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Make it
better together

Energy Management Initiatives

Sai Life Sciences Ltd, Bidar, Karnataka.

- Lead Presenter : Mr. Surya Prakash (Corporate- Engineering)
- Team Member : Mr. Venu Gopal (Energy Manager-Process Engineering)

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better together

Sai Life Sciences delivers advanced Discovery, Contract Development and Manufacturing Solutions, through a broad suite of expert capabilities across the molecular lifecycle.

Having headquarter in Hyderabad, our R&D and manufacturing facilities are built to global standards and cater to international clients. New facilities are planned for future and existing ones are expanding with state-of-the-art infrastructure.

2000+

EMPLOYEES

Strong pool of scientific talent consists of

700+	500+	300+
R&D	MANUFACTURING	QUALITY

Current facilities

Biology, Cambridge (USA)

Process R&D, Manchester

R&D, Hyderabad

Manufacturing, Bidar

R&T, Hyderabad

Biology Lab, Boston

Contd....

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Current facilities

Additional Clean Room Facility, Bidar

Biology Lab, Hyderabad

Upcoming facilities

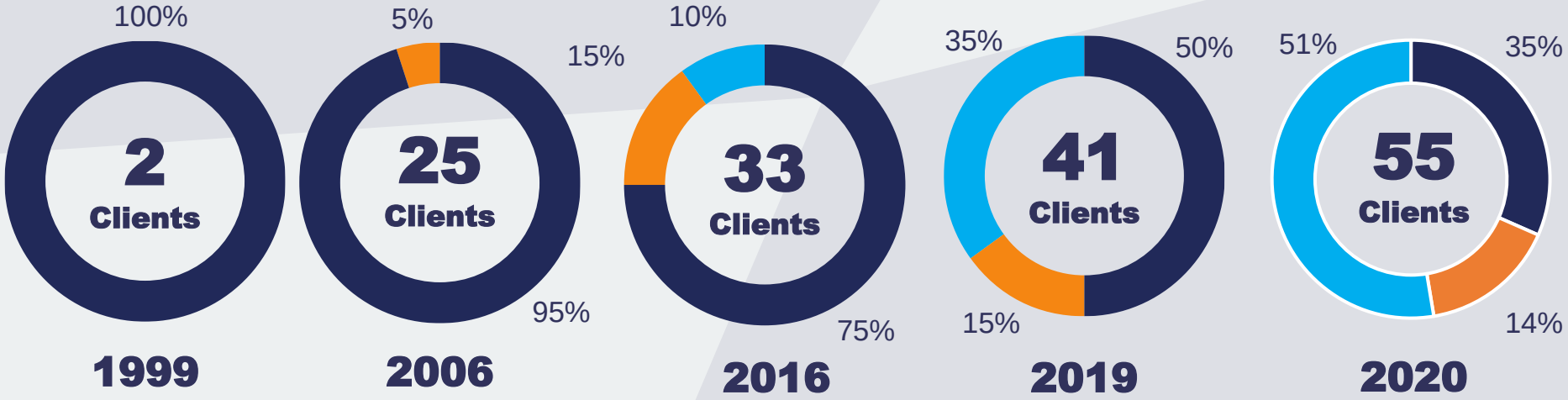
High Potency Facility, Bidar

Additional Manufacturing Facility (200 KL), Bidar

Amidites block, Bidar

Discovery Expansion at R&T Centre, Hyderabad

MOLECULAR LIFE CYCLE SERVICES



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Impact of Covid-19

Impact on annual production performance

- Due to adequate care, no impact on production compared to FY20
  (16% increased FG production compared to FY20)

Impact on Specific energy consumption (SEC)

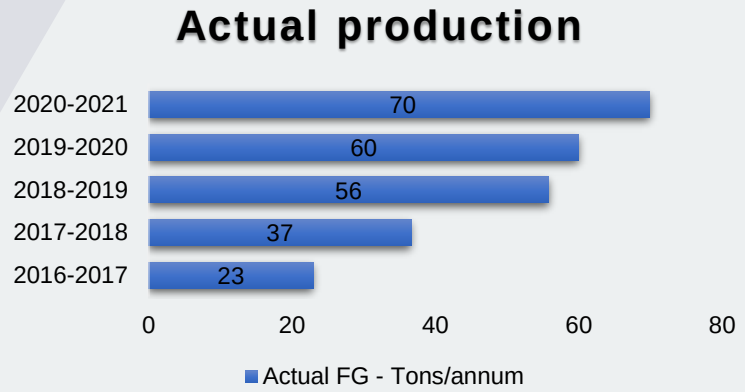
- Due to adequate care, no impact on SEC compared to FY20
  (19% reduced SEC w.r.t FG production compared to FY20)

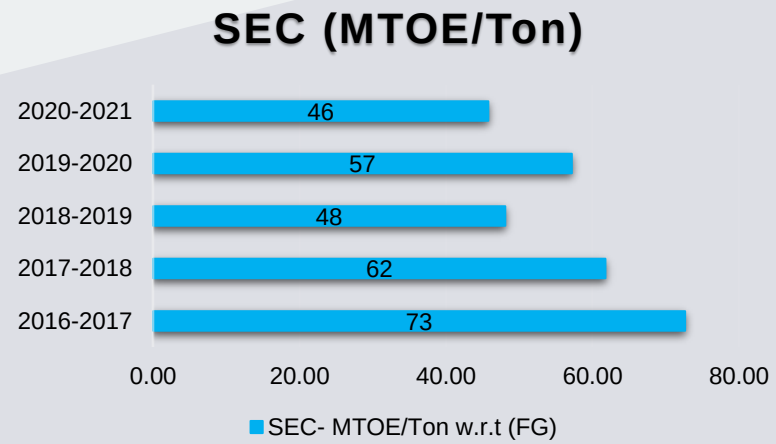
Measures taken by the plant / unit to address the challenges

a) Initiatives undertaken to improve energy performance of Utility areas
b) Energy efficiency improvements undertaken
c) Initiatives undertaken to improve capacity utilization

Impact on COVID 19 on Energy Efficiency

a) Drop in the productivity against the FY21 projections.
b) Impact on the energy conservation projects implementation due to travel restriction by technology providers.
c) Logistics & delivery of material got impacted due to travel restrictions





Unit IV

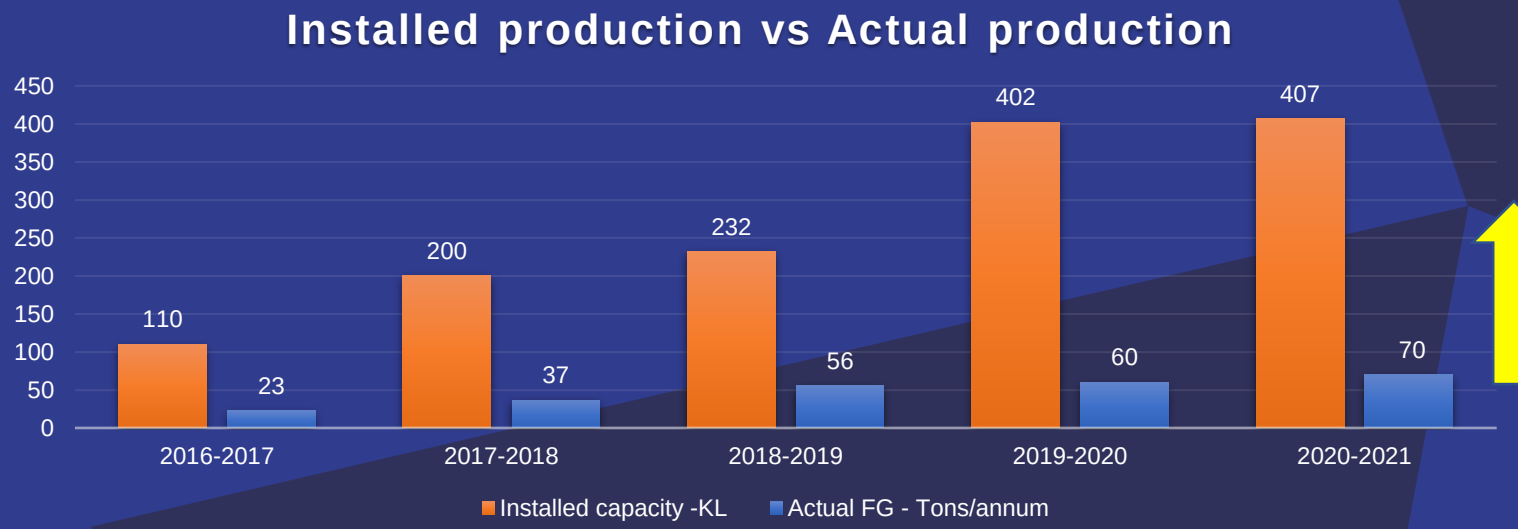
1.Installed Capacity Vs Actual Production Vs Energy

