



Presenters :

Keyur Desai

Head - Site Engineering & Projects

Ashish Chauhan

Head –Utilities (CEM , 2008)

Keyur Shah

Asst. Manager (CEA, 2013)



Zentiva Group : Overview

530

Over 530
years of
history

40

Producing for
more than 40
countries

4

4
Pharma
Manufacturing
sites

1

1
API
Manufacturing
site

2

2
R&D
Centers

Ankleshwar Unit : Overview

Site Evolution

1987

API Plants

- Production of intermediates and APIs
- Capacity of 500 Tons/Year
- Products: Articaine HCl, Glibenclamide, Pentoxifylline, Pheniramine Maleate,

1989

Pharmaceuticals

- Large scale production of solids orals and medical devices
- Capacity of 8.0 Bn. Tablets / Year
- Products: Paracetamol, Avil, Metformin, Ramipril

2015

Pharmaceutics Development (PD)

- API development
- Research & Development

Site Transformation Journey



1987

Hoechst

1996



2002



2004



2011

ZENTIVA

2020

Production Process

KEY FIGURES

- 935 employees
- 24 X 7 Round the year Operations.
- 23.5 Acres Lush green premises
- Most competitive production cost approx. **0.05€ per SMU**
- More than 80% Export to US, Europe, Russia & Japan market.

CERTIFICATIONS

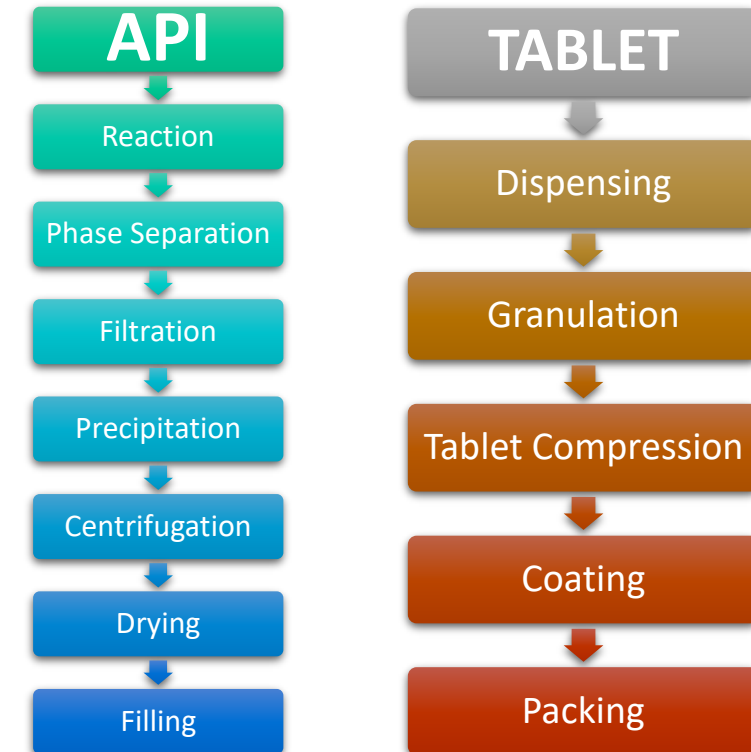
- US FDA
- Ukraine
- EDQM
- ISO 14001
- Russia
- PMDA Japan
- MHRA
- ISO 45001

INFRASTRUCTURE

- **API I**
 - 5 equipment trains
 - 1 M³ SS
 - 4 M³ SS
 - 6 M³ Glass lined
 - Distillation column
 - 1 M³ Glass lined
 - 4 M³ Glass lined
 - SPDU
- **API II**
 - 4 equipment trains
 - 4 M³ SS * 2
 - 6 M³ Glass lined
 - 4 M³ Glass lined
 - 6 M³ Hastelloy
- **Pharma Formulation**
 - Wet Granulation
 - Dry Granulation
 - Packaging
- **Common Facilities**
 - Utilities
 - Waste Water Treatment
 - Tank farms
 - Warehouses



