Confederation of Indian Industry

ATC Limited

25th National Award for Excellence in Energy Management 2024

Team Members:

- Rishab Garg
  HoD - Operations & Energy Manager
- P. Rajasekaran
  IC Elec & Energy Manager

Company Profile: About Us

ATC Limited

1974 Established

1st Company in SIPCOT Hosur belt

11.3 acres Land Area

3.2 acres Build Area

45% Green Coverage

26% Roads and other open area

151 Employees

180 ESPs

31 Trainees

38 Managers

9500 MnC / Annum
Licensed Capacity

IGBC GREEN FACTORY BUILDING
INDIAN GREEN BUILDING COUNCIL
ATC LIMITED, HOSUR
PLATINUM

INTEGRATED MANAGEMENT SYSTEM

ISO 9001 : 2015 | ISO 14001 : 2015 | ISO 45001 : 2018

HIGHLIGHTS

ATC Limited

Sustainability

- Sustained Divisional benchmark in Units/MnC and kL/MnC
- Sustained Renewable energy share to 80%
- Augmented Solar plant capacity by 0.2 MW
- Nil Lost Time Accident for 15 years
- Rating “5” and maturity level “Leading” in SSCI desktop assessment

Operational Excellence

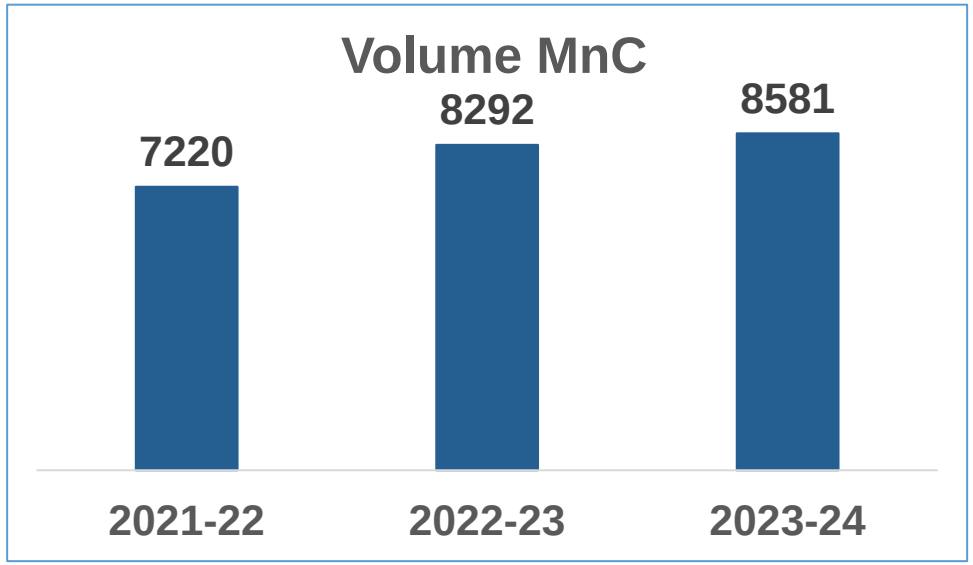
- Sustained improvement in all KPIs
- Benchmark in Market Complaint Index
- Highest ever cigarette volume of 8581 MnC and highest ever output of 796 MnC – Sept’23
- Low cost automated solution pilots - OTR and Filter shooter

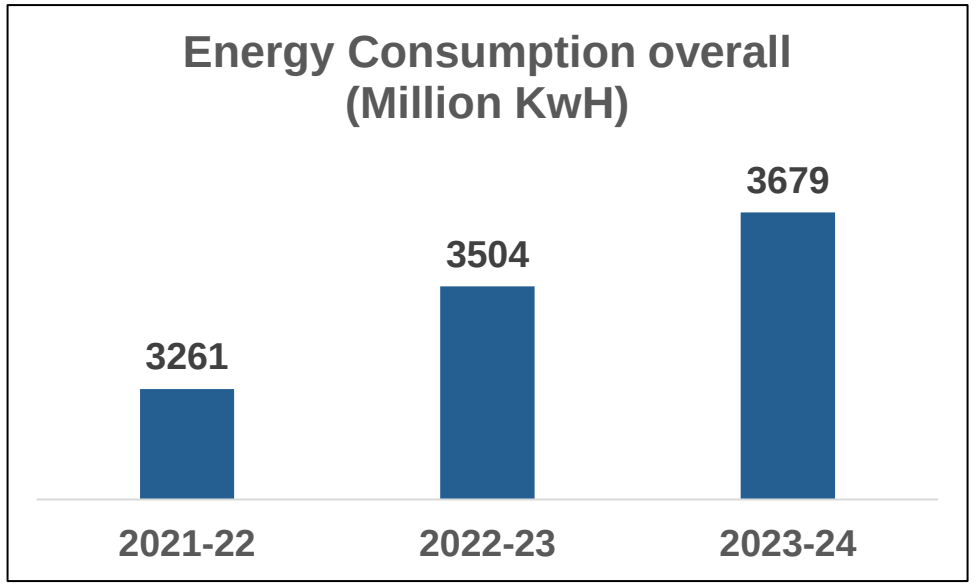
Innovation

- Capsule Filter Separation machine
- Compressed air management system with IFC
- Heat recovery system in dehumidifier for reduction of load in place of electrical heaters