Production Overview

FY 2017 to FY 2021

3.7 times – Installed capacity

3.0 times –FG production



FY :2020 to FY2021

Nominal hike in installed capacity (1.2%)

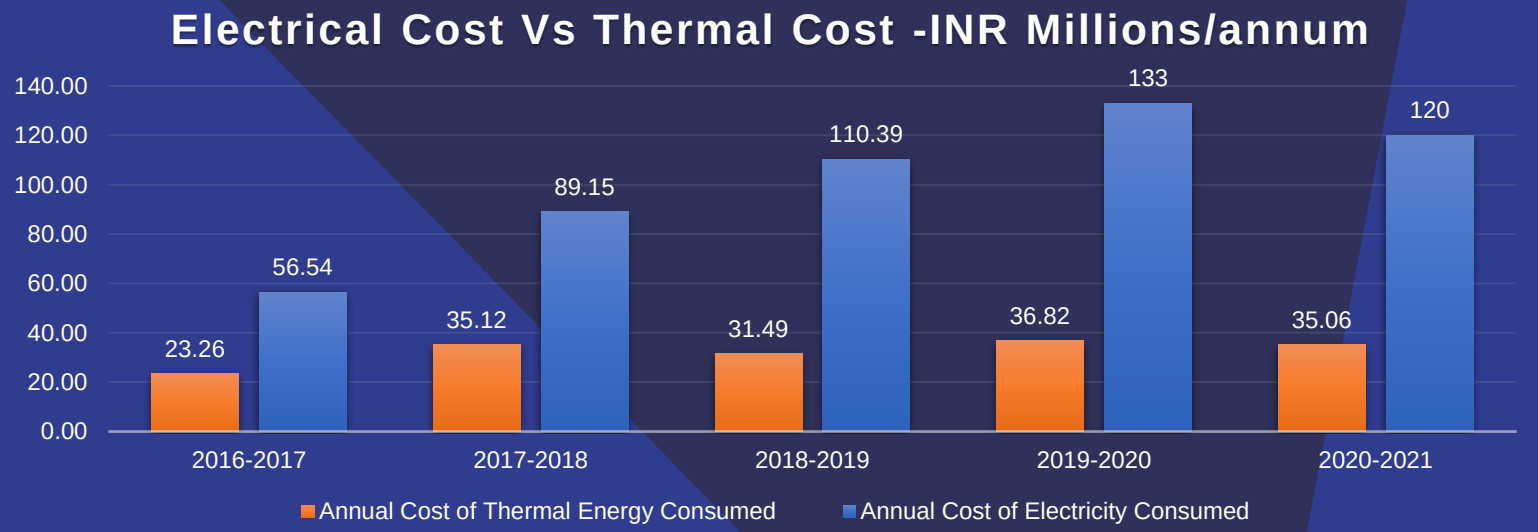
1.16 times –FG production (16%)

Energy Cost Overview

FY 2017 to FY2021

1.5 times (Thermal)

2.1 times (Electrical)



FY 2020 to FY2021

10% drop in Thermal

5% drop in Electrical

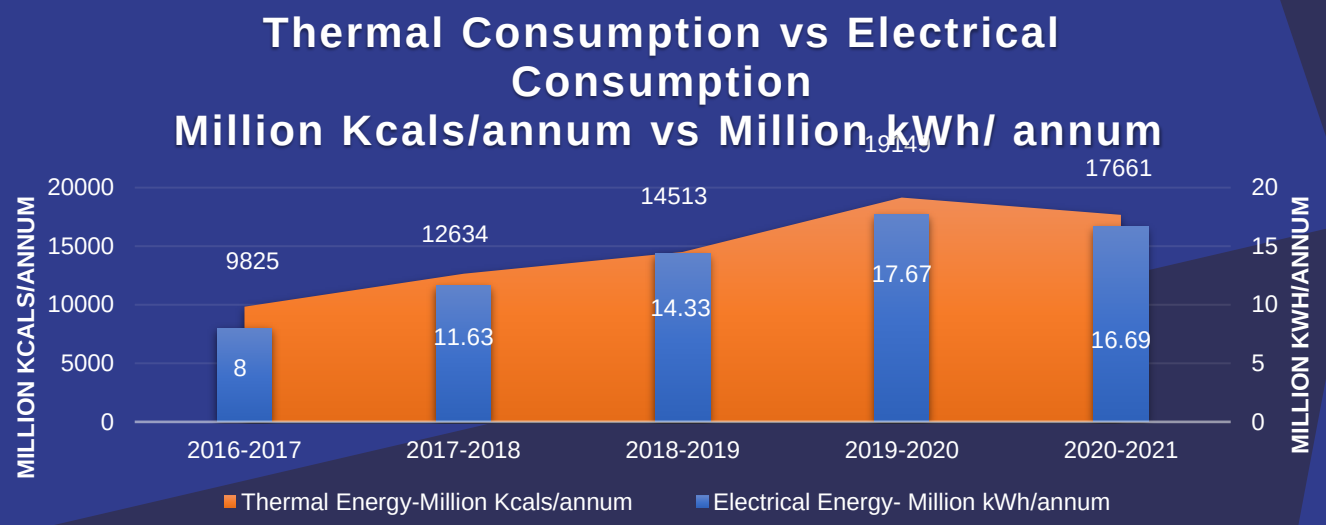
Unit IV

1.1 Energy Consumption Vs SEC-Thermal & Electrical

Energy Consumption Overview

FY2017 to FY2021

1.79 times (Thermal)
2.00 times (Electrical)



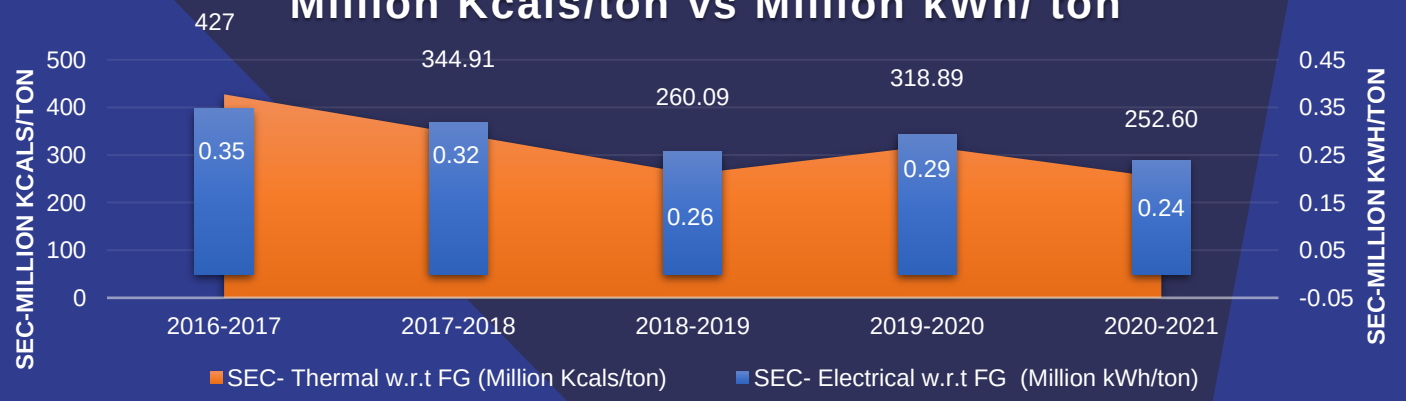
FY2020 to FY2021

7.7% drop in Thermal
5.5% drop in Electrical

SEC w.r.t FG Overview

FY2017 to FY2021

40.8 % (Thermal-SEC)
31.4 % (Electrical-SEC)