PROCESS



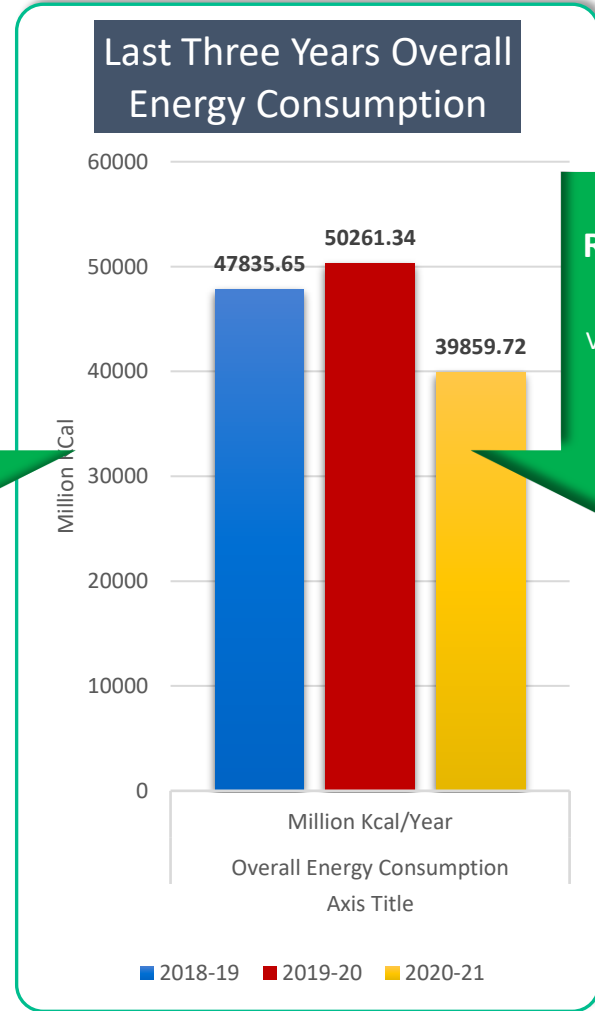
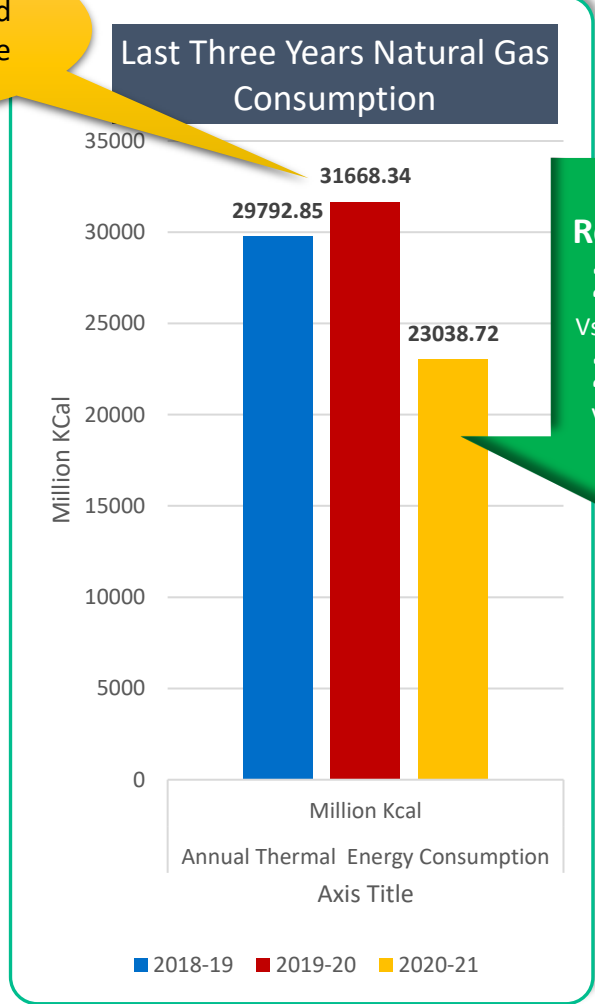
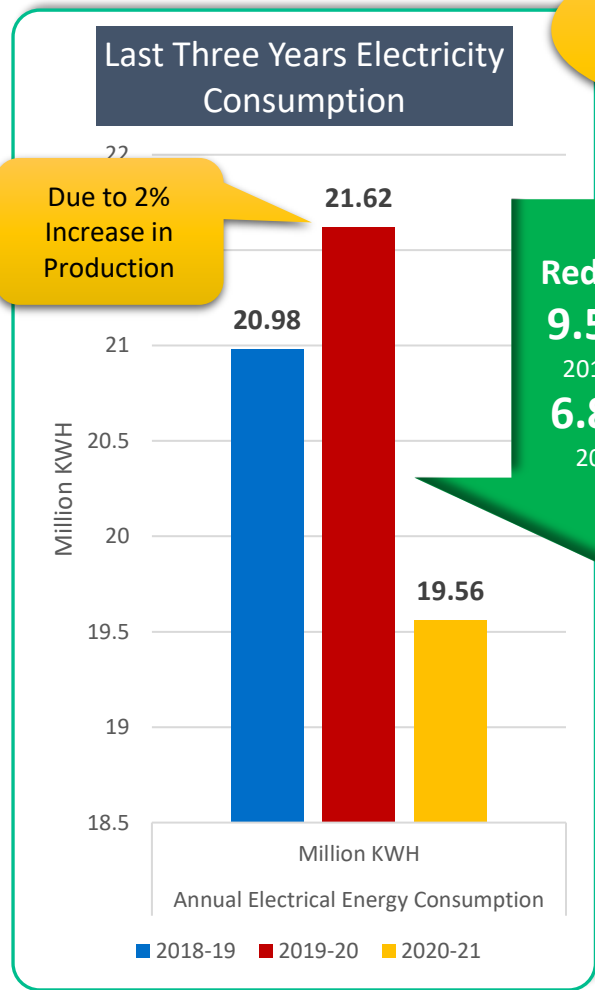
Impact Of COVID19

- Slowdown of overall Production volume by 20%.
- Delays in Capex projects implementation.
- Delays in statutory /liasoning work for transfer activities.
- Increase in unbudgeted expenses for COVID Protocol maintenance at site like Sanitization, Mask, Social Distancing & so on.
- Learnings from Challenges like,
 - ✓ Maintaining Productivity, OEE , Energy Efficiency at partial capacity operations.
 - ✓ Managing resource crunches – Manpower, Materials, with limited mobility in lockdown era.
 - ✓ Adoption of New ways of working : WFH, Virtual Meetings , Staggered schedule, Remote Operations.
 - ✓ Crisis Management.
 - ✓ Keeping workforce motivated.
 - ✓ Need for CSR.
 - ✓ Activation of Business Continuity Plans. Shortage of Liquid Nitrogen supply had been mitigated by switching over to Own generation at site.
 - ✓ Highest level of Hygiene maintenance for wellbeing of employees.