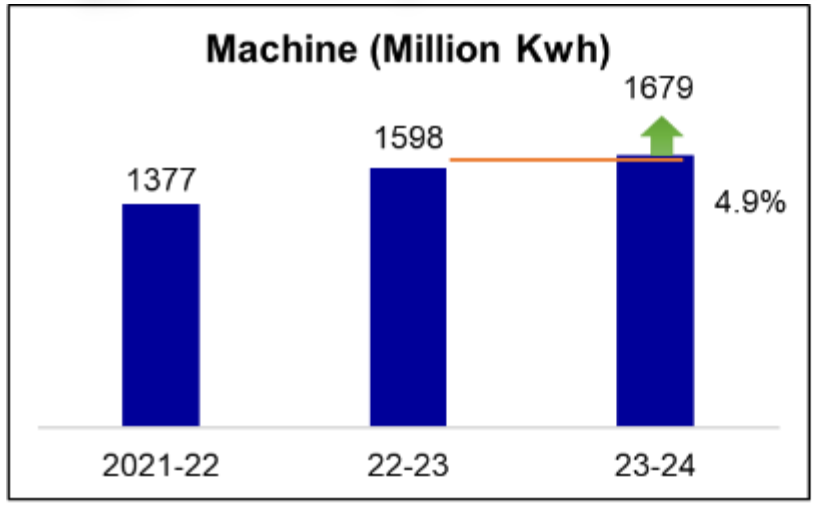
Manufacturing Process Flow

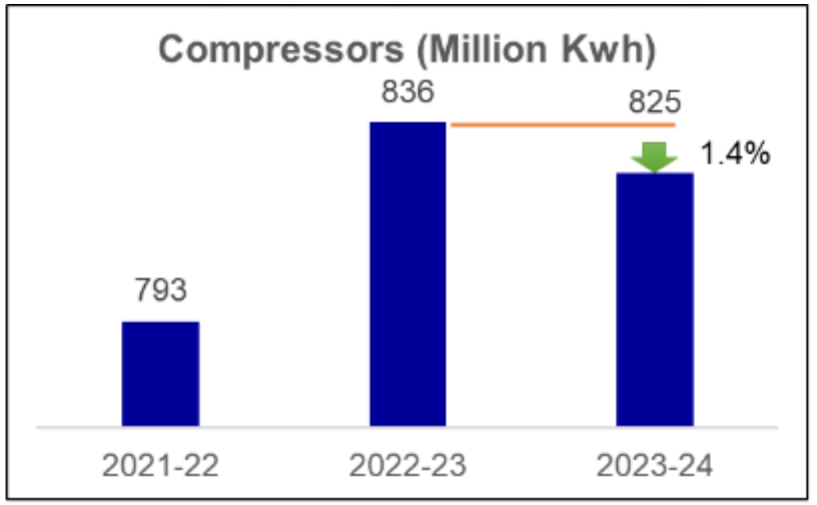
Energy Consumption – Overview

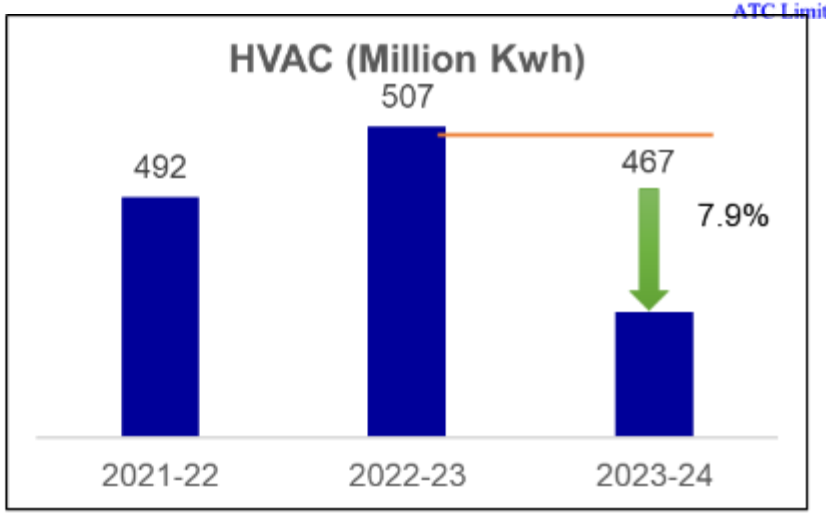


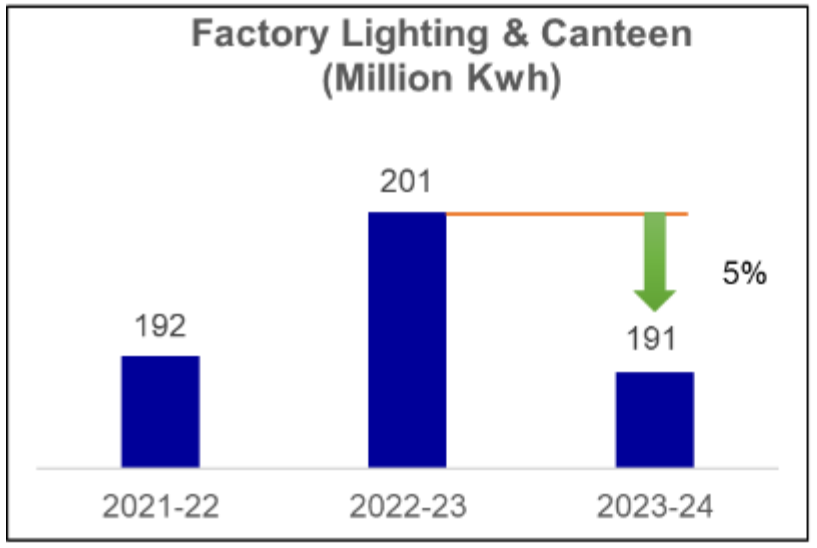


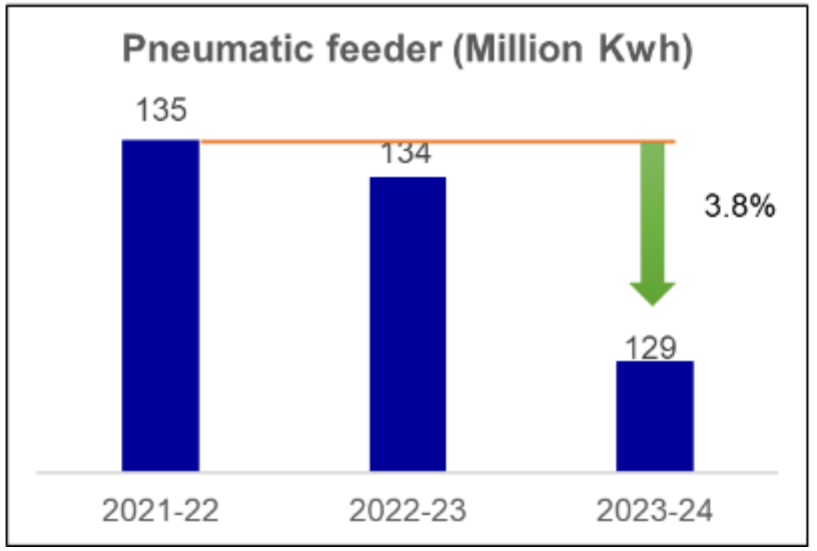
Energy Consumption in Million Kwh – Overview ….contd

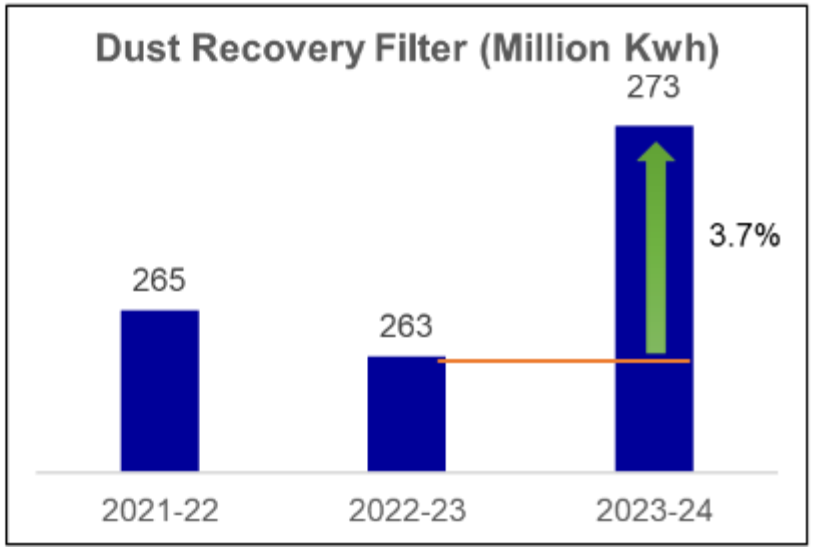




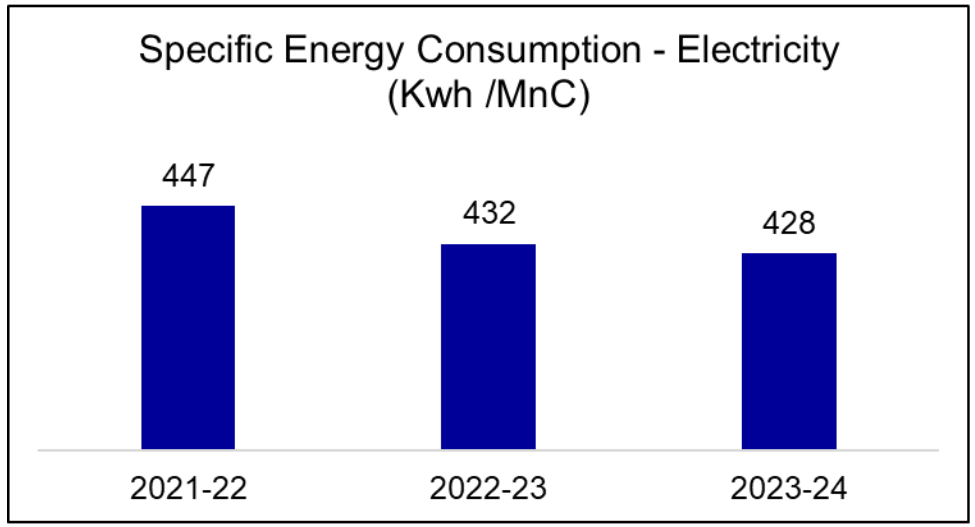








Specific Energy Consumption



Audit/gaps/Benchmarking

- Auto Cut off valves at machines head – 3 Units/MNC
- Smart Compressed Air Flow and Pressure Control – 2 Unit/MNC
- DRFs Bags Replacement – 3 Unit/MNC

New technologies

- Replacement of DRF Motors with IE4– 2 unit/MNC
- CDRF Fan replacement – 2 Unit/MNC
- Energy Efficient Pumps for Chilled Water – 1.7 Units/MNC

