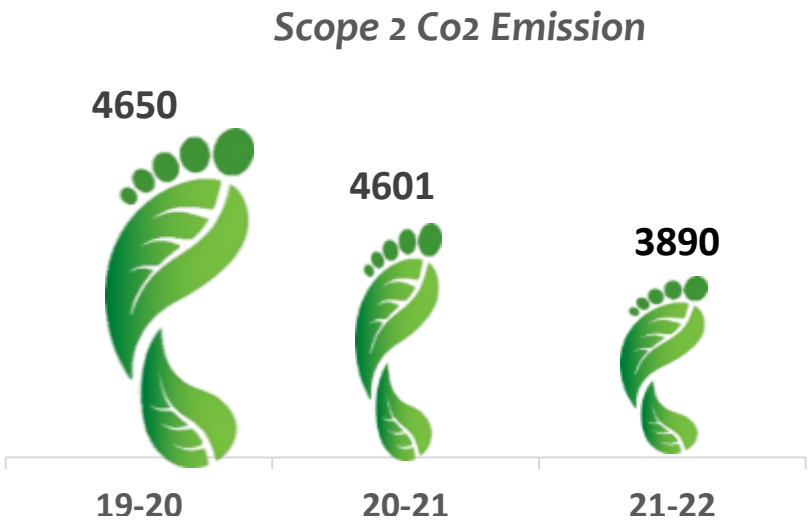
Winnow recovery machine

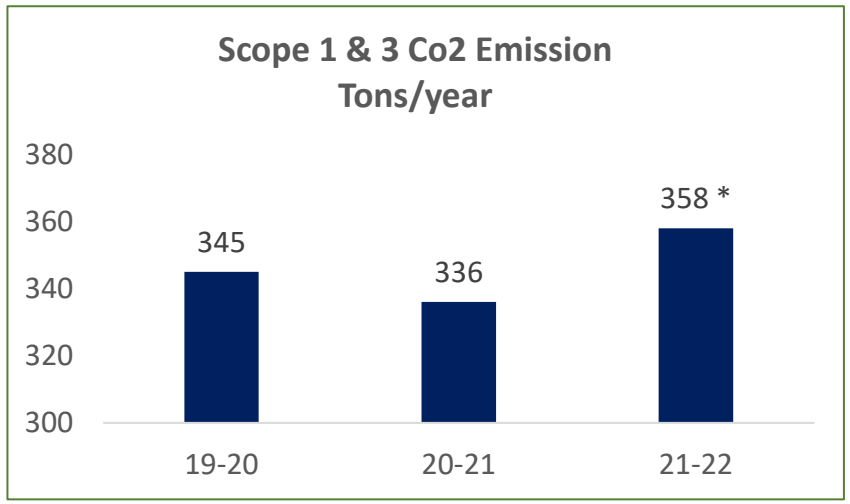
Installation of in-house developed winnow recovery machine to re-use tobacco and improve yield

Waste reduction & Productivity improvement

GHG Inventorisation

Cigarette Mfg GHG Emission





Approach & Initiatives

- In the year 20-21, we have augmented the Onsite solar power plant from 0.53 MWp to 1.03 MWp.
- Started wheeling green energy from ITC's wind power plant in Andhra to cut down the CO2 emissions in coming years
- In advanced discussions with WB govt officials for getting clearance to install 20 MW offsite solar plant at Purulia, West Bengal

***Dedicated vehicles provided to all employees to minimize COVID spread**

Electric Vehicle Charging Facility in parking area

100% renewable energy (Electrical Energy) by 2030 – Long term plan

Green Supply Chain

Beyond the Boundary

Solid Waste Management

31,062 Household Covered and **1,095 MT Waste** Handled in 2021-22.

Plan to cover 45,249 Household and 4,850 MT waste will be handled in 2022-23.