Specific Energy Consumption in last 3 years

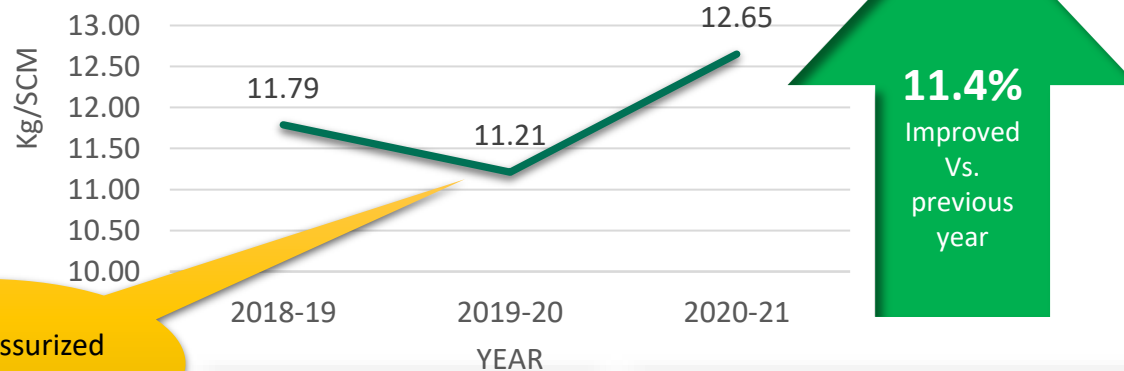
	UOM	2018-19	2019-20	2020-21
Annual Electrical Energy Consumption	Million KWH	20.98	21.62	19.56
Annual Electrical Energy Consumption	Million KCal	18042.8	18593	16821
Annual Thermal Energy Consumption	Million KCal	29792.85	31668.34	23038.72
Overall Energy Consumption	Million Kcal	47835.65	50261.34	39859.72
Specific Electrical Energy Consumption	Million KWH/Ton Of Production	0.0074	0.0075	0.0085
Specific Thermal Energy Consumption	Million Kcal/Ton Of Production	10.57	11.02	10.08
Specific Overall Energy Consumption	Million Kcal/Ton Of Production	16.97	17.50	17.45
Annual Production	Tones	2818.08	2872.05	2283.56

Specific Energy Consumption in last 3 years

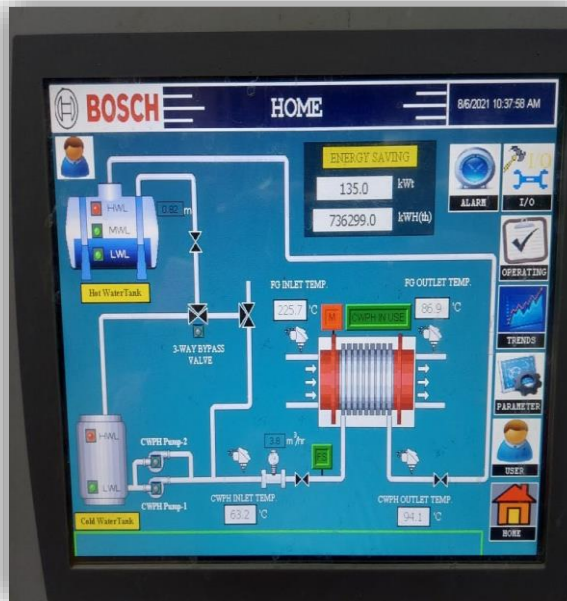


Specific Energy Consumption in last 3 years

Steam Fuel Ratio



Due to Pressurized Economizer failure

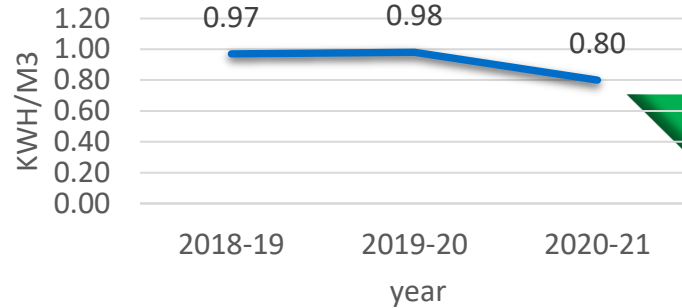


Initiatives resulted in Improved Energy Efficiencies.

- Bosch Condensing Economizer Installation for $< 97^{\circ}\text{C}$ feed water temperature.
- Heat Recovery from Auto Blowdown system using Flash vessel & PHE.
- Condensate Recovery Increased from **20%** to **35%**.
- Reduction in Steam Distribution Network losses from **19%** to **14%** by efficient maintenance of traps, Insulation.
- Boiler feed water tank level optimization as per current load conditions.
- Precise measurement of steam by installation of Veries flowmeters (Armstrong) for lowest pressure drop and minimum flow capturing.
- Burner modulation frequency increased from Monthly to Weekly to maintain efficient combustion during various load conditions.
- Manual Blowdown decreased and Auto Blow down calibration frequency increased.

Specific Energy Consumption in last 3 years

Specific Power: Chilled Water

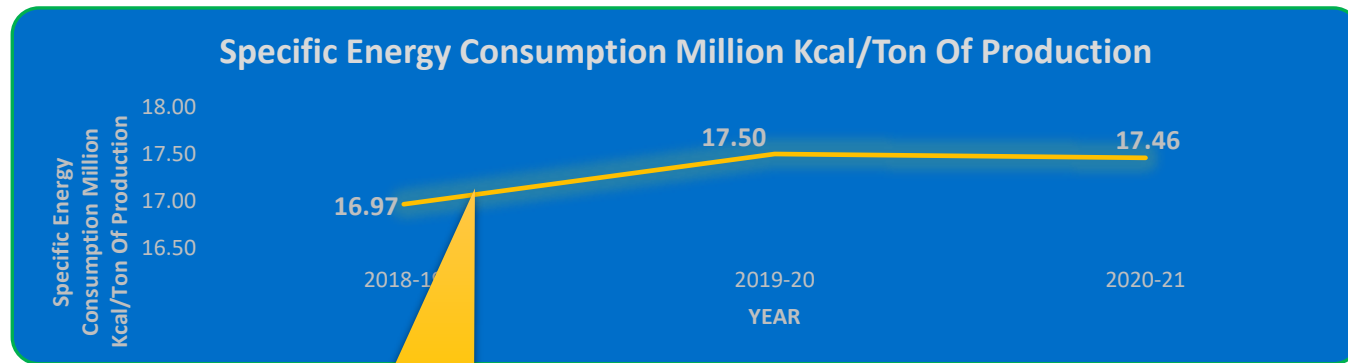


Initiatives resulted in Improved Energy Efficiencies.