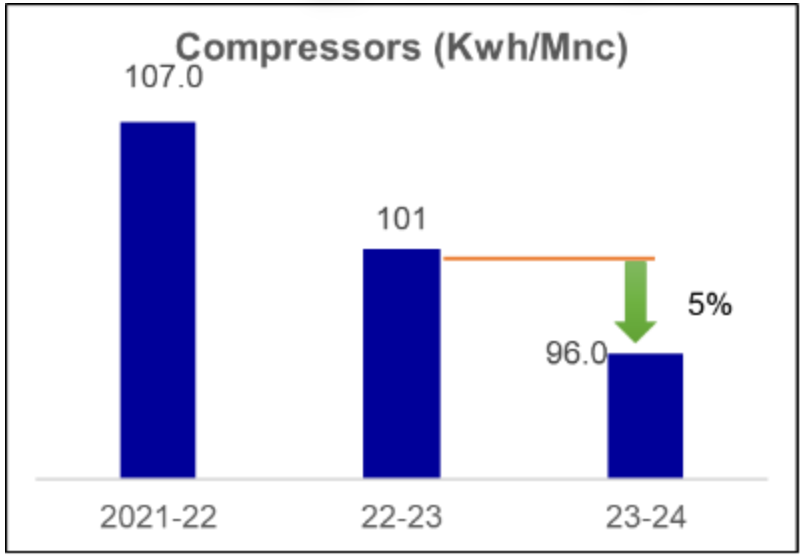
Automation & Control

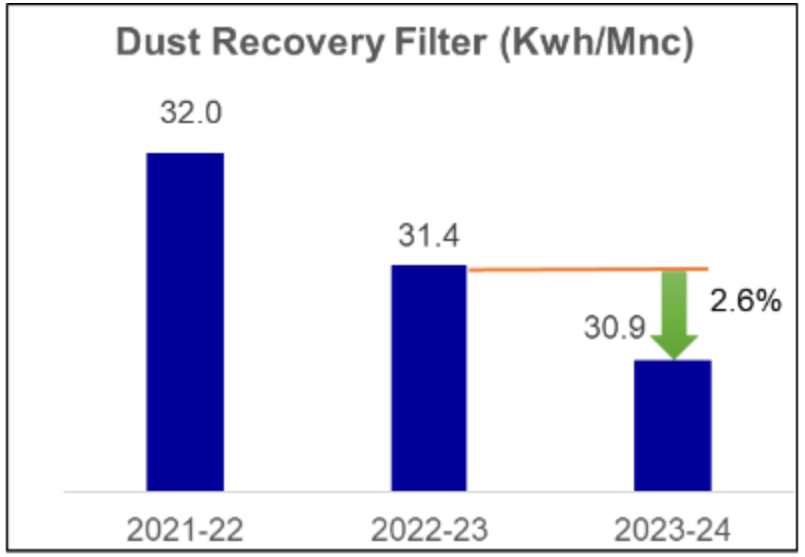
- Smart Remote of AC – 1 Unit/MNC
- Sustenance of Lighting Automation– 1 Units/MNC
- Auto cut off vacuum in Casepacker - 1 Unit/MNC

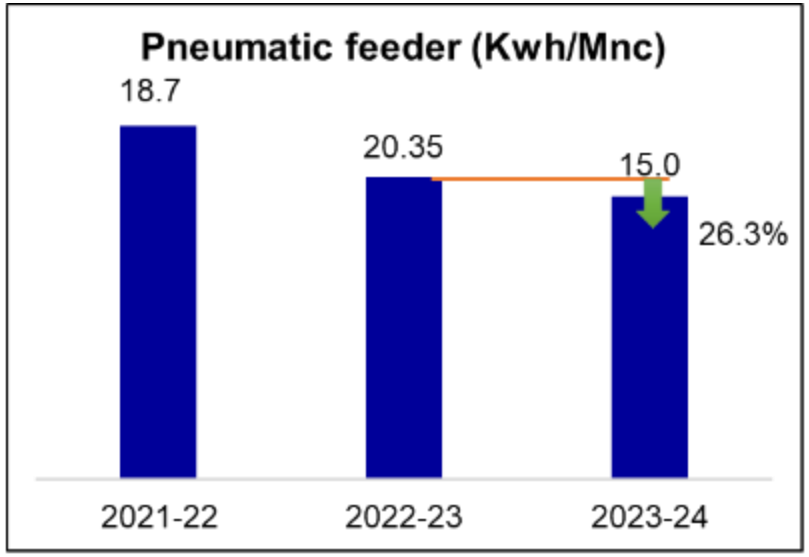
Awareness Building

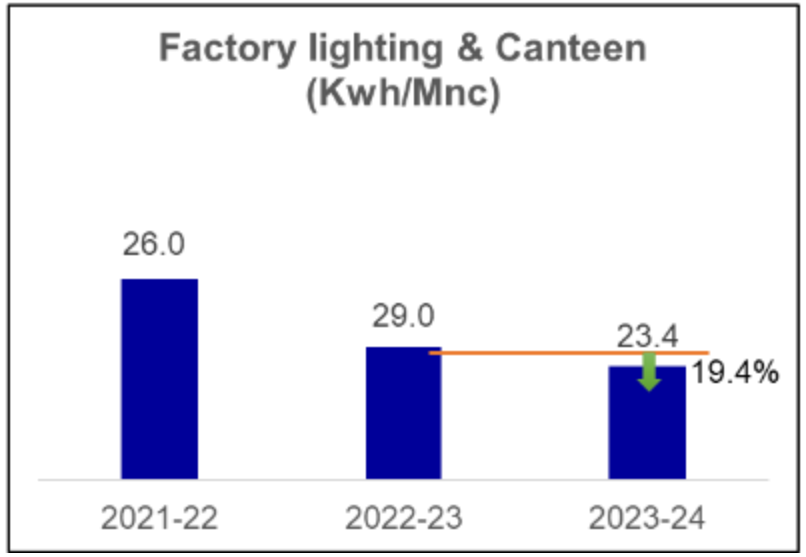
- Energy Conservation day celebration
- Sustenance Of Initiatives
- Admin Control