FY2020 to FY2021

20% drop in Thermal-SEC
17% drop in Electrical-SEC

Production

3.0 times(204%) –FG production

FY2020 to FY2021

16% hike in FG production

Unit IV

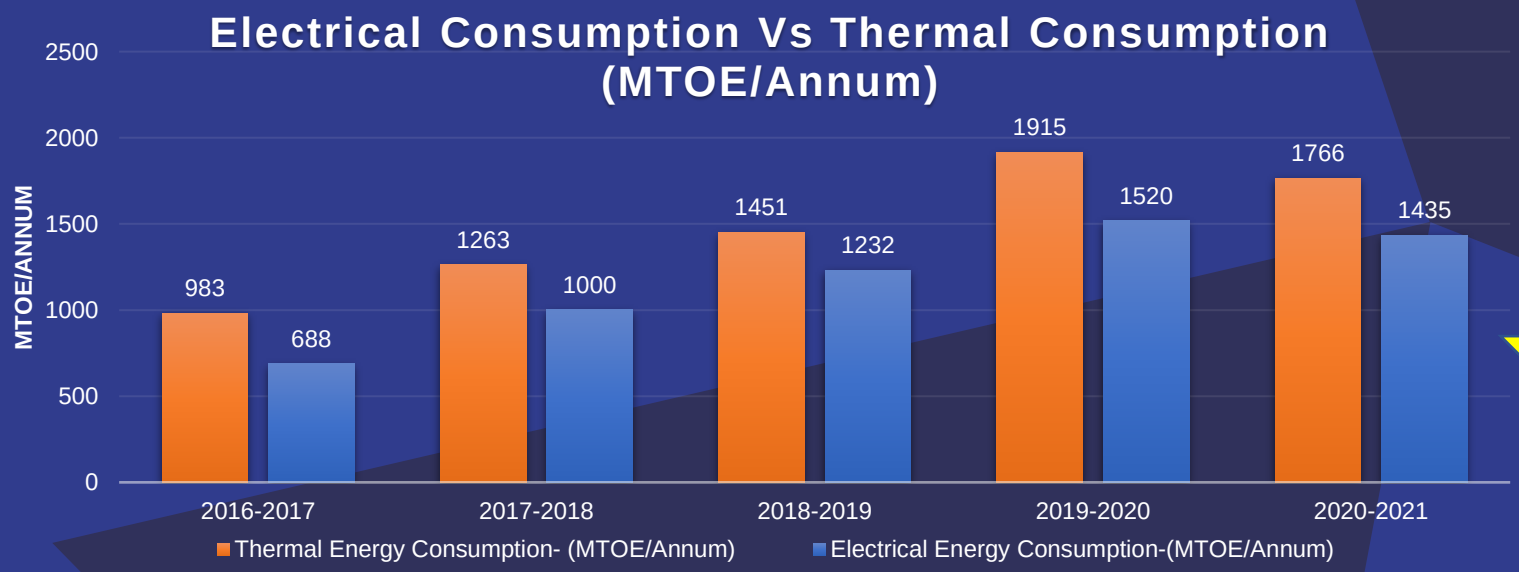
1.2 Energy Consumption & SEC variations w.r.t MTOE

Energy Consumption Overview

FY2017 to FY2021

1.79 times (Thermal)

2.08 times (Electrical)



FY2020 to FY2021

7.7% drop in Thermal

5.5% drop in Electrical

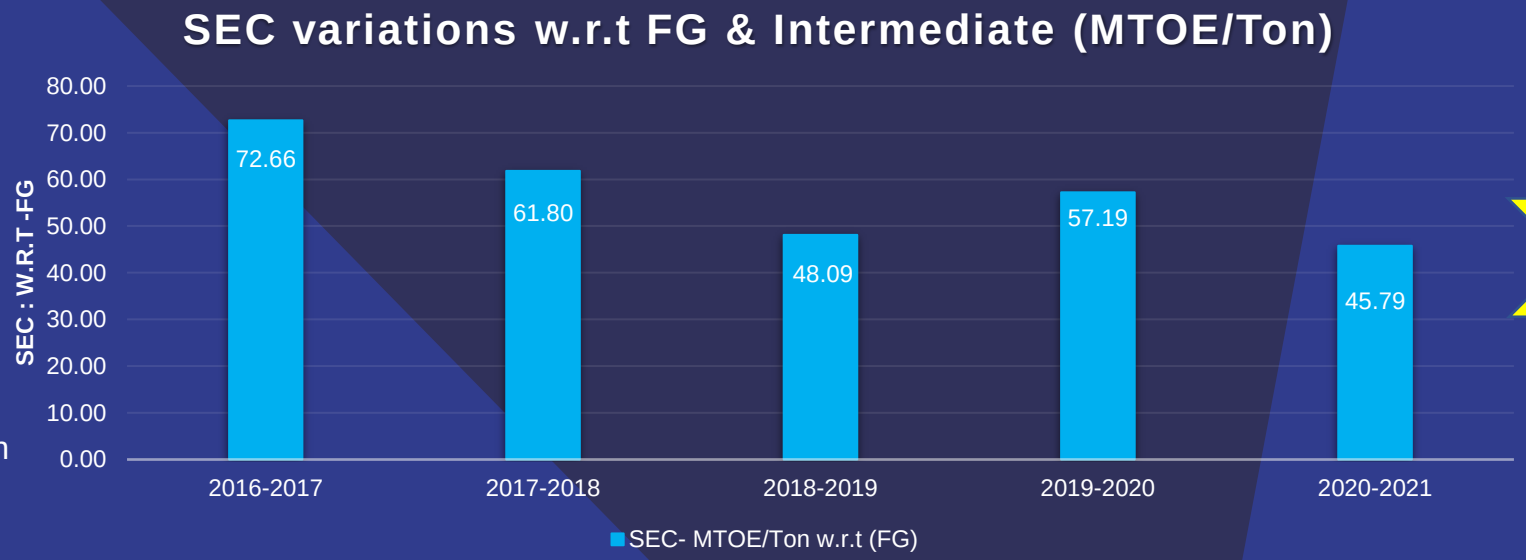
SEC Variations

FY2017 to FY2021

36.9 % w.r.t FG

FY2017 to FY2021

3.0 times (204%) –FG production



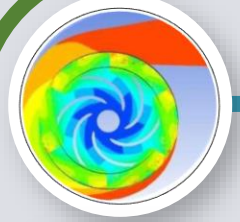
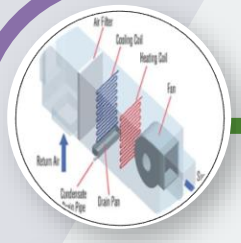
FY2020 to FY2021

19% drop w.r.t FG

FY2020 to FY2021

16% hike in FG production

2. List of Major Encon projects planned for FY22

	Centralization Pumps (SF2D) Optimization	Utility Integration of +5 chiller with variable primary	AHU optimization by EC-Fan plus	Replacement with Energy Efficient pump	Replacement with Energy Efficient Bio-ETP blower
					