- Auto Tube Brushing System Installed installed in Trane Screw Chiller for maintaining Condenser approach temperature.
- Periodic Maintenance frequency increased for Evaporator cleaning from **yearly to Six Monthly**.
- Chilled water distribution network modified by re-route to decrease length of **90 Meters**. Thereby, able to decrease supply pressure from **4.0 to 3.4 Kg/Cm²**.
- Introduced new 275 TR Screw Chiller with VFD and Auto Tube Brushing.

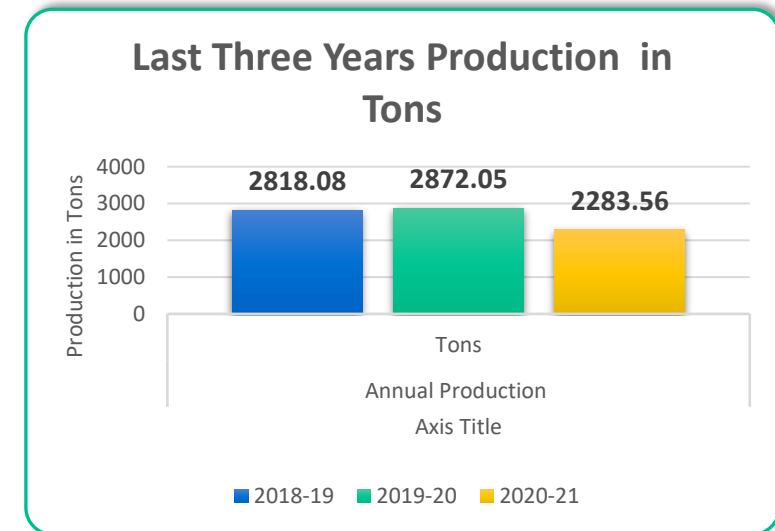


Specific Energy Consumption in last 3 years



Increase 3% due to

- ✓ Production volume increase by 2%.
- ✓ Natural gas consumption increased due to failure of pressurized economizer.
- ✓ Cogen Plant validation trails for resistive load banks.



- Despite reduction of **20.4%** in production volume, and due to COVID19 impact, many irregularities , unscheduled stoppages, partial capacity operations, Overall efficiency is improved in 2020-21.
- There is **20.7%** reduction in Overall Energies Consumption in 2020-21 Vs 2019-20.
- There is **16.7 %** reduction in Overall Energies Consumption in 2020-21 Vs 2018-19.
- There are several initiatives taken to improve energy efficiency, which will be shared in following slides.

Information On Competitor, National, Global Benchmarking.

International Benchmarking:

- In 2019-20, Our site was **Most Energy Efficient Site** on Global Energy Mapping platform, across all Sanofi sites, benchmarking developed by **SCHNEIDER** (<https://www.resourceadvisor.com/>).
- The benchmark for our kind of site (where API + Formulation combined manufacturing facility) was **800 MWh/M²**, Vs. we have actual economy of **654 MWh/M²**.

National Benchmarking:

- We have Specific Overall Energy Consumption is **17.46 Million KCal/ Ton of production**
- National Benchmark is not available because Pharma industry doesn't come under DC & PAT.
- Comparison with peer industries is not viable due to different product mix, footprint and various environmental conditions.

List Of Major Encon Projects planned in 2021-22

In broader spectrum, Our Encon projects are planned to achieve,

- To align with ZENTIVA' s global vision of becoming Carbon Neutral Organization by 2030.
- Use of 100% Renewable Energies @ Ankleshwar Site.

Project Description	Investment	Expected Deliverables	Status
Installation Of Roof Top Solar Power Plant 1 MW at Site.	₹ 37.5 Mio.	<ul style="list-style-type: none"> Reduction Carbon emissions \approx 812 Tons CO₂ /Annum YoY. Increase Renewable Energy usage share from 22% to 28% of total site energy consumption. Captive electricity of 1,540,000 KWH/Annum = ₹ 12.32 Mio./Yr. 	Implemented.
Installation Of Adaptive Frequency Drive for 375 TR Chiller.	₹ 2.2 Mio.	<ul style="list-style-type: none"> Saving of Electricity =140,160 KWH/Annum = ₹1.12 Mio./Yr. 	Implemented.
Replacement of Chilled water supply pumps by New Design Enveloped Pump.	₹ 1.1 Mio.	<ul style="list-style-type: none"> Saving of Electricity = 293750 KWH /Annum = ₹ 2.35 Mio./Yr. (55KW*2 =110 KW Vs. 75 KW). 	Implemented.
Audit of Steam distribution network followed by Corrective actions.	₹ 0.1 Mio.	<ul style="list-style-type: none"> Steam Distribution losses reduced from 19% to 15%. (Steam Traps replacement, Insulation repairing). 	Implemented.
Cooling Water Supply pump No.4 Inside Coating.	₹ 0.03 Mio.	<ul style="list-style-type: none"> Saving of Electricity= 559705 KWH/Annum = ₹ 0.4 Mio./Yr. 	Implemented.
	₹ 40.93 Mio.	Expected Savings = ₹ 16.19 Mio./Yr. = Payback Of 2.5 Yrs.	Implemented

Continue....