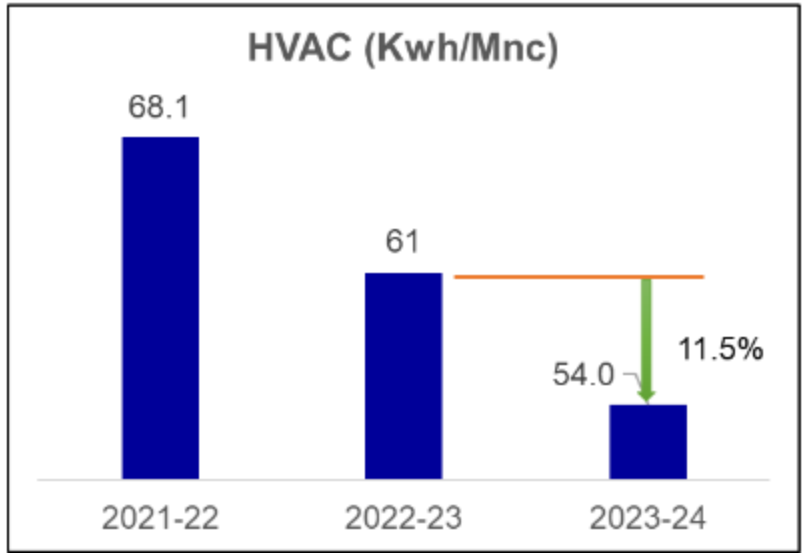
Specific Energy Consumption



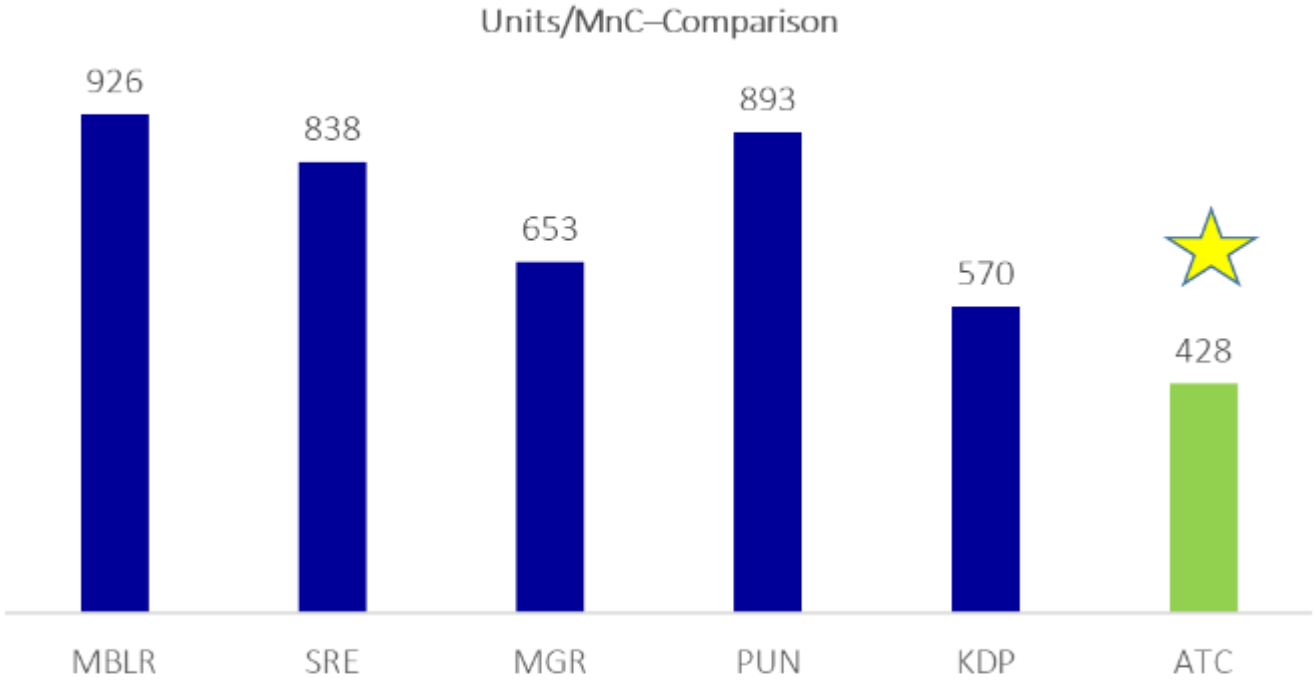


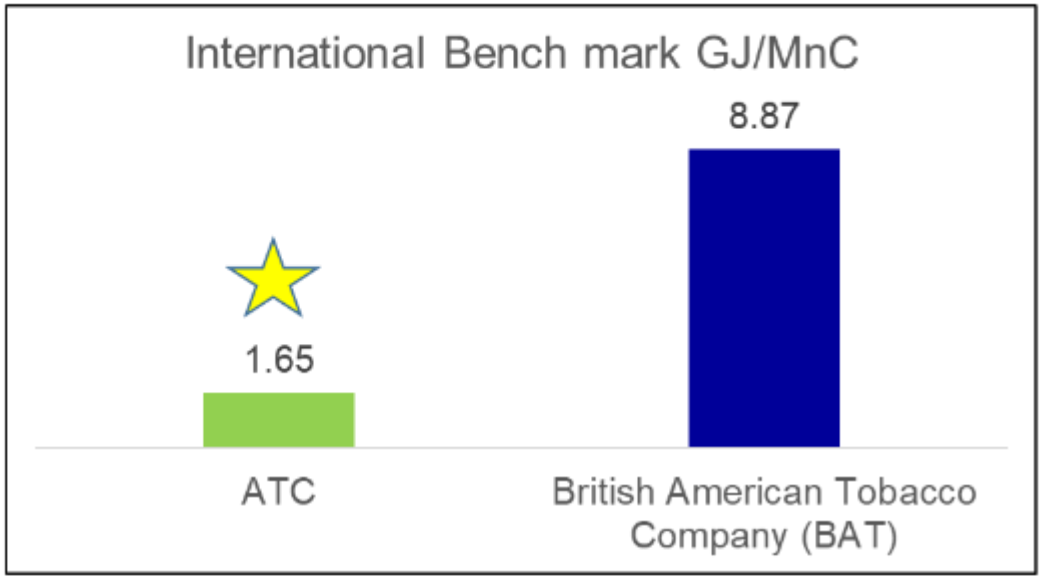






Information on Competitors, National & Global benchmark





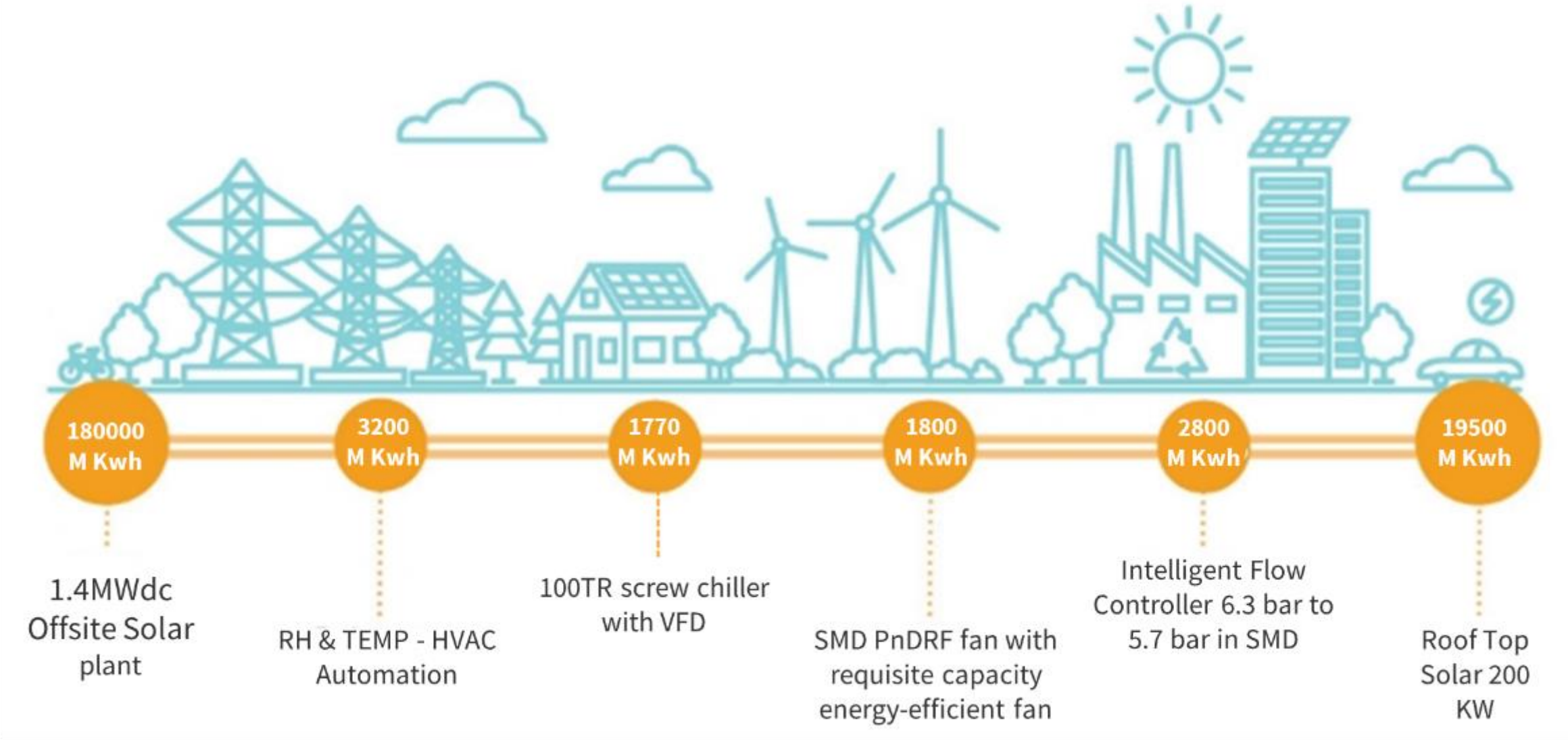
Specific Energy Consumption Target – Unit / MNC

	2022-23	2023-24	Target 2024-25	Rationale
Overall	432	428	423	3% improvement

Product : Cigarette
MOP : No. of Cigarettes produced in million (mnc)