Status	Aug-2021 Under Progress	June-2021 Completed	Nov-2021 Under progress	Nov-2021 Under progress	Dec-2021 Under progress
Savings	0.174 Million kWh/annum	0.106 Millions kWh/annum	0.05 Millions kWh/annum	0.564 Millions kWh/annum	0.101 Millions kWh/annum
Investment	Rs. 0.55 Million	Rs.0.79 Million	Rs.0.59 Million	Rs.9.14 Million	Rs.2.2 Million

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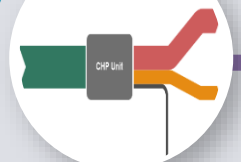
2.1 List of Major Encon projects planned for FY22

	Centralization of Air comp	Boiler Efficiency Improvement (By GCV, O2, PPPU)	Micro Turbine	Total Projects 21 Nos Planned
Status	Jan-2022 Under progress	Dec-2021 Under Implementation	Jan-2022 Under progress	FY22
Savings	0.235 Million kWh/annum	495 Tons/annum Coal	0.165 Millions kWh/annum	1.99 Millions kWh/annum & Coal 495 tons/annum
Investment	Rs. 6.00 Million	Rs.2.14 Million	Rs.3.50 Million	Rs.35.54 Million



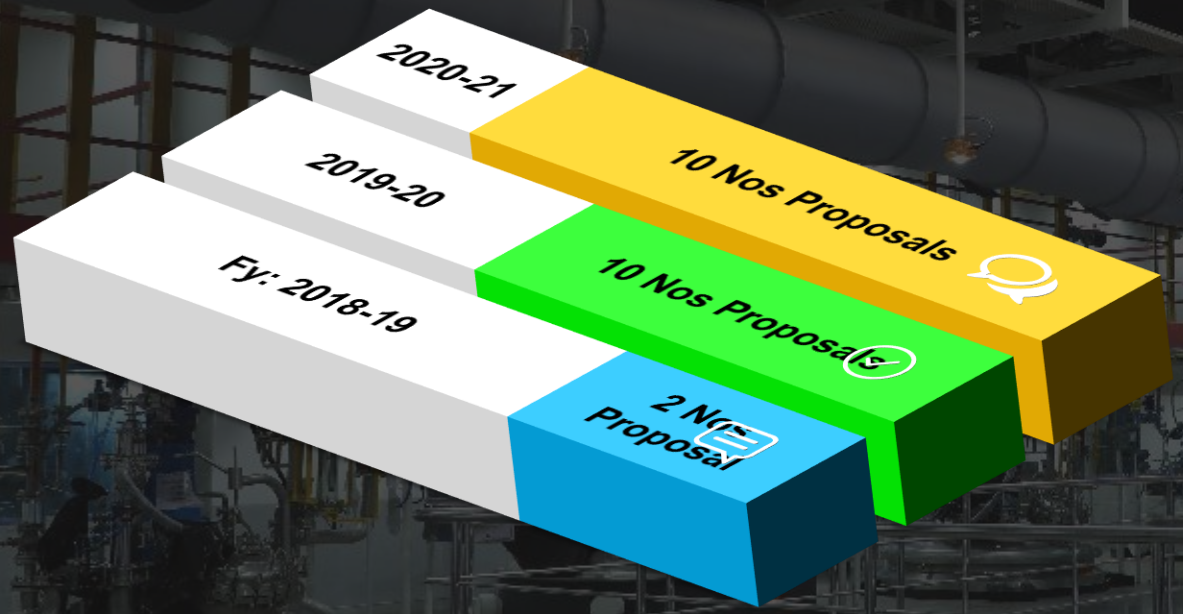
Out of 21 nos
4 Nos – Completed (INR 2.9 M)
2 Nos - Under implementation (INR 2.2 M)
15 Nos - To initiate (INR 11.2 M)

Expected saving potential: INR 16.33 Millions/annum

Unit IV

3. Last Three Years Projects

Last three years projects



2020

Investment: 2.39 Rs. Million
Savings: 9.64 Rs. Million
Initiated ISO 50001: 2018 – Jan-2021

2019

Investment: : 0.44 Rs. Million
Savings: 3.03 Rs. Million
Based on CII energy audit conducted : Dec 2018

2018

Investment: 30.2 Rs. Million**
Savings: 4.12 Rs. Million

Note: ** Major investment is conversion of 5TPH manual feed boiler to 10TPH FBC boiler conversion. (SFR improved from 4.2 to 5.2)

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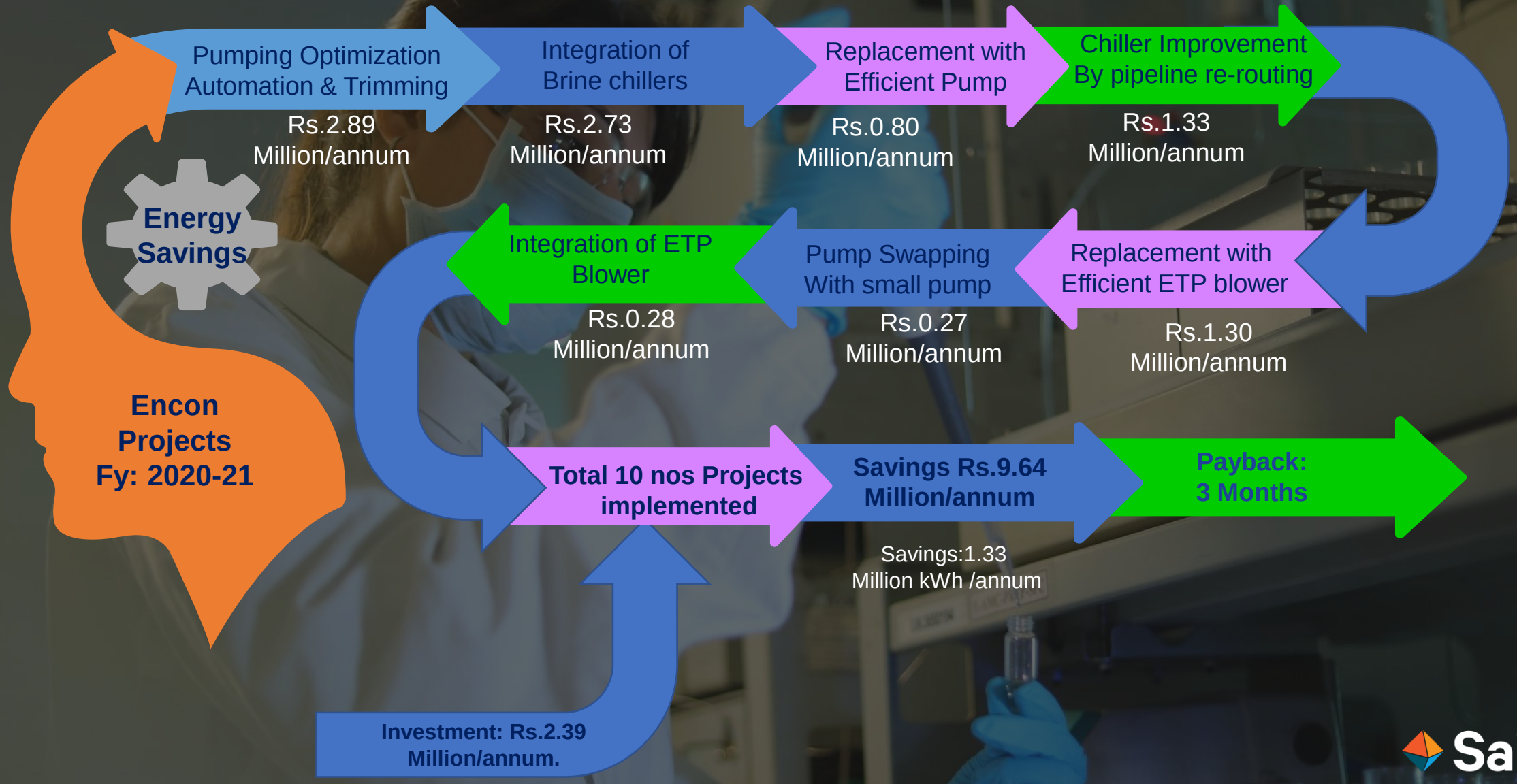
Unit IV