Renewable Energy for Society

- Solar Panel Installation in Schools
  - 6 Nos of schools covered
  - Total Renewable Energy Installed – 12 KW
- Plan to cover more schools in the current FY 2022-23

School Wash

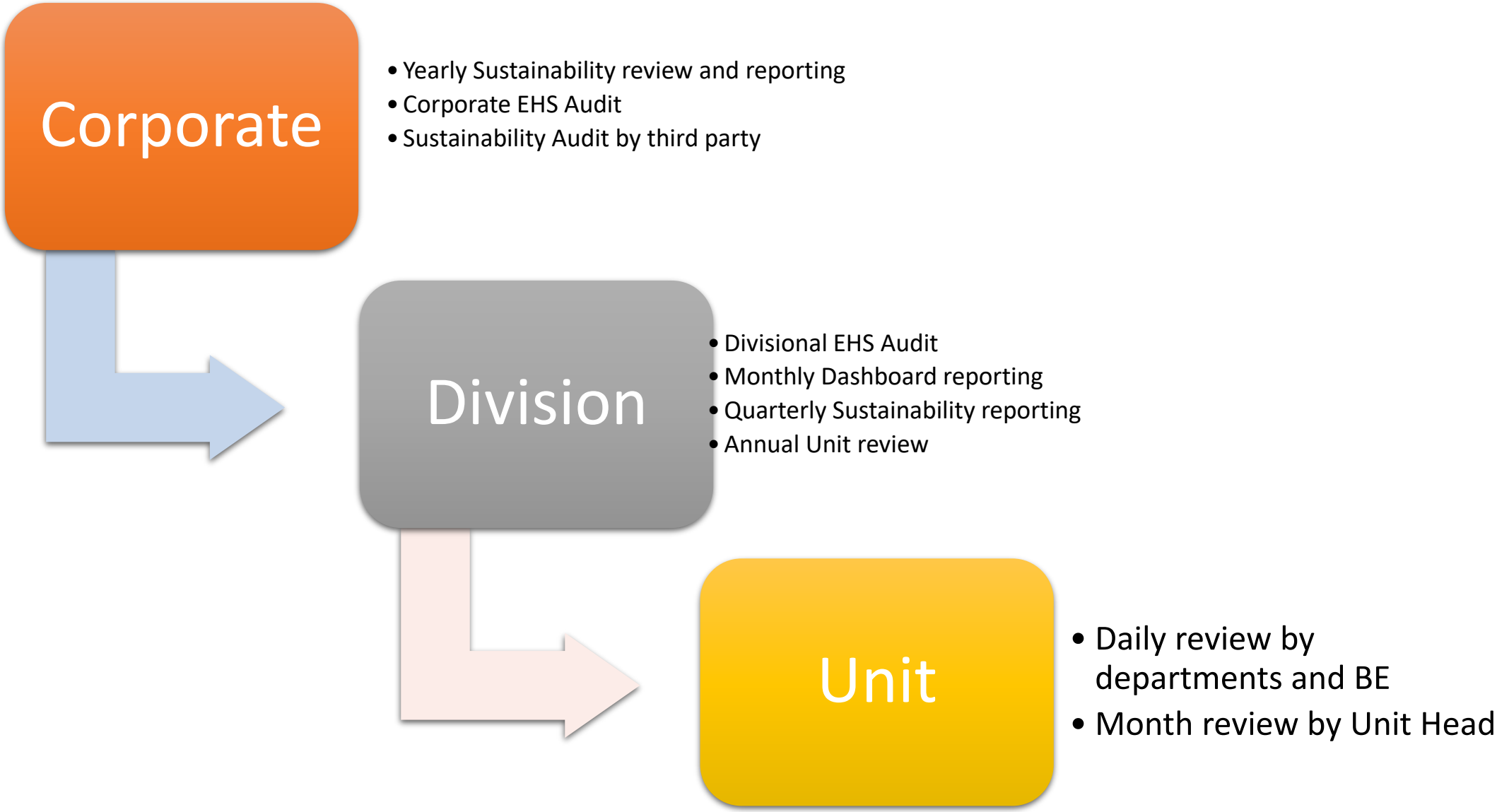
20 School Toilets Constructed in 2021-22.