Hence, GJ/mnc is the unit used for Benchmarking in case of Cigarette Industries

Energy Saving Road Map



Energy Saving Road Map
Replacement of LPG gas with Induction Heating

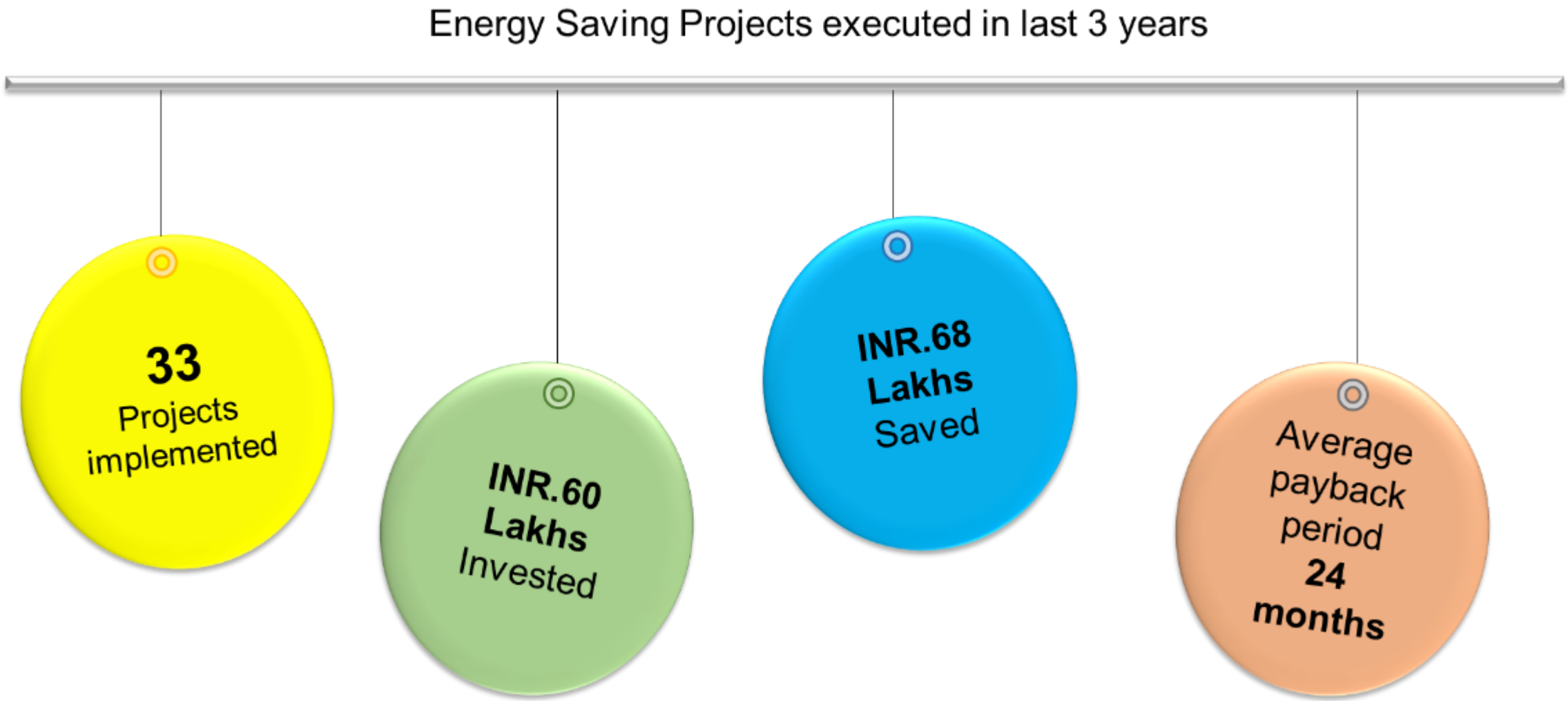
ATC Limited

- ✓ Investment : Rs.26 Lakhs
- ✓ LPG Saving : 585 Cylinders / Annum
- ✓ Cost Saving : Rs.12 Lakhs / Annum
- ✓ Electricity consumed by Induction Heating :KWH 30000/Annum
- ✓ Payback Period : 24 Months

Specific Energy Consumption Targets

ATC 2030 S2.0 Target	2018-19 Baseline	2020-21 (A)	2021-22 (A)	2022-23 (A)	2023-24 (A)	2023-30 (Target)
50% Renewable Energy (Overall)	77%	63.84%	65.36%	80%	80%	98%
100% Purchased Grid Electricity	77%	63.84%	65.36%	85%	87%	98%
50% Reduction in Specific GHG Emissions (Ton/MNC)	0.357	0.379	0.227 (36 %↓)	0.197 (45%↓)	0.152 (45%↓)	0.108 (70 %↓)
30% Reduction in Specific Energy (GJ/MNC)	1.86	1.86	1.76 (5%↓)	1.69 (7.5%↓)	1.65 (7.5%↓)	1.3 (30%↓)
30% Reduction in Energy (Units/MNC)	457.5	454 (0.76%↓)	447 (2.3%↓)	445 (2.8%↓)	428 (2.8%↓)	320.25 (30%↓)

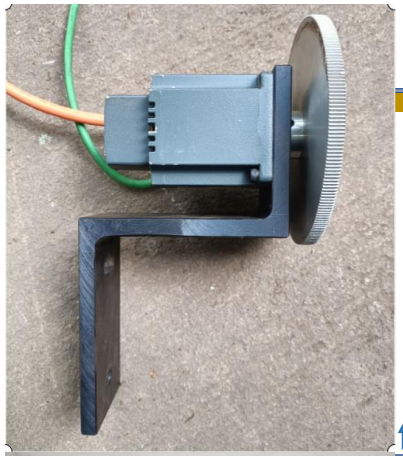
Energy Saving projects implemented: April 2022 – March 2024….contd

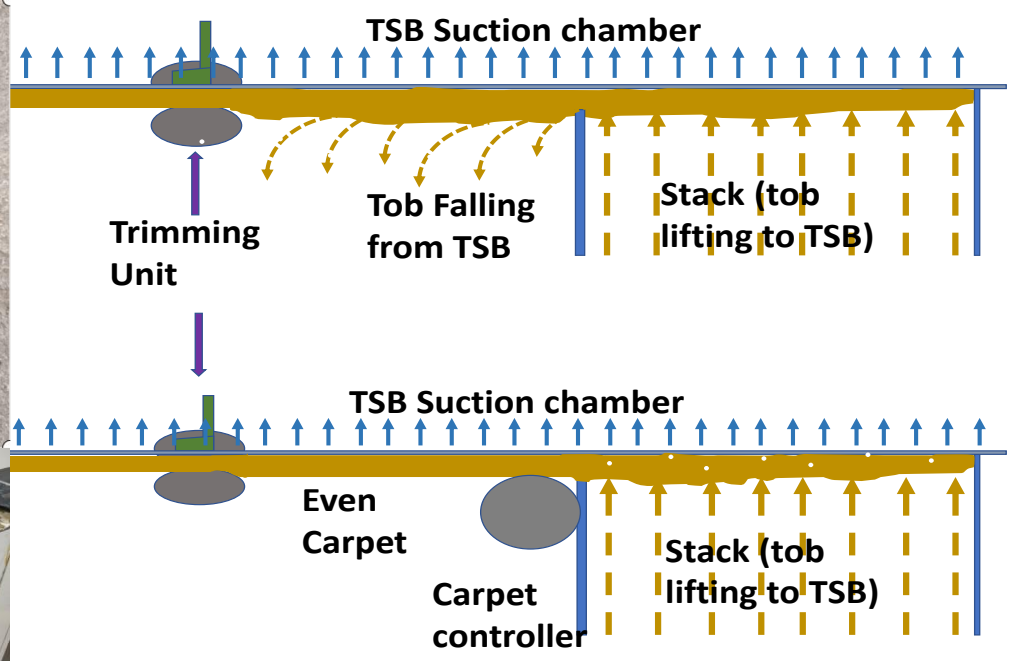


Energy Saving projects implemented : 2022-24 ….contd

Year	No of Energy saving projects	Investments (INR Million)	Electrical savings (Million kWh)	Thermal savings (Million Kcal/ MTOE)	Savings (INR Million)	Payback period	Impact on SEC (Electrical, thermal) (Units/ Mnc)
FY 2023-24	10	2.35	0.32	0	2.35	16	4
FY 2022-23	12	3.02	0.42	0	3.33	21	15
FY 2021-22	11	3.30	0.17	0	1.19	33	2

Loose End Carpet Controller





Benefits

- Machine LE rejection to be reduced
- LSTC Loose end penalization to be reduced
- Loose shorts to be improved
- QR and Firmness to be maintained
- Overall machine waste to be reduced

ATC Limited

MC 5 &6

MC 7

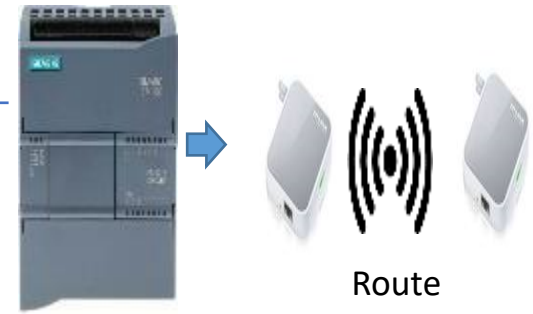
MC 50

Pro-face
Control HMI

Interlocked with
Shooter
machine for
incorrect brand

Bar code data
exchange

PC with PC
Runtime /SCADA



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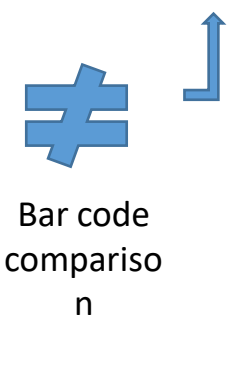