4. List of Encon projects implemented FY21



5. Innovative Projects Implemented

Chiller Utility integration

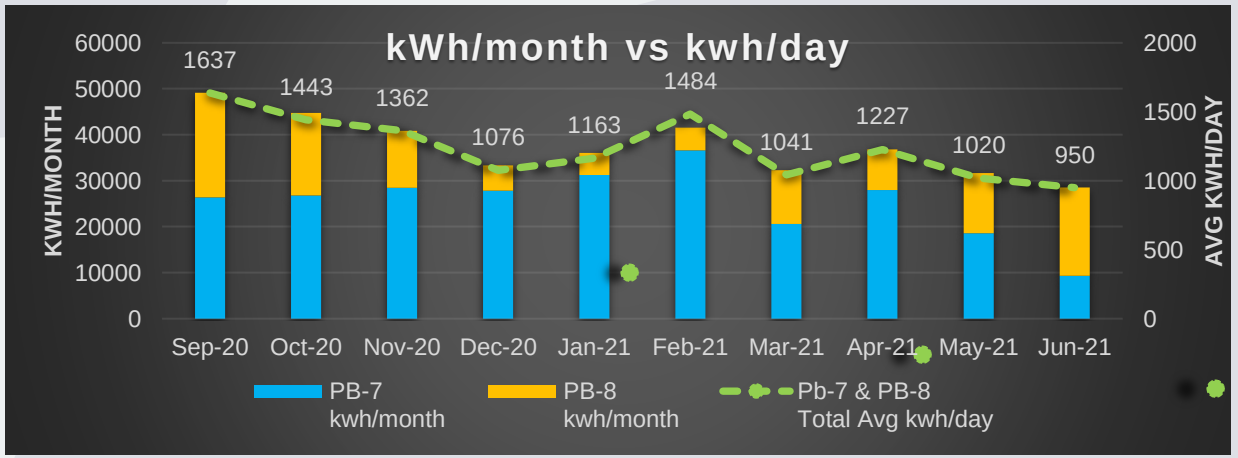
Category-C

Two individual +5 chillers are running at partial loading with high ikW/TR
Integration of two +5 chiller system -Saving : **7.98 Rs. Lakhs/annum,**

Unit IV 5.1 Innovative Project-1 (Utility Integration)

- Individual two utility +5 chiller are running for two production block facilities
- Both chillers are running at partial loading based on its occupancy
- Constant primary flow system

- Integration of both utilities
- Flow balancing carried out by converting from constant primary to variable primary with flow control logic.
- Actual saving > 300 kwh/day.



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Unit IV

6. Utilization of Renewable Energy

Renewable Energy by third party PPA

FY20:

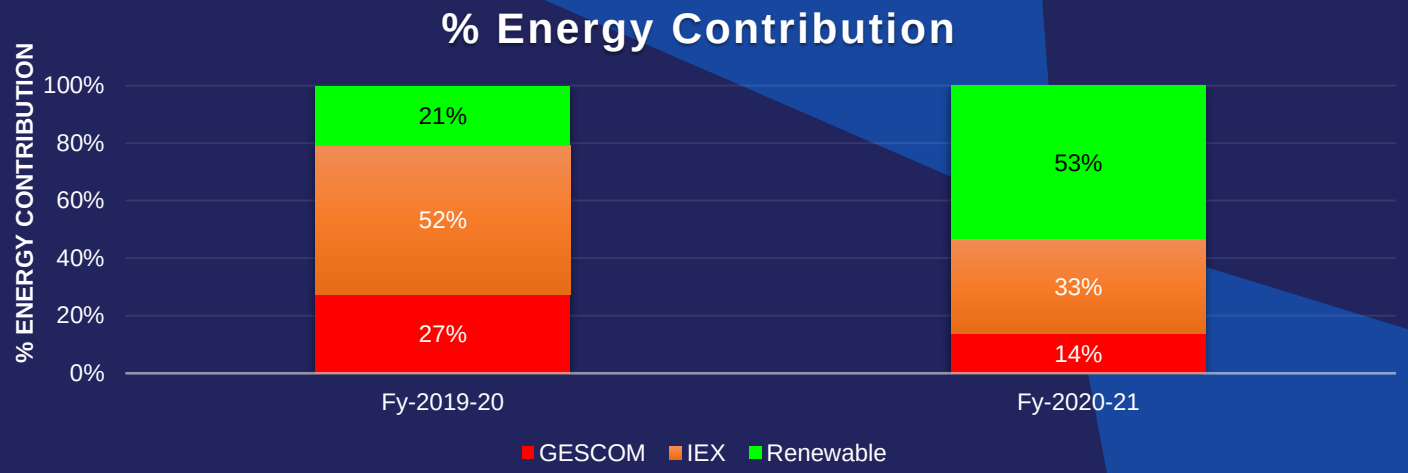
21%- Renewable

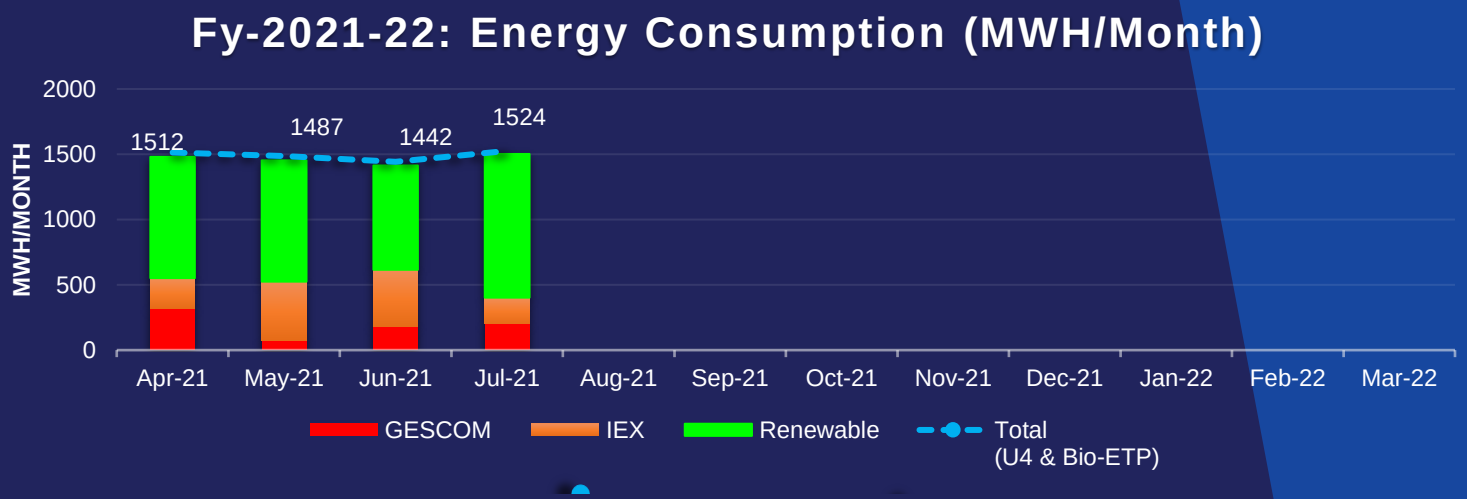
FY21:

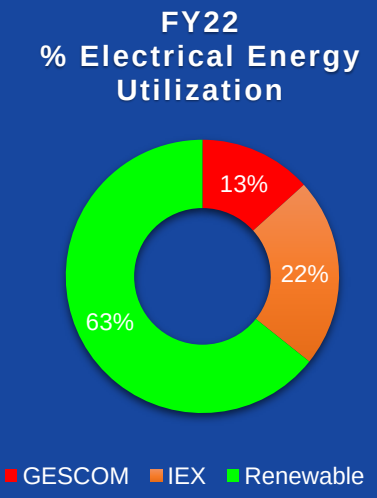
53%- Renewable

YTDJuly 22:

63% -Renewable







Unit IV

7. Waste Utilization & Management

Environmental performance

2018-2019

Land Filling 20%

Co-Processing 80%

2019-2020

Land Filling 0%

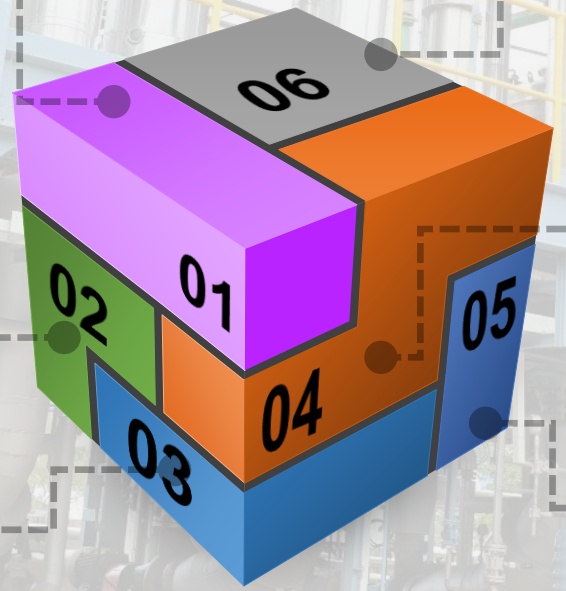
Co-Processing 100%

2020-2021

Land Filling 0%

Co-Processing 100%

Other initiatives at plant level



35% Reduction in Domestic water Compare to FY20

25% Reduction in Total water requirement by using ETP RO permeate for utility compare to FY20

28% ZLDS reduction operational cost compare to FY20.

88% Environmental Tours Compliance in FY21

0% Zero **waste to landfill** achieved from FY20

16% Reduction in ZLD Energy Consumption compare to FY20

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Unit IV

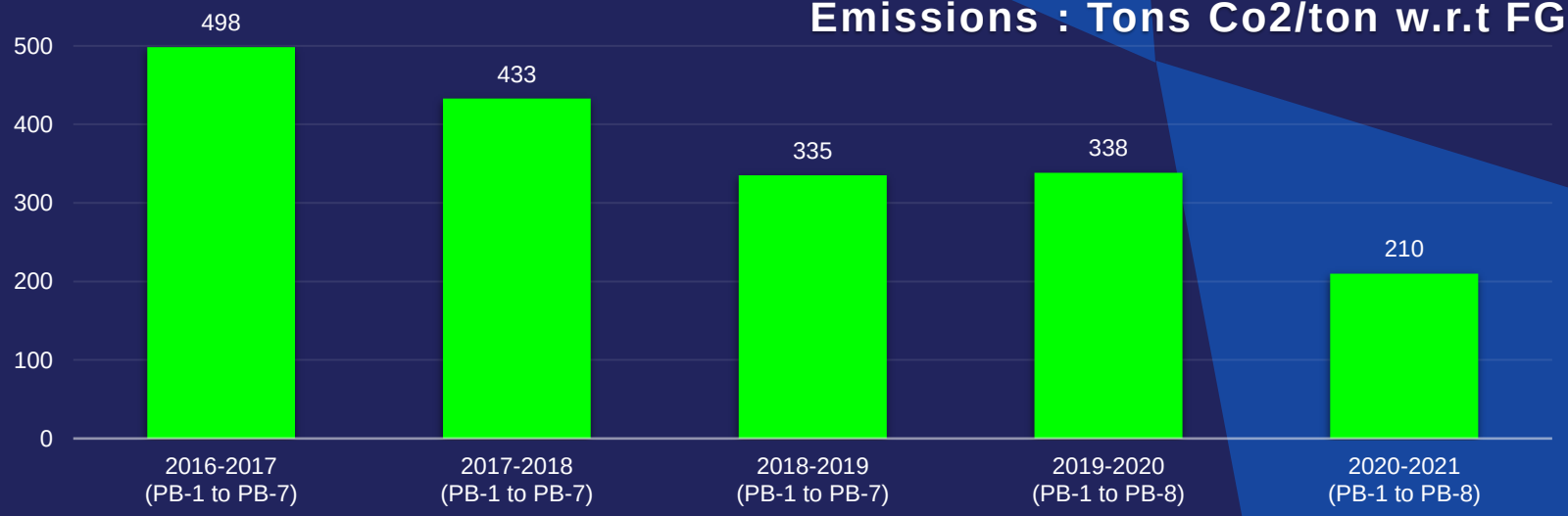
8. Co2 Emissions

At Sai Life Sciences, we are committed to playing our part towards a more sustainable future.
As a company committed to a healthier tomorrow, we understand our responsibility towards socio-economic development, climatic change mitigation, resource conservation and reduce Co2 emissions.

Sustainability @ Sai

FY :2016 to 2021

57% drop in Co2 emissions w.r.t FG



FY2020 to FY2021

37% drop in Co2 emissions w.r.t FG

CO2 emission conversion considered as below

a) Electrical-Grid : 820 kg CO2/MWh
b) HSD fuel : 2.67 kgCO2/lit
c) Coal : 1816 kgCO2/ton
d) Furnace Oil : 2.93 kgCO2/lit

Source: IPPC/ ghg protocol

Towards Environment norms (Air quality, SOx, NOx, etc.)					
Sl.No	**Type of system installed**	**Supplier**	**Investment Rs. Millions**	**Operating Cost (Rs in Millions)**	**Running Hours**
1	Bag filter & cyclone separator for 10 TPH & 5TPH boiler	Thermax	2.5	0.25	8160
2	Scrubbers 11 Nos	Chemplast/N plast	2.5	0.2	7000
3	Coal Dust suppression system	SN engineering	0.45	0.1	8160
4					

Unit IV

9. Green Supply Chain Management

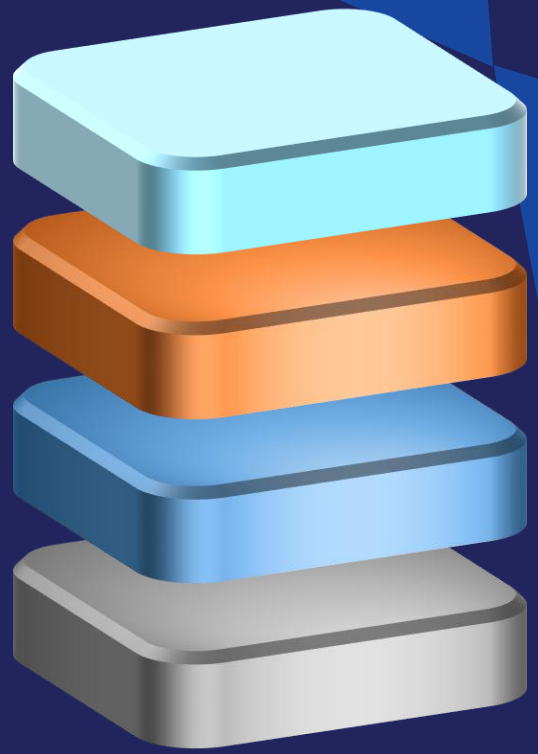
SCM @ Sai

Green SCM Policy

Sustainability is the integral part of business

Paperless office

100% RFQ, GMP pro, LMS



Use of biodegradable

For packing materials, raw materials, intermediates.