Plan to construct 16 School Toilets in 2022-23.

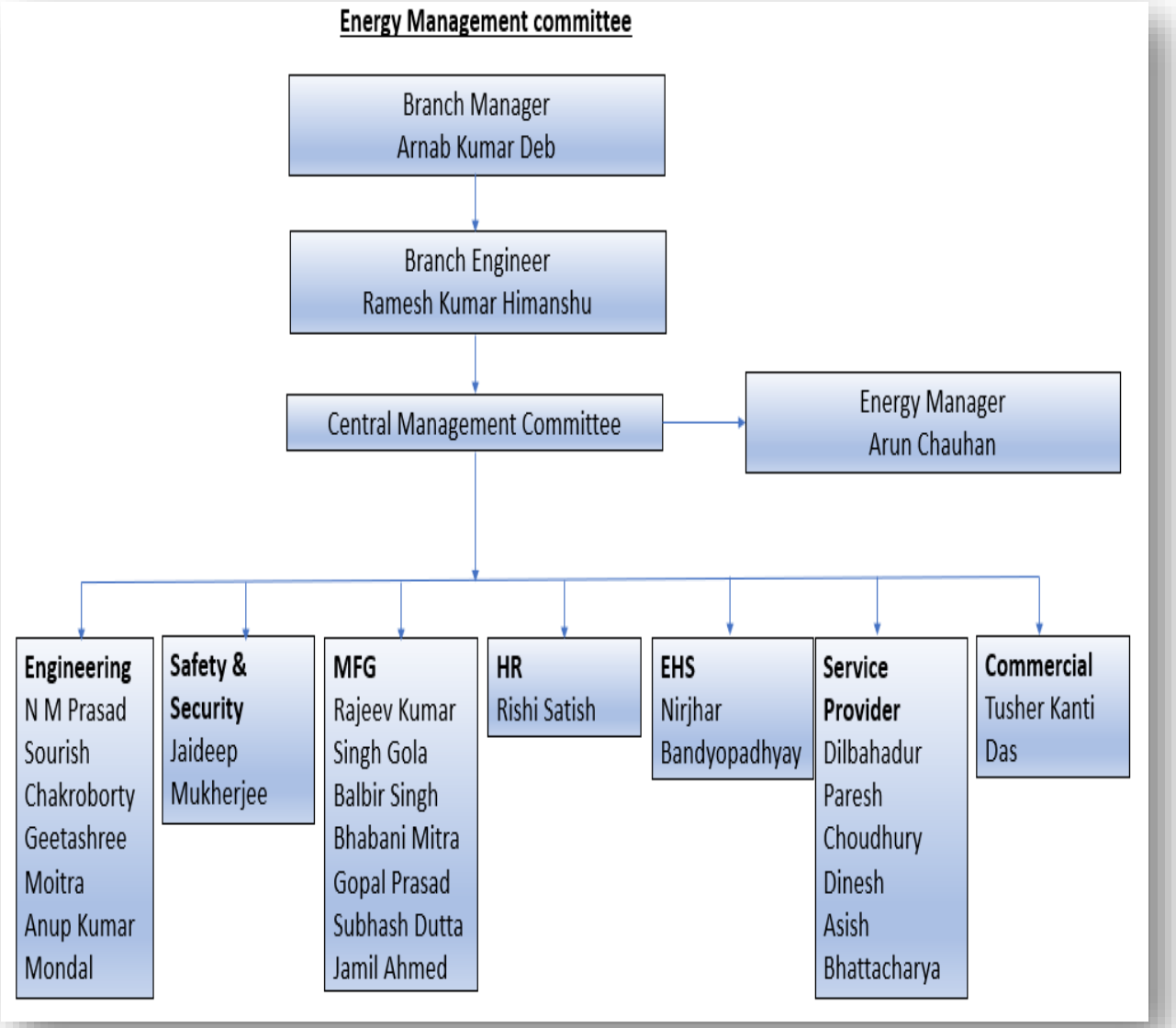
15 Community Toilet Constructed in 2021-22.