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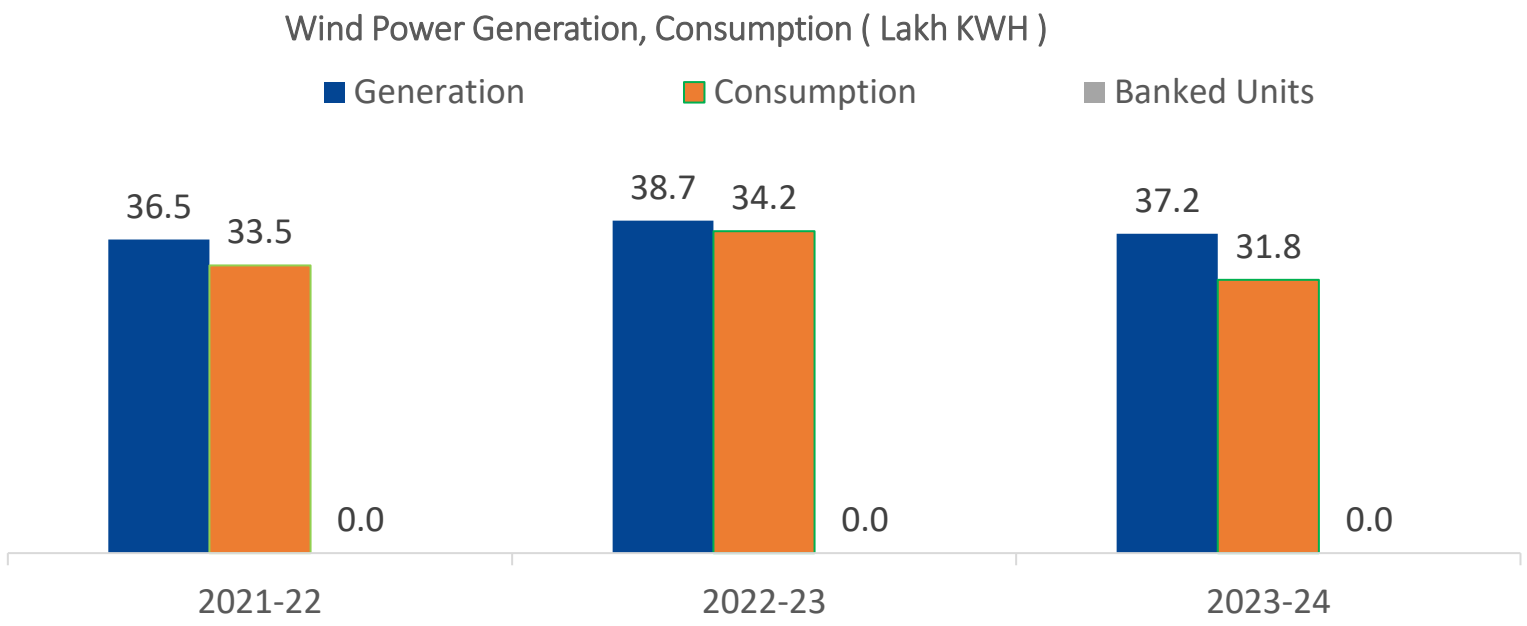
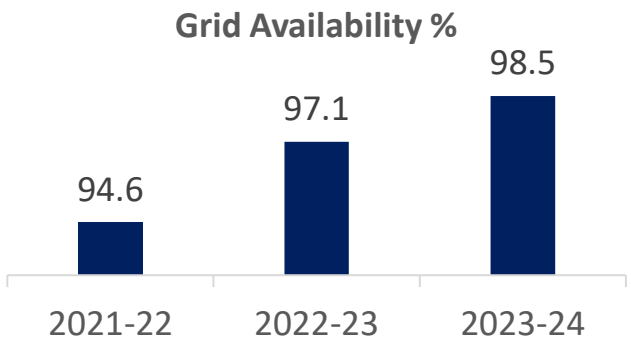
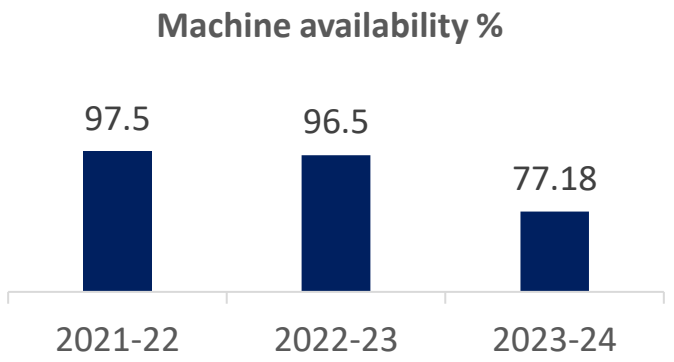
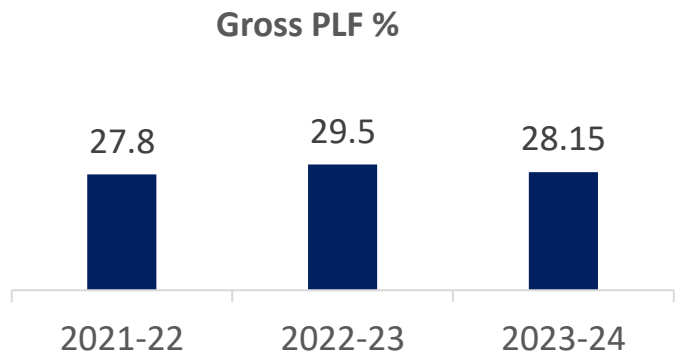
Utilization of Renewable Energy sources



Generator Failure since 17th Jan 2024.
Repair work in progress in Tada Plant







Utilization of Renewable Energy sources

RE Share	2022-23	Q1	Q2	Q3	Q4	2023-24
Wind	62%	40%	59%	68%	45%	53%
Solar	19%	30%	30%	28%	35%	31%
IEX (Green)	-	0%	1%	0%	9%	2%
Total RE	80%	70%	90%	96%	89%	86%

Savings in Lacs	2022-23	Q1	Q2	Q3	Q4	2023-24
Wind	199	40	59	67	40	206
Solar	65	30	29	26	32	118
IEX(Green)			1		8	9
Total RE	264	71	89	93	80	333