Partners segmentation

SWOT analysis for vendor identification.

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Unit IV

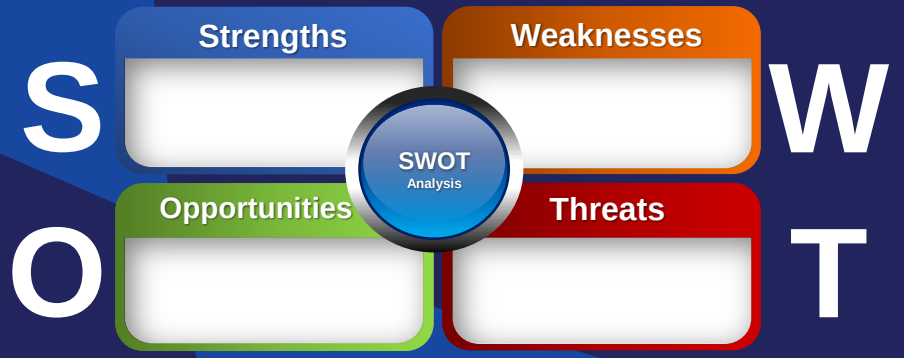
9.1 Green Supply Chain Management

SCM @ Sai

Vendor Assessment methodology:

We at Sai, perform Vendor SWOT analysis of key projects,

- Covering HSE aspects (Health, Safety and Environment)
- Technical expertise **(SOP revised-FY21),**
- Statutory & regulatory compliance,
- Infrastructure & Quality Management Systems.



- We also take help from Third party agencies for vendor assessment e.g. D&B, PWC, Meritor etc.

Sl.No	Projects Implemented	Investment Made (Rs In Million)	Benefits Achieved
1	Renewable Power Purchase agreement	52.5	INR saving 10.9 Rs. million & 7298Tons Co2 emissions reduction (53% in FY21)
2	Cargo consolidation	0.33	INR saving 1.1 Million & converted from road transport to Rail transport , thus reduced 600 KMs road transport to 47 Nos consignments

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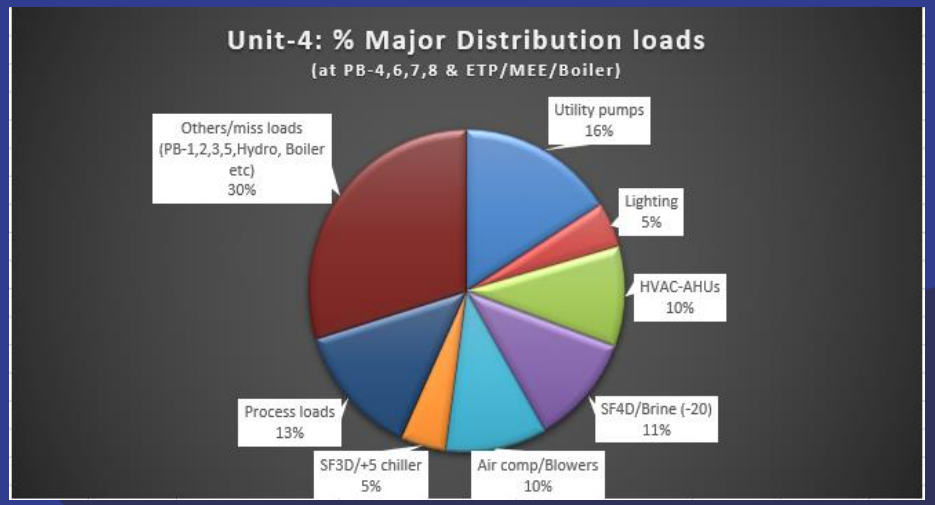
Unit IV

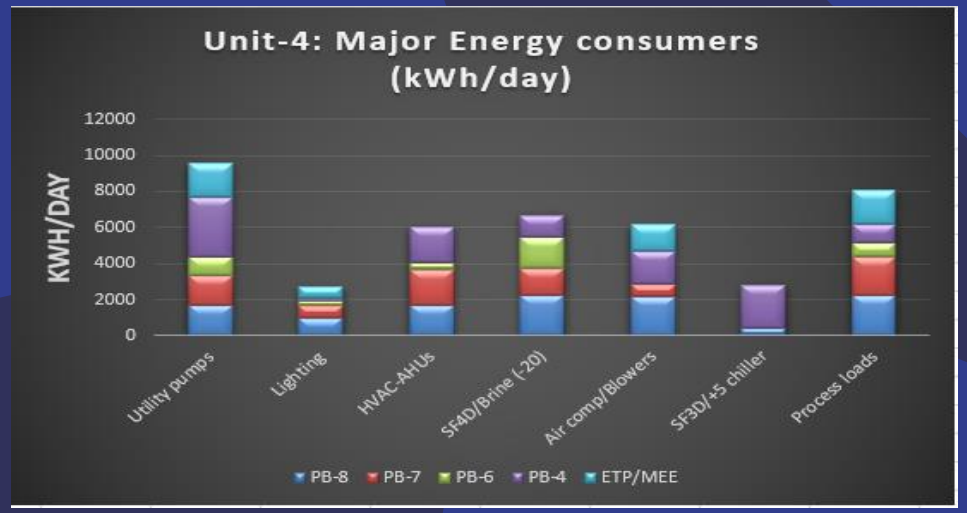
10. Energy Monitoring (Electrical vs Thermal)