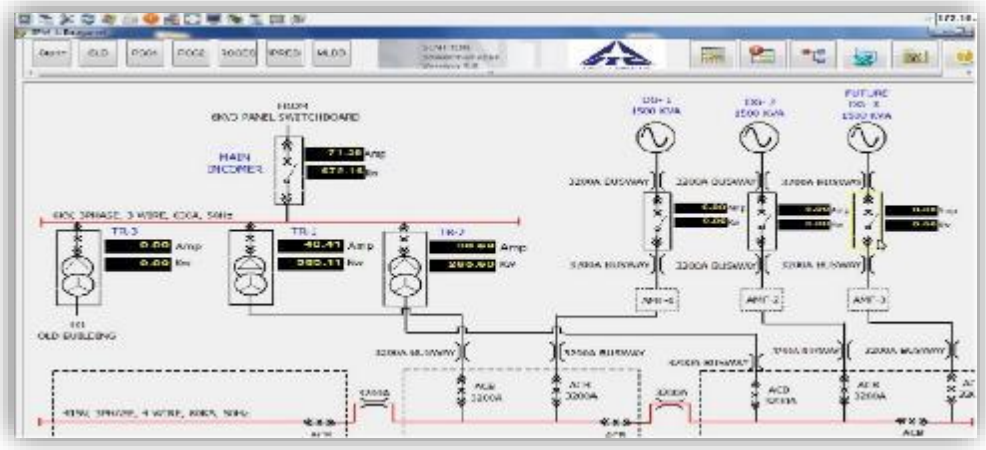
Plan to construct 25 Community Toilet in 2022-23.

Energy Management – Monitoring & Review Mechanism



Energy Management – Monitoring & Review Mechanism





Online Energy Management system

DAILY ENERGY REPORT - MARCH, 2019

	Target Units/mnc	1/Mar	2/Mar	3/Mar	4/Mar	5/Mar	6/Mar	7/Mar	8/Mar	9/Mar
Production (mnc)	30	44	42	40	41	36	35	40	44	43
Total Unit Consumed	514414	20479	18422	17807	21420	19416	18746	20668	22360	22774
Total UNIT/MNC	680	469	441	451	526	534	538	511	513	533
Machines - Unit/mnc	188	184	166	168	173	180	181	172	183	182
Compressor Units/mnc	85	61	81	89	77	90	92	71	68	84
SMD PDRF Units/mnc	25	22	20	20	20	21	22	21	21	20
SMD CDRF Units/mnc	18	21	18	19	18	20	21	19	25	25
Laser Fan Units/mnc	5	4	4	4	4	4	4	3	3	3
Lighting Units/mnc	74	44	43	47	52	57	58	49	45	46
AHU Units/mnc	18	18	19	20	19	21	21	20	22	21
HVAC Units/mnc	97	22	20	26	56	60	55	35	32	38
Others Units/mnc	48	37	19	3	39	5	5	59	56	56
Others Utility Units/mnc	44	34	30	37	43	47	50	36	33	33
Filter Making Units/mnc	77	21	21	19	25	28	29	26	23	24
Machine efficiency (%)	70	65	79	80	77	74	71	77	67	66