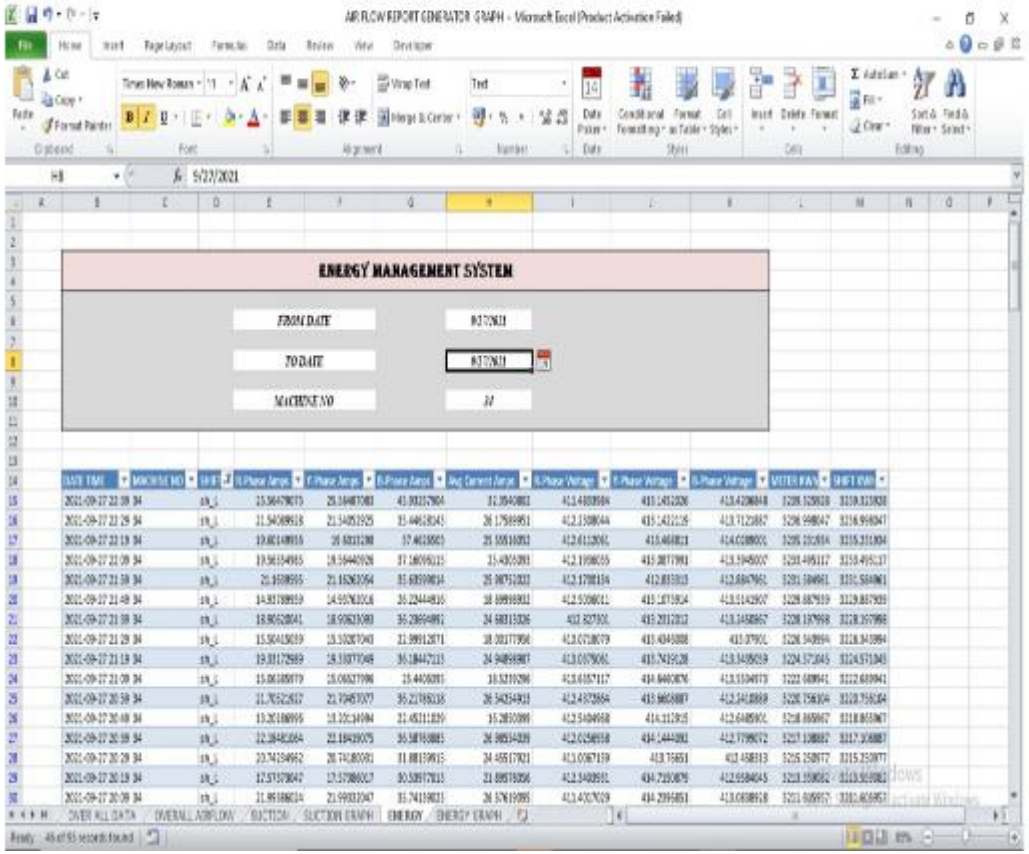
Highlights

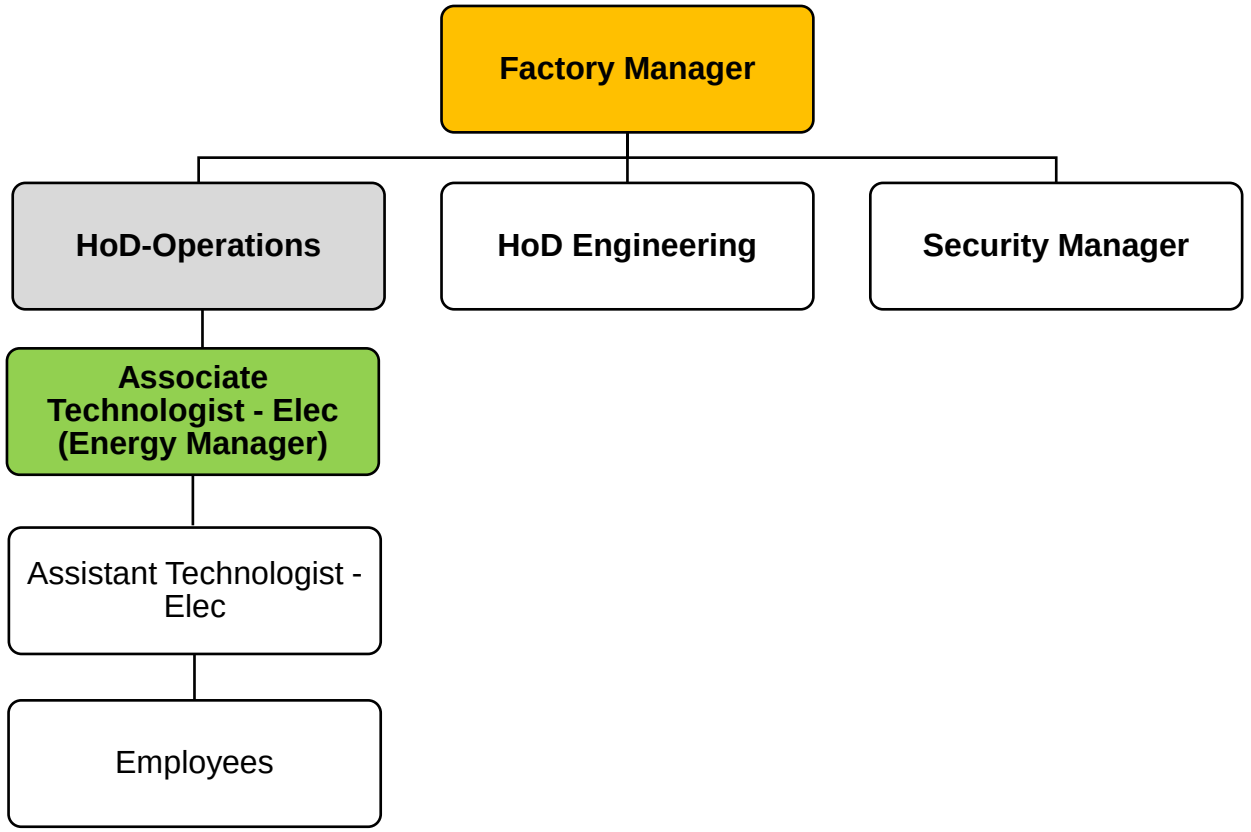
- RE Share has gone up from 80% to 89% Quarter on Quarter basis. Improvement on account of additional Solar and IEX
- 2023-24 RE share is 86% vs 80% in 2022-23 vs 65% in 2021-22
- Net savings on account of captive RE is ~ 333 Lacs YTD 2023-24 vs 264 Lacs in 2022-23
- Due to wind generator failure in Jan'24 ytd generation has reduced to 37.2 Lac Units from 38.7 Lac in LY

Team Work, Employee Involvement & Monitoring

ATC Limited

- Online Energy monitoring system data logging and reports.





Waste Utilization and disposal method

ATC Limited

FY2021-22

Cigarette paper
Qty(MT/Year) : 6.4
% Total fuel:

Oil cotton waste
Qty(MT/Year):1.42
%Total Fuel :

Used Oil
Qty (MT/Year) :0.6
%Total fuel :

Type of waste generated	Quantity waste generated (MT/Year)	Disposal method
Cigarette paper	6.4	Recycle/reuse
Oil cotton waste	1.42	Incineration
Used oil	0.6	Recycle/reuse

FY2022-23

Cigarette paper
Qty(MT/Year) : 5.17
% Total fuel:

Oil cotton waste
Qty(MT/Year):0.4
%Total Fuel :

Used Oil
Qty (MT/Year) :0.54
%Total fuel :

Type of waste generated	Quantity waste generated (MT/Year)	Disposal method
Cigarette paper	5.17	Recycle/reuse
Oil cotton waste	0.4	Incineration
Used oil	0.54	Recycle/reuse

FY2023-24

Cigarette paper
Qty(MT/Year) : 7.35
% Total fuel:

Oil cotton waste
Qty(MT/Year):0.28
%Total Fuel :

Used Oil
Qty (MT/Year) :0.35
%Total fuel :

Type of waste generated	Quantity waste generated (MT/Year)	Disposal method
Cigarette paper	7.35	Recycle/reuse
Oil cotton waste	0.28	Incineration
Used oil	0.35	Recycle/reuse

GHG Emission

ATC Limited

Scope 1

- LPG for cooking
- HSD for Generators

Scope 2

- Purchased electricity from Grid

Scope 3

- Raw Materials transportation
- Finished goods transportation

	Absolute Emission (Metric Ton)	Emission Intensity (KgCO2 / Ton of Final Products)	Absolute Emission (Metric Ton)	Emission Intensity (KgCO2 / Ton of Final Products)	Absolute Emission (Metric Ton)	Emission Intensity (KgCO2 / Ton of Final Products)
2021-22	37.6	0.005	2.0	0	2381.9	0.330
2022-23	43.9	0.005	0.6	0	2821.8	0.340
2023-24	42.1	0.004	0.58	0	2729.1	0.284

WASTE MANAGEMENT

- Color coding of waste bins with pictorial signs
- Training and Awareness
- Regular inspection of Waste bins

Renewable energy Projects : Off Site Wind Power Plant

Investment
9.5crores

Generation
36 Lakh
Units/Annum

Total
Capacity
1.5mw

Pay Back
5.7 years

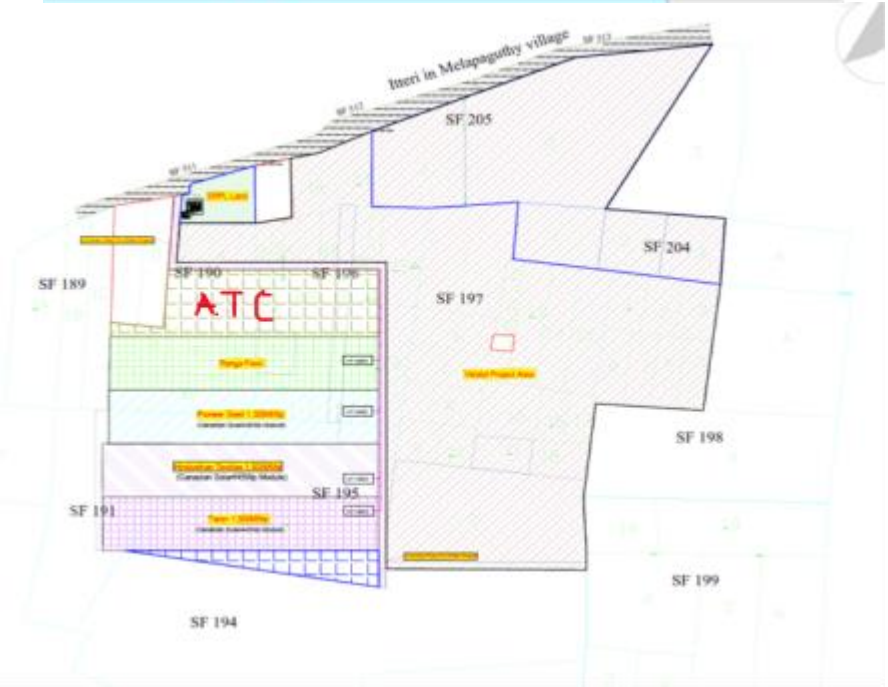
Total Wind
Power
Consumption
2021-22
33.5 lakh Kwh