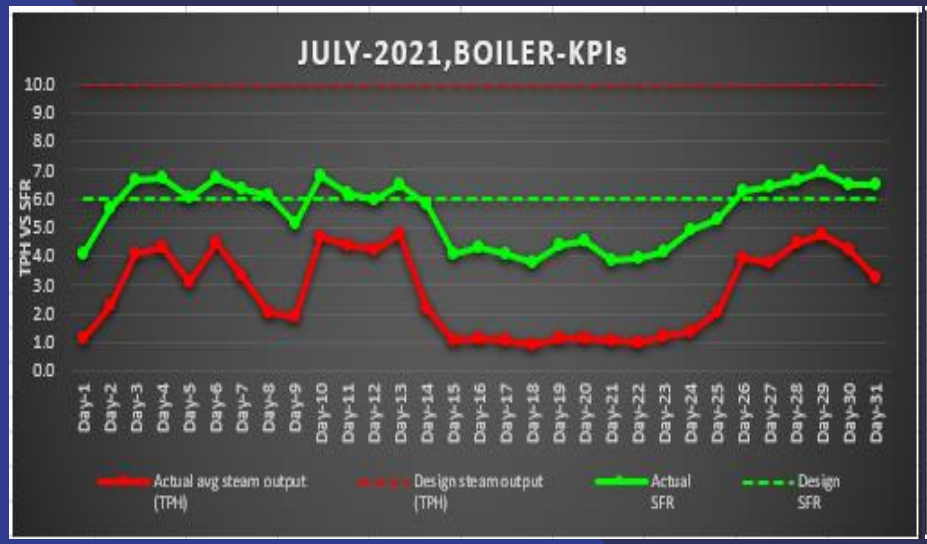
Energy Mapping

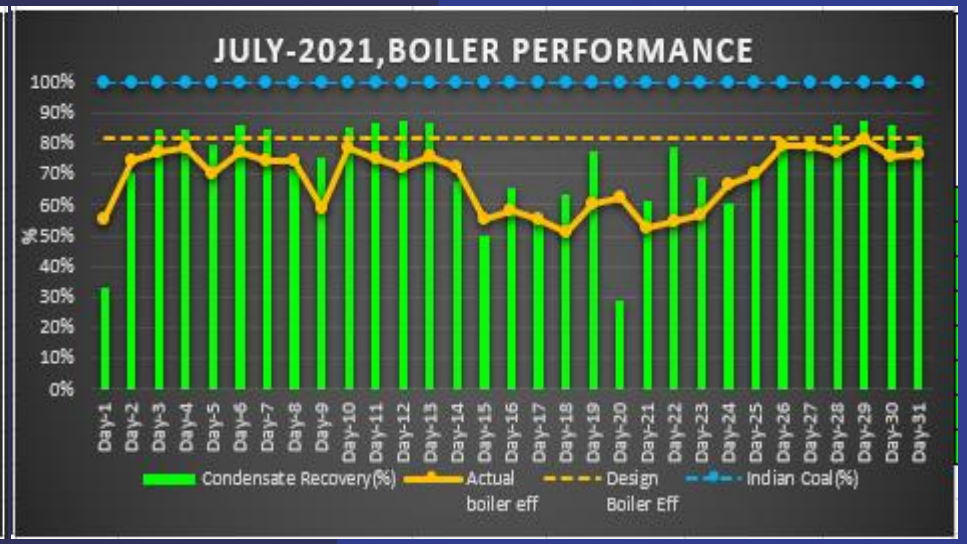
1) Unit-4 – Electrical
   a) Utility – 60%
   b) Process – 15 %
   c) Miss Energy- 25%
   (MEE/Boiler/Admin/WH)

2) Unit-4 – Thermal
   a) Process- 25%
   b) MEE Operation- 75 %









Unit IV

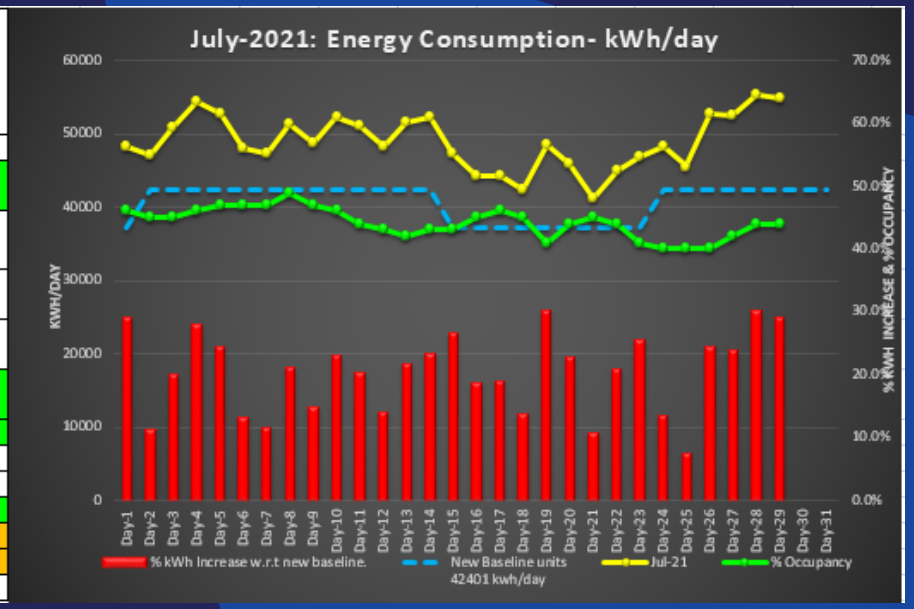
10.1 Energy Monitoring

Energy Review @ Sai

a) Daily monitoring of energy monitoring by IOT based EMS system and review w.r.t baseline of each production blocks.

b) Raising SET* action points w.r.t target date to minimize energy gap by addressing (Leakages – steam, traps, valves passing, comp air, & N2, insulation, PF, miss operations, utility requirements block wise)

Sl.No	Loads at PCC Feeder panels	Basline day kWH/Day	Previous day 28-July-2021		Yesterday 29-July-2021		Variation w.r.t Basline day & Yesterday KWH/Day	Variation w.r.t Previous day & Yesterday KWH/Day
Nos	LT feeder level	New basline	KWH/Day	% Occupy	KWH/Day	% Occupy	Difference	Difference
1	PB-1 Feeder : (PB-1+Canteen+DI water+LYO)	2600	2798	33%	2490	36%	-110	-308
2	PB-02 Feeder: (PB-2+PB-3+PB-4+PB-5+Boiler+PR&D)	3000	4268	80%	4747	75%	1747	479
3	PB-4 Feeder: (PB-2+PB-4+ Old ETP)	5000	5739	79%	5962	70%	962	223
4	PB-6 Feeder: (PB-6+ Workshop Comp+N2 Plant)	4300	5492	53%	5513	55%	1213	21
5	PB-7 Feeder (PB-7, Admin, WH & Boiler)	12899	19434	38%	18992	42%	6093	-442
6	PB-8	8000	11591	39%	11132	39%	3132	-459
7	ETP/NEW MEE	6000	5916	NA	5932	NA	-68	16
9	DG sets (+ve) or Lossess (-ve)	-500	0	0%	0	0%	500	0
9	TOTAL/day	42401	55238	44%	54768	44%	12367	-470
10	Total cumulative kwh units -Jul-2021				1418496		kwh/ Month (till date)	
11	Avg kwh units/day - Jul-2021				48914		avg kwh/day (till date)	
Note: Above areas consumption at PCC LT Feeder level, it may differ to actual consumption of blocks.								



*SET – Shop floor Effectiveness Team

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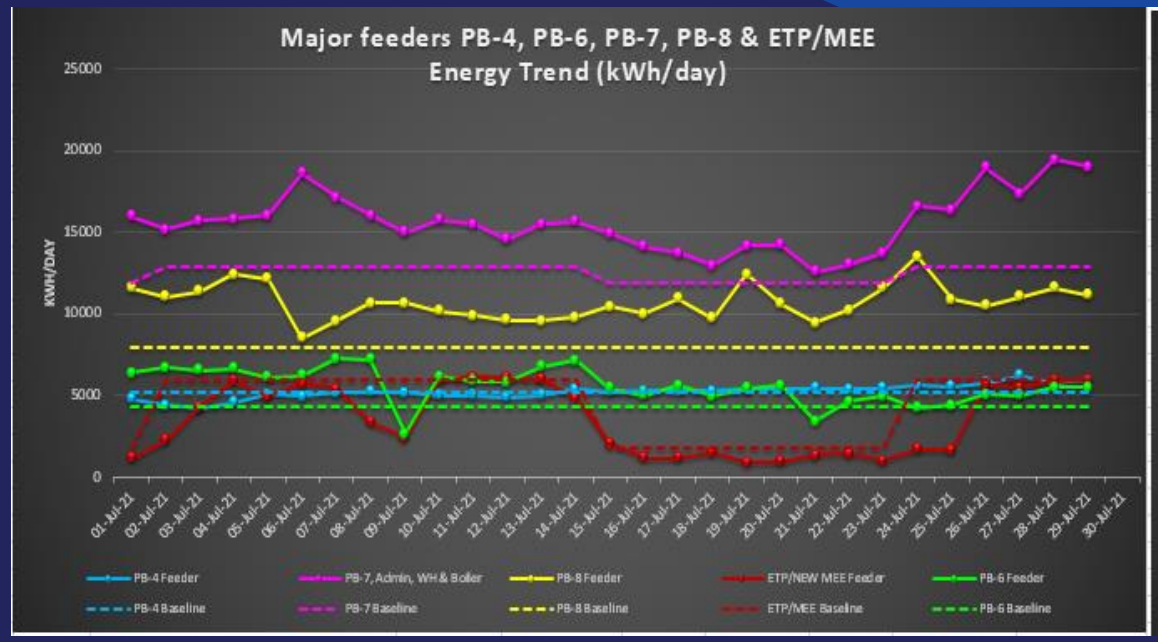