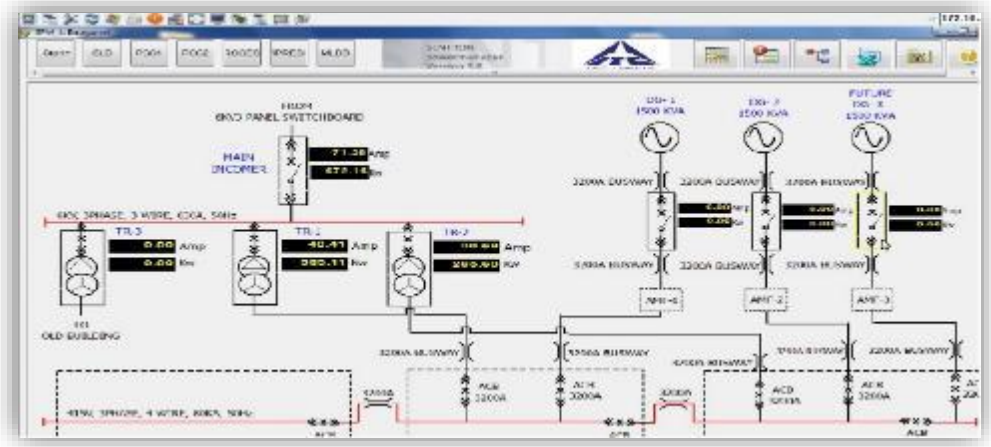
ABSOLUTE CONSUMPTION

		1/Mar	2/Mar	3/Mar	4/Mar	5/Mar	6/Mar	7/Mar	8/Mar	9/Mar
Machines		8012	6928	6655	7037	6543	6314	6965	7998	7796
Compressor		2684	3389	3524	3130	3283	3203	2879	2970	3590
SMD PDRF		952	828	780	818	780	753	833	923	867
SMD CDRF		915	752	738	747	731	734	774	1097	1060
Laser Fan		154	155	156	153	141	133	123	127	148
Lighting		1939	1816	1868	2120	2081	2009	1986	1983	1981
AHU		801	800	772	785	758	729	813	962	903
HVAC + VRV & Ventilation		961	817	1008	2268	2190	1925	1432	1415	1645
Others		1637	796	109	1579	181	189	2377	2441	2379
Others Utility		1499	1275	1452	1759	1702	1736	1442	1453	1396
Filter Making		926	865	745	1024	1024	1022	1043	991	1009
	TOTAL	20479	18422	17807	21420	19416	18746	20668	22360	22774