CO_2

Reduced 1830.5
Tones / Annum

Off Site Solar Plant (Capacity 1MW)

ATC Limited



Project Size:1.2MW AC(1.4Mwp DC)

Project Site: Adanur village,Karur Dt,Tamilnadu

Total project Cost 7.36 cr

Land Size :3.5 Acres

IRR:17.4%(15yrs) 19.5%(25yrs)

Estimated Generation:20Lakhs units

ROI-4.2Years

Annual Electricity Savings(KWH): 2000000

Annual Saving(in lakhs): 333

Long Term Vision on EE (Roof Top Solar)

- Reduced cost of land and greater utilization
- Reduced cost of evacuation
- Easier operation and maintenance
- Higher Efficiency of invertor / Power convertor
- Increased Grid PLF%

- ✓ Investment : Rs.130 Lakhs
- ✓ Energy Saving : Kwh 3 Lakhs / Annum
- ✓ Cost Saving : Rs.25 Lakhs / Annum
- ✓ Payback Period : 62 Months

Green Supply Chain – Green Purchase Policy

ATC Limited

To ensure that its products and services comply with all applicable statutes and regulations;

To work towards safe and optimal resource use over the life-cycle of its products and services, including recycling of resources wherever possible;

To work towards ensuring that all goods and services are procured, manufactured and delivered through a system embedding its policies in terms of labour practices, human rights, ethics, occupational health, safety and environment;

To work towards sourcing significant raw materials, products and services in a manner so as to continuously improve the balance between social, economic and environmental impacts;

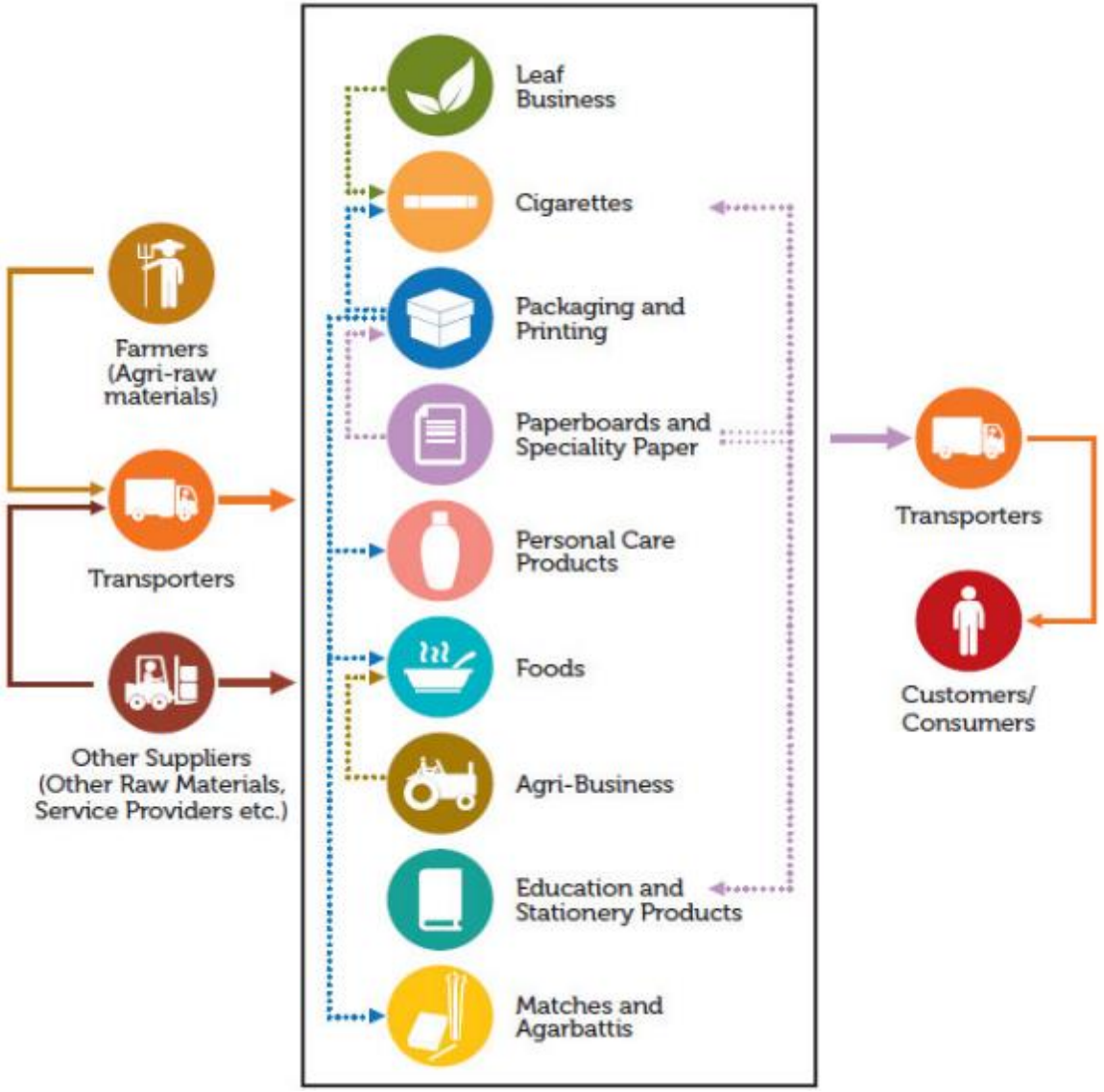
To work towards building capacity such that all the value chain partners, namely the third party manufacturers (TPMs), service providers including transporters and suppliers of significant raw materials, are sensitised and empowered to fulfil their roles and responsibilities towards sustainability;

To raise the awareness of consumers on responsible disposal of products and packaging;

To continue to progressively factor in relevant social and environmental considerations during the process of development of products / services; To continue to recognise and respect the rights of people who may be owners of traditional knowledge, and other forms of intellectual property, wherever relevant.

Green Supply Chain – ENCON Projects implemented by Vendor

Being a converter of tobacco into cigarettes for ITC Limited, ATC Limited sources most of its raw materials from ITC Limited. The material flow across different divisions in ITC Limited is as follows:



- Almost 95% percent of our vendors are from ITC Ltd. Papers and boards are from ITC PSPD, Leaf tobacco is sourced from ILTD, Filters are sourced from ITC Essentra.
- Energy conservation and replication of projects are governed by corporate EHS at ITC Limited. All the projects are tracked for implementation along with the replication projects. So the projects originated in one division, are replicated across divisions.
- We try to maximize the efficiency of our logistic networks by using travelling salesman algorithm to optimize routes and maximize truck loads/dispatch.

People Centric Initiatives

Energy Conservation Day Celebration

- Energy conservation Week Celebrated every in month of December
- Energy conservation pledge taken by all the participants
- Quiz was organized
- Total no. of Suggestions received from employees – **127**

World Environment Day Celebration

- World Environmental Day Celebrated every year on 5th June
- Around 1200 saplings planted across Hosur along with District Administration, 150 sapling issued to employees and planted 30 inside the Factory premises
- Environmental awareness program conducted inside the Shop floor

Awards and Accordance

Renewal of Platinum rated IGBC Green Building Certificate for 3 years (till 2023)

Excellence Award - IGBC Performance Challenge 2021

Prashansa Patra from national safety Council of India

Energy Efficient Unit from CII National Level Energy management 2021

Transition to ISO 45001:2018 and IMS Recertification

Gold Prize in FICCI Safety Excellence Award 2020 under small sector

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