List Of Major Encon Projects planned in 2021-22

Project Description	Investment	Expected Deliverables	Status
MEE Retrofitting by PFET+ MVR Technology.	₹ 15 Mio.	<ul style="list-style-type: none"> Reduction Of Steam Consumption by 70%. 	Vendor Identified. Preliminary detailing done.
SBR –Scale & Bio Removal System for Cooling Water. (Replacement Of existing chemical treatment).	₹ 7 Mio.	<ul style="list-style-type: none"> Reduction Of blowdown & hence make up water consumption. Reduction Of effluent generation. 	Proposal received . Under evaluation.
Steam Distribution line to Pharma Plant Re routing	₹ 3 Mio.	<ul style="list-style-type: none"> Reduction Of Steam distribution losses. Reduction Of Steam Consumption in Pharma plant. Increase PCT. 	Proposal.
Ice Ball Energy Storage Technology	₹ 23 Mio.	<ul style="list-style-type: none"> For gaining advantage of Peak load & Off-Peak load tariff. Balancing of load profile. 	Proposal under evaluation.
Cooling Tower Fans replacement by Direct Drive Type.	₹ 1 Mio.	<ul style="list-style-type: none"> Saving in Electricity. Less Maintenance. 	Proposal.
ATB For brine plants.	₹ 1.5 Mio.	<ul style="list-style-type: none"> Saving in Electricity. 	Proposal.
Chilled Water Primary Pumps' Optimization by replacing with Design envelop pump.	₹ 1.5 Mio.	<ul style="list-style-type: none"> Saving in Electricity. Less Maintenance. 	Proposal.
Total Encon Projects Budget	₹ 92.9 Mio.		₹ 40.93 Mio. Implemented

Major Encon Projects implemented in last 3 years

SUMMARY

Year	Project	Investment	Savings	Payback
2018-19	03	₹ 1.526 Mio.	₹ 2.427 Mio.	7.5 Months
2019-20	08	₹ 81.42 Mio.	₹ 31.79 Mio.	30 Months
2020-21	05	₹ 4.203 Mio.	₹ 13.15 Mio.	4 Months
Total	16	₹ 87.149 Mio.	₹ 47.367 Mio.	1.83 Years

Major Encon Projects implemented in last 3 years

2018-19

Project	Investment	Savings	Payback
Installation Of APFC Panel	₹ 0.026 Mio.	₹ 1.6 Mio./ Yr. YoY. By maintaining near Unity Power Factor, rebate in electricity bill.	2 Months
Replacement Of Steam Traps	₹ 0.3 Mio.	₹ 0.323 Mio./Yr. YoY. Thermal savings 9231 SCM Natural Gas /Yr.	1 Year.
ATB Installation for 375 TR Screw Chiller	₹ 1.2 Mio.	₹ 0.504 Mio./Yr. YoY. Electrical savings of 63113 KWH annually.	2.4 Yr.
03	₹ 1.526 Mio.	₹ 2.427 Mio.	7.5 Months



APFC Panel
PF > 0.99

Direct Drive
CT Fans. No
Gear box.



Auto Tube
Brushing
System 375 TR
Chiller



Major Encon Projects implemented in last 3 years

2019-20

Project	Investment	Savings	Payback
Chilled Water Distribution Network Optimization & Reroute.	₹ 5.27 Mio.	₹ 5.37 Mio./Year YoY. By reduction in discharge head, stoppage of 5 booster pumps and one main pump re size.	10 Months
BOSCH Condensing Economizer for increase of feed water temperature.	₹ 5.7 Mio.	₹ 2.8 Mio./ Yr. YoY. By increase in BFW Temperature from 65 Deg C to 95 Deg C., Saving in fuel 668000000 Kcal / Year.	30 Months
275 TR Screw Chiller with VFD & ATB.	₹ 6.0 Mio.	₹ 1.8 Mio./Yr. YoY. Electrical savings With VFD & Auto Tube Brushing System, improved COP 5.5 Vs. 6.1.	3.4 Years.
Replacement of 65 W CFL By 45 LED Lamps.	₹ 0.45 Mio.	₹ 0.081 Mio./Yr. YoY. Electrical savings of 10129 KWH annually.	5.4 Years
Replacement of 2000 KVA Transformer with OLTC.	₹ 4.00 Mio.	₹ 4.47 Mio./Yr. YoY. Electrical savings of 559705 KWH annually.	12 Months
Cogeneration Power Plant 850 KW	₹ 60.00 Mio.	₹ 17.27 Mio./Yr. YoY. - Saving in Fuel due to 0.5 TPH WHRB. - Saving in Electricity due to 125 TR VAM.	3.5 Years.
8	₹ 81.42 Mio.	₹ 31.79 Mio.	2.56 Years.

Major Encon Projects implemented in last 3 years

2020-21

Project	Investment	Savings	Payback
Nitrogen Consumption Reduction. (Distribution network pipelines replacement & Reroute).	₹ 0.7 Mio.	₹ 3.68 Mio./Year YoY. By reduction in Nitrogen consumption reduced from 150000 to 90000 NM3/Month by leakages arresting. This savings is on reoccurrence basis year over .	2.3 Months
Compressed Air Consumption Reduction. (Distribution network pipelines replacement & Reroute).	₹ 0.5 Mio.	₹ 1.53 Mio./ Yr. YoY. <ul style="list-style-type: none"> Distribution network losses are arrested by replacement of pipeline on bridge and Dry air pressure optimization by installation of control valve from 6.2 to 5.5 Kg/Cm². 	4 Months
Cooling Tower Fan Direct Drive.	₹ 1.0 Mio.	₹ 0.34 Mio./Yr. YoY. <ul style="list-style-type: none"> Two Nos. Cooling Towers Fans are replaced from Gear box driven type to Direct driven type .So, Power rating decreased from 12 KW To 9.3 KW . 	3.5 Years.
Switching over from Liquid Nitrogen outsourcing to Own Nitrogen generation (PSA Type)	₹ 2.0 Mio.	₹ 7.2 Mio./Yr. YoY. 85% Of Total Nitrogen requirement is catered by own generation.	3.3 Months
Cooling water Pump No.4 Internal coating.	₹ 0.003 Mio.	₹ 0.4 Mio./Yr. YoY. Electrical savings of 559705 KWH annually.	1 Month
05	₹ 4.203 Mio.	₹ 13.15 Mio./Year	4 Months

Innovative Project

Chilled Water Distribution Network Optimization



- The Chilled Water Supply & Return pipelines from Central Energies to User Plants have very long route of **220 Meters**.
- The shortest route of major user plant is identified, by which **90 Meters** length of supply & return lines is reduced.
- Also many bends/ Up- Down elevations are eliminated by New route.
- Investment : ₹ **5.27 Mio.** Savings : ₹ **5.35 Mio./Year** Payback: **0.98 Yr.**