Legend		
	Holiday	Greater than Target
	Shut Down	Lower than Target
	Sunday	

Daily Energy Analysis & Reporting

Energy Management – Monitoring & Review Mechanism



Online Energy Management system

Energy Demand 2018 - 19

MWH

		2017-18	Today	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Electricity															
Secondary															
Machines	Units	1785399	1899801	104973	131933	170898	204174	152201	127830	154204	163092	166648	163159	180474	180214
	Units/mnc (cig)	197	196	206	207	189	196	194	232	200	186	194	207	187	184
Compressors+Laser Suction fan	Units	1056222	999283	63774	79606	97490	113240	82295	71187	75490	80047	85708	85118	78227	87102
	Units/mnc (cig)	117	103	125	125	108	108	105	129	98	91	100	108	81	89
CDRF	Units	163192	185130	9434	10468	14382	17268	12813	13030	13182	14523	17851	17723	22503	21955
	Units/mnc (Making cig)	18	19	18	16	16	17	16	24	17	17	21	22	23	22
Vaccum Blower	Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Units/mnc (MKS cig)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pneumatic feed	Units	286831	259637	17334	21166	25417	28362	21368	18860	22269	23593	20105	19051	20493	21620
	Units/mnc (Making cig)	32	27	34	33	28	27	27	34	29	27	23	24	21	22
Lighting	Units	738049	659052	47781	51449	58365	62576	57398	53823	53524	52306	53960	56022	53023	59126
	Units/mnc (cig)	82	69	81	80	64	67	73	98	70	60	62	71	55	61
Subtotal		**4029693**	**4002903**	**243296**	**294622**	**366552**	**425619**	**326075**	**284730**	**318669**	**333562**	**343971**	**341072**	**354719**	**370017**
Production(mnc)		**9055**	**9670.57**	510	636	906	1044	784	551	770	876	861	788	966	977
units/ mnc (cig.)		**445**	**414**	**477**	**463**	**404**	**408**	**416**	**517**	**414**	**381**	**399**	**433**	**367**	**379**
units/mnc (conv.)		**445**	**414**	**477**	**463**	**404**	**408**	**416**	**517**	**414**	**381**	**399**	**433**	**367**	**379**
Filter Making	**Units**	**0**	**197649**	**0**	**0**	**0**	**11287**	**15680**	**21285**	**26118**	**25582**	**24616**	**22630**	**24326**	**26129**
	Units/mnc		**20**	**0**	**0**	**0**	**11**	**20**	**39**	**34**	**29**	**29**	**29**	**25**	**27**
HVAC															
Chillers 1		833340	832362	69174	96926	109875	126648	98854	82085	66226	51271	21518	9175	38480	62130
Chillers 2		0	0												
Sub total - Chillers	86.07163927	833340	832362	69174	96926	109875	126648	98854	82085	66226	51271	21518	9175	38480	62130
No of Chiller working days		0	0												
HVAC utility(Chiller & cond pumps, CT)		233057	217601	16142	23577	22575	23777	19260	16710	17005	14390	12296	10307	17181	24383
AHU 2		0	0												
Subtotal AHU (SMD+Roulette)	22.50140535	233057	217601	16142	23577	22575	23777	19260	16710	17005	14390	12296	10307	17181	24383
Subtotal		**1066397**	**1049963**	**85316**	**120503**	**132451**	**150426**	**118114**	**98795**	**83230**	**65660**	**33813**	**19481**	**55661**	**86513**
No. of AC working days		285	292	19	22	26	28	24	23	22	24	26	25	26	27
No. of AHU working days		**290**	292	19	22	26	28	24	23	22	24	26	25	26	27
units/AC working days		**3742**	**3596**	**4490**	**5477**	**5094**	**5372**	**4921**	**4298**	**3783**	**2736**	**1301**	**779**	**2141**	**3204**
units/mnc(conv.)		**118**	**109**	**167**	**189**	**146**	**144**	**151**	**179**	**108**	**75**	**39**	**25**	**58**	**89**
Others (UPS, Delphi, Roulette, Lift, Vehicle section charging, RO Plant, Innerframe slitter machine, etc.)	87.03324583	826841	841661	62388	62655	80354	70173	80919	64160	73160	72716	59990	61099	66687	87359
Subtotal		**826841**	**841661**	**62388**	**62655**	**80354**	**70173**	**80919**	**64160**	**73160**	**72716**	**59990**	**61099**	**66687**	**87359**
units/production day		**6296**	**6409**	**4159**	**2238**	**3494**	**2924**	**2890**	**2291**	**3048**	**2693**	**2307**	**2656**	**3176**	**3494**
units/mnc(conv.)		**91**	**87**	**122**	**98**	**89**	**67**	**103**	**116**	**95**	**83**	**70**	**78**	**69**	**89**
Grand Total	**Units**	**5922931**	**6092177**	**391000**	**477780**	**579357**	**657504**	**540789**	**468970**	**501172**	**497520**	**462390**	**444283**	**501393**	**570019**
Total Units Supplied	**Units**	**5922931**	**6092177**	**391000**	**477780**	**579357**	**657504**	**540789**	**468970**	**501172**	**497520**	**462390**	**444283**	**501393**	**570019**
units/mnc(conv.)		**654**	**630**	**766**	**751**	**639**	**630**	**690**	**851**	**651**	**568**	**537**	**564**	**519**	**583**

Monthly Dashboard System sharing with HO

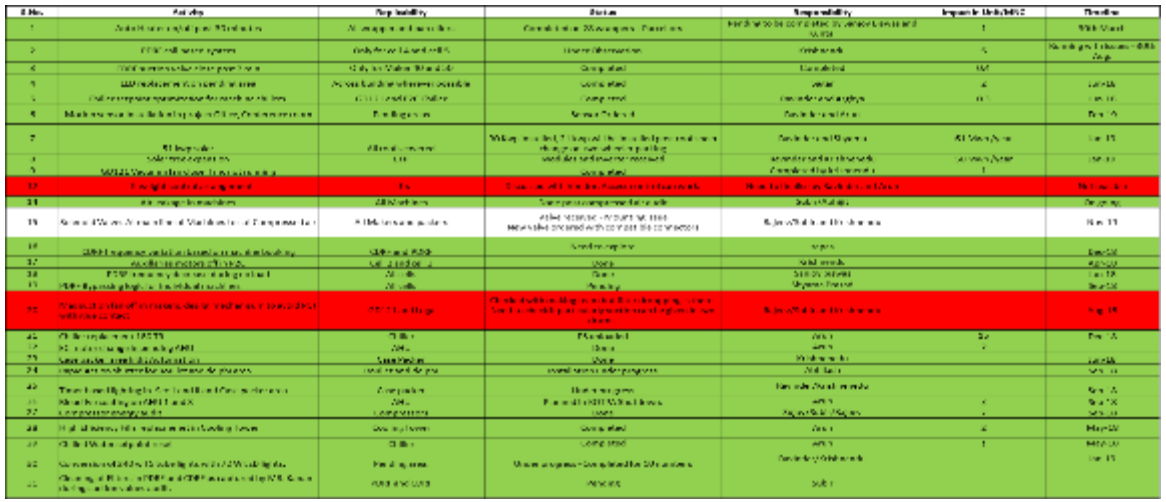
DAILY ENERGY REPORT - MARCH, 2019

	Target Units/mnc	1/Mar	2/Mar	3/Mar	4/Mar	5/Mar	6/Mar	7/Mar	8/Mar	9/Mar
Production (mnc)	30	44	42	40	41	36	35	40	44	43
Total Unit Consumed	514414	20479	18422	17807	21420	19416	18746	20668	22360	22774
Total UNIT/MNC	680	469	441	451	526	534	538	511	513	533
Machines - Unit/mnc	188	184	166	168	173	180	181	172	183	182
Compressor Units/mnc	85	61	81	89	77	90	92	71	68	84
SMD PDRF Units/mnc	25	22	20	20	20	21	22	21	21	20
SMD CDRF Units/mnc	18	21	18	19	18	20	21	19	25	25
Laser Fan Units/mnc	5	4	4	4	4	4	4	3	3	3
Lighting Units/mnc	74	44	43	47	52	57	58	49	45	46
AHU Units/mnc	18	18	19	20	19	21	21	20	22	21
HVAC Units/mnc	97	22	20	26	56	60	55	35	32	38
Others Units/mnc	48	37	19	3	39	5	5	59	56	56
Others Utility Units/mnc	44	34	30	37	43	47	50	36	33	33
Filter Making Units/mnc	77	21	21	19	25	28	29	26	23	24
Machine efficiency (%)	70	65	79	80	77	74	71	77	67	66

ABSOLUTE CONSUMPTION

		1/Mar	2/Mar	3/Mar	4/Mar	5/Mar	6/Mar	7/Mar	8/Mar	9/Mar
Machines		8012	6928	6655	7037	6543	6314	6965	7998	7796
Compressor		2684	3389	3524	3130	3283	3203	2879	2970	3590
SMD PDRF		952	828	780	818	780	753	833	923	867
SMD CDRF		915	752	738	747	731	734	774	1097	1060
Laser Fan		154	155	156	153	141	133	123	127	148
Lighting		1939	1816	1868	2120	2081	2009	1986	1983	1981
AHU		801	800	772	785	758	729	813	962	903
HVAC + VRV & Ventilation		961	817	1008	2268	2190	1925	1432	1415	1645
Others		1637	796	109	1579	181	189	2377	2441	2379
Others Utility		1499	1275	1452	1759	1702	1736	1442	1453	1396
Filter Making		926	865	745	1024	1024	1022	1043	991	1009
	TOTAL	20479	18422	17807	21420	19416	18746	20668	22360	22774
Legend	Holiday			Greater than Target						
	Shut Down			Lower than Target						
	Sunday									