Chilled Water Pressure Optimization

- After reduction in distribution of Route, the revised Pumping Head is reduced from **50 Mtr.** To **40 Mtr.**
- To cater this requirement, new **Design Envelope type Pump** is installed for new duty point.
- This pump has inbuilt VFD, Sensor less Control technology & preprogrammed **ALGORITHMS** to operate the pump with highest efficiency.
- Investment : ₹ **1.05 Mio.** Savings : ₹ **2.35 Mio./Year** Payback: **5.5 Months.**



Utilization Of Renewable Energy Sources



Year	Technology	Type Of Energy	Onsite / Off Site	Installed Capacity	Generation Million KWH	% Of Overall Electrical Energy
2018-19	Windmill	Electrical	Off Site	2.1 MW	4.29	20.4%
2019-20	Windmill	Electrical	Off Site	2.1 MW	4.65	21.5%
2020-21	Windmill	Electrical	Off Site	2.1 MW	4.22	21.5%
2021-22	Roof Top Solar Power	Electrical	Onsite	999 KW	1.4 (Proposed)	28.0%



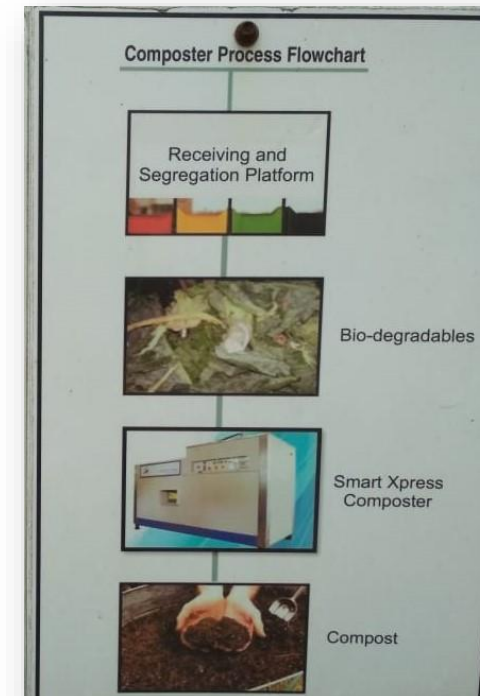
Utilization Of Renewable Energy Sources



Waste Utilization and Management

- Installation of inhouse machine to convert food waste into compost manure.
- Waste send for Co processing in Cement manufacturing industries.
- Plastic waste disposal directly to recycler (MOEF Approved).

Sr. No	Waste Description			Opening Stock	Quantity Generated	Total Quantity	Disposal Quantity	Closing stock	Mode of disposal
	Type of Waste	Waste Category	Unit						
1	Used Oil	5.1	MT	0	0	0	0	0	" As & When generates" Collection,Storage, Transpotation and Disposal by reuse after in plant & machinery as lubricant or sell it to authorized re-refiners/recycler
2	Sludge and filter contaminated with Oil	3.3	MT	0	0	0	0	0	Collection,Storage, Transpotation and Disposal at common incineration through BEIL/SEPLL.
3	Solid waste from surface penetration for painting	21.1	MT	0	0	0	0	0	Collection, storage within factory premises and transportation, and disposal at common TSDF of BEIL / SEPLL
4	Waste from containment / clean-up of spills.	28.1	MT	0	0	0	0	0	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL /Co-processing at cement industry OR GPCB approved co-processing / pre-processing site include waste insulation & lining material as & when generates.
	Process / Distillation residue		MT	0.186	59.514	59.7	59.7	0	
	Pharma powder waste		MT	0	0	0	0	0	
	Cotton Waste		MT	0.483	11.899	12.382	11.11	1.272	
	Used PPE		MT	2.402	7.27	9.672	7.275	2.397	
	Waste insulation and lining material		MT	1.065	13.245	14.31	14.2	0.11	
	Broken glass		MT	0.028	0.271	0.299	0.151	0.148	
Con. Aqueous Effluent	MT	0	324.849	324.849	323.105	1.744	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL /Co-processing at cement industry OR GPCB approved co-processing / pre-processing site as & when generates.		
5	Offspecification Material	28.4	MT	1.592	2.376	3.968	3.22	0.748	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL /Co-processing at cement industry OR GPCB approved co-processing / pre-processing site as & when generates.
	Carbon Wastes	28.3	MT	0	19.611	19.611	18.12	1.491	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL /Co-processing at cement industry OR GPCB approved approved co-processing / pre-processing site
6	Waste / Rejected pharmaceutical powder, Date expired, discarded & Off-Specification drugs/medicines	28.5	MT	1.046	152.032	153.078	152.99	0.088	Date expired products " As & When generates":Disposal at common Incineration through BEIL/SEPLL/Co-processing at cement industry OR GPCB approved approved co-processing / pre-processing site.
7	Spent Solvent	28.6	MT	0.369	181.21	181.579	181.5	0.079	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL /Co-processing at cement industry OR GPCB approved approved co-processing / pre-processing site OR Sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste after making MoU.
8	Discarded empty containers	33.1	MT	0.219	67.909	68.128	67.586	0.542	Collection,Storage, Transpotation and Disposal sell to authorized facility/unit after decontamination and inspection by AEPS. " As & When generates" Collection,Storage, Transpotation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility/recycler or send back to supplier. " As & When generates" Collection,Storage, Transpotation and Disposal by reuse after in-house decontamination or send it to authorized decontamination facility/recycler or send back to supplier.
	Discarded empty containers (Glass Bottles)		MT	0.36	7.323	7.683	7.538	0.145	
	Liners		MT	5.953	23.184	29.137	24.59	4.547	
	Foils (PVC & Aluminium)		MT	1.91	177.898	179.808	179.553	0.255	
9	Air (gas) cleaning residue (molecular sieves of Nitrogen plant)	35.1	MT	0	0	0	0	0	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL
10	ETP sludge	35.3	MT	0.635	463.17	463.805	463.76	0.045	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL OR co-processing at RSPL-Panoli.
11	Waste residue (resin) from ion exchange process in water purification.	35.2	MT	0	0	0	0	0	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL/SEPLL
12	Other Waste (Gypsum Cementing Sheet)	S8	MT	0	20.84	20.84	20.84	0	Collection,Storage, Transpotation and Disposal at common TSDF of BEIL



Waste Utilization and Management

Year	Name Of Waste Fuel	Qty. used MT/Year	Heat Value Million K Cal/Year
2018-19	Waste Heat Flue Gases from Gas Engine	36600	329400
2019-20	Waste Heat Flue Gases from Gas Engine	29646	266814
2020-21	Waste Heat Flue Gases from Gas Engine	36600	329400

- Installation of WHRB 0.5 tph x 2 Nos. for using heat from flue gases leaving from gas engine.
- Installation Of VAM 125 TR for recovering heat from jacket water of Gas Engine.
- Installation of 2 Nos. Heat Recovery System in Oil free Screw Air Compressors to preheat boiler feed water.
- Installation of Flash vessel & PHE to recover heat from blowdown water.
- Condensing Economizer.
- Bunker wash exhaust.



Air Compressors' Heat Of Compression is being utilized for pre heat of feed water to produce steam.

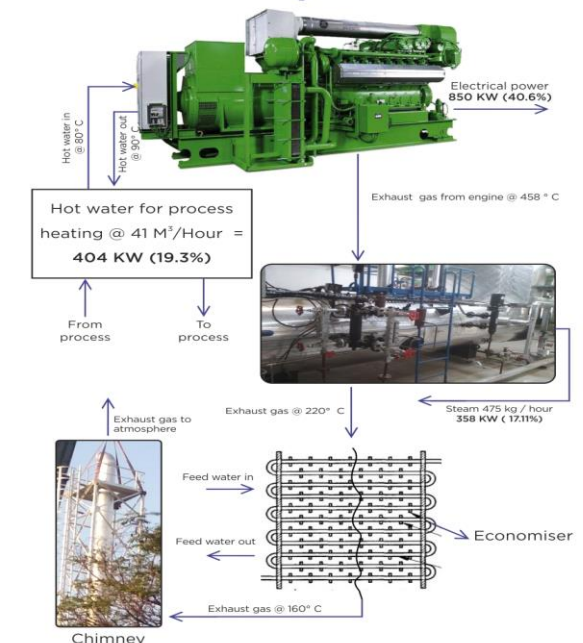


Condensing Economizer Recovering Thermal Energy from Flue gases



SECOND COGENERATION ZENTIVA

Natural gas (input energy 2092 KW)



- objective :**
- Installed capacity enhanced to mitigate back up power short fall.
 - Project budget 747 KE
 - Total equipments 20 Nos.
 - Major Suppliers /Vendors 7 Nos.
 - Project execution duration 6 Months
 - CO₂ Emission reduction ~ 3600 Tons YoY

GHG Inventorisation

2020		
Scope 1	7061	t CO2e
Scope 2	12537	t CO2e
Scope 3	8225	t CO2e
Total	27823	t CO2e

Deforestation

- We are planning to plant a more than million trees (5 yrs plan) with the support of forest department and district officers. Once govt allot land, we will start tree plantation gradually.
- ZENTIVA Group running **PLANETZ** Initiative to become Carbon Neutral Co. by 2030.
- Zentiva Czech Republic is a proud member of the **Circular waste management**, to promote **Reuse > Recycle**.
- Zentiva Czech Republic is using **100% renewable energies**.

Renewable Energy

- Own Windmill of 2.1 MW for catering \approx 22% of total electricity requirement of site.
- Onsite Solar Power Plant 999 KW for \approx 5 % of total electricity requirement of site.

Recycling Reuse

- Rain Water harvesting at site \approx 7000 KL /Annum.
- Use of Recycled water from Waste Water Treatment plant \approx 14% of total water requirement at site. Our ETP Plant designed for ZLD for self sustenance.
- Use of Canteen Food waste for generating compost manure onsite machine.
- Waste send for Co processing in Cement manufacturing industries.

Green Supply Chain Management

Initiatives taken in Supply Chain to reduce Energy Consumption.

- For Refer containers at site, Electrical connections provided Instead of Diesel Generator used earlier.
- Finished goods shipments to South Korea & Mexico by Sea Route instead of Air Cargo used earlier.
- New practices implemented : Only FCL : Full Container Load dispatches instead of partial load container dispatches earlier.

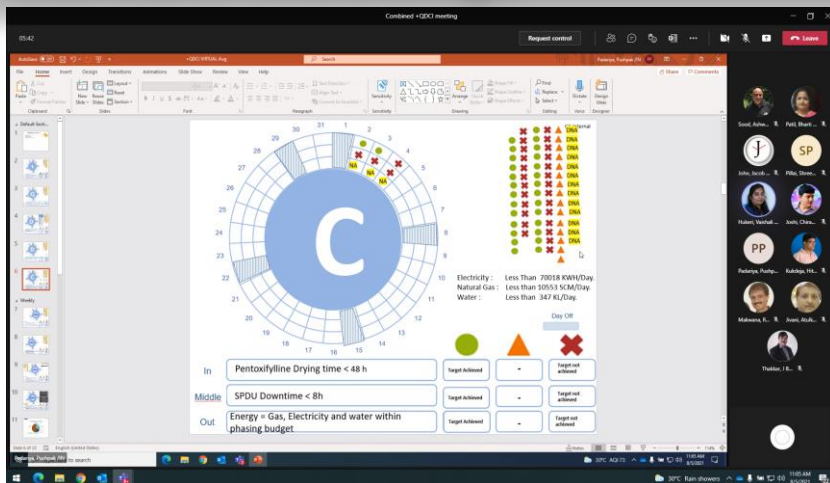
Teamwork , Employee Involvement & Monitoring

Use Of IoT



- DCS For Utilities since 2012. Monitoring, tracking of online parameters like flow, pressure, temperature, level etc.
- Controlling & Operating of utilities from DCS Control room.
- Archival and trending of historical utilities consumption pattern / Monotone.
- Smart flowmeters for all utilities at generation end and user plant ends. **110** Nos. with communication portability.
- 500+ Energy meters at equipment level, feeder level ,hooked up to DCS.
- BMS for monitoring & optimizing performance of 50+ HVAC System in Pharma.

Review Meetings



- **DAILY:** At shopfloor level +QDCI Forum for 20 Minutes for review of previous day SEC, Corrective actions.
- **DAILY:** At Site Leadership Forum +QDCI for 20 Minutes for review of previous days Primary Energies Consumption and reasons for deviations ,if any.
- **MONTHLY:** Monthly Energies Statement showing all utilities generation, usage by each plant wise. Sharing with all stakeholders.
- **MONTHLY:** Energies Circle Meeting to review KPI achieved and actions planned.

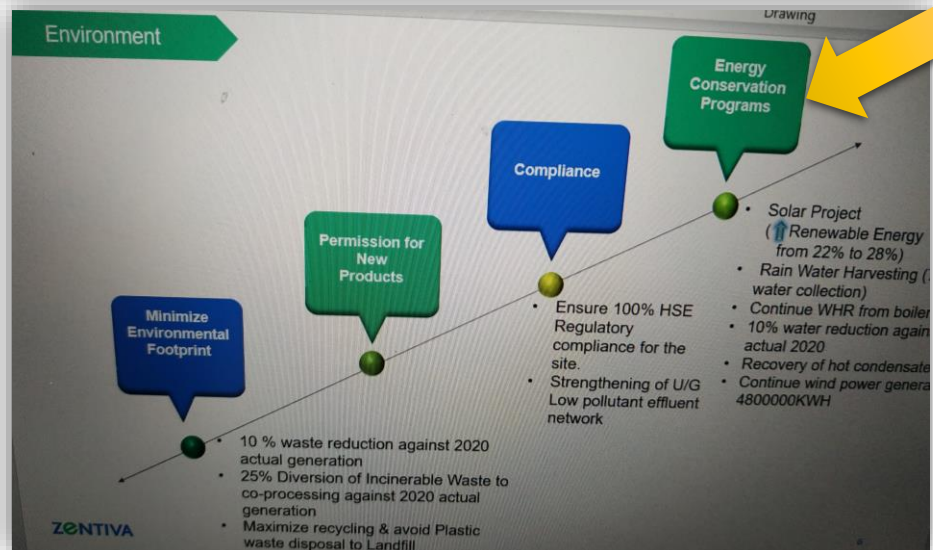
Teamwork , Employee Involvement & Monitoring

Employee Involvement



- Monthly basis “**Reward & Recognition**” for outstanding performance of employees towards Innovation, Energy Conservation initiatives etc.
- Inhouse Awareness Trainings on Energy Conservation / Efficiency Improvement / LEAN /KAIZEN 5S to employees.

Energy Budget



- **Top priority for fund allocation to Energy Conservation projects in CAPEX Budget.**
- **Annual Budget :**
 - At least 6 Month advance preparation starts for coming year Energies Budget.
 - It starts with all energies users’ production plan & Energies requirements submittal.
 - Based on Energies requirements, costing and budgeting at site level prepared.
 - In a year , 3 times review (LE0, LE1,LE2) of energies budget and tracking each month for precise mapping.
- **Periodical Tracking of output /deliverables from Investment done for Energies conservation initiatives/projects.**

Recognitions

International



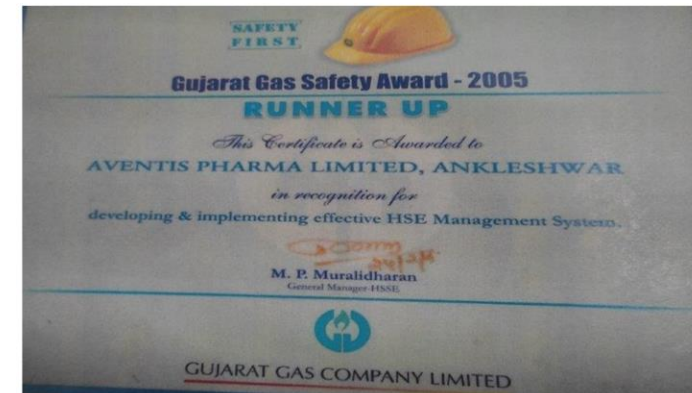
Site had won “**Climate Change Award 2009**” for outstanding performance on Energy Conservation among all 45+ Sanofi sites across the Globe.

National



Second prize winner of “**Lal Bahadur Shastri – CII National Awards 2000**” for Energy Conservation.

Regional



- Winner of “**Gujarat Gas Safety Award**” as a Best Consumer practices in the region, among 500+ Consumers. Two times in 2005 & 2008
- Also **Best Boiler User Award** at State level



CSR Initiatives:

We **CARE** We are **RESPONSIBLE**

- We are very cautious about wellbeing of our employees, surroundings, and society, where we live. We realized the need of strengthening Health Infrastructure during COVID and hence,
 - Donated 6 Nos. New **Ventilators** @ Jayaben Modi Hospital, Ankleshwar.
 - Donated Two Nos. **Onsite Oxygen generation plants** One @ Healing Touch Hospital Bharuch & One @ Orange Hospital, Ankleshwar.
- For wellbeing of our employees, Contractors & their families, we had organized **Vaccination camps** at our site, till all are vaccinated.
- Joy Of giving. Sharing is Caring.





Thank You