Daily Energy Analysis & Reporting



Encon Projects Tracker

Awareness building

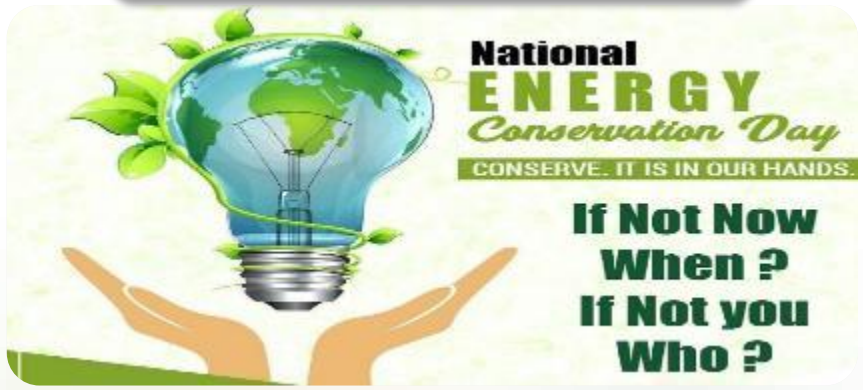
National Energy Conservation Day Celebration

Energy Savings Awareness Sessions

Managers, TAs and electricians sit together in the IDEA box for brainstorming energy savings ideas

Poster making competition arranged for Energy Conservation Day

In the new normal, the celebration of energy conservation day was carried out in a virtual manner.



Teamwork and Employee Participation

DESCRIPTION	Project - 1	Project - 2	Project - 3	Project - 4
Source of En-Con Idea	Electrical supervisor	ESP	Security team	Operator
Name of the Project	Interlocking of Driers with Dehumidifiers, Level Sensor in Centrifugal Sorter to avoid Idle run	Decanter Interlocked with Level Controller to avoid idle run	Timer based operation of lights and Exhausts	Laser suction fan frequency optimization
Idea Originated in the Year	2021	2021	2021	2021
Idea Implemented	Yes	Yes	Yes	Yes
Members in the Implementation Team	Shift IC and Electrical Supervisor	Shift I/C and electrical supervisor.	Shift I/C and electrical supervisor.	Electrical supervisor and Electrician
Date of Implementation	May,21 Completed	Jun,21 Completed	Sep,21 Completed	Oct,21 Completed
Energy Saved	65 MWH	5 MWH	5 MWH	12 MWH

Implementation of ISO 50001/ Green CO / IGBC Rating

The ITC Kidderpore Unit is IGBC Green Building Certified with Platinum Rating

The ITC Kidderpore Unit is in process of getting the ISO 50001:2018 certification. The unit is expected to receive the certification by end of FY 2022-23

250 Lakhs invested in Encon projects in 2021-22

200 Lakhs investment planned in 2022-23


Indian Green Building Council (IGBC)

ITC Ltd, Kidderpore

Kolkata

IGBC Green Factory Buildings Rating System

Platinum

September 2020

CII Learnings Implemented

Intelligent Flow Controller

Implemented in FY 20-21

BLDC fan

Implemented in FY 19-20

AC Energy Saver

Implemented in FY 19-20

Automatic Tube Cleaning System

Implemented in FY 20-21

2 of our managers attended and cleared the CII Online Course on Certified Professional in Energy Efficiency in 21-22

Awards & Recognitions in 2021-22

Excellent Energy Efficient Unit
National award for Excellence in Energy Management 2021 by CII

Winner- Shreshtha Suraksha Puraskar from NSCI

Winner- 14th CII –Eastern Region- Encon Awards

Winner of SHE Excellence Award by CII

Thank You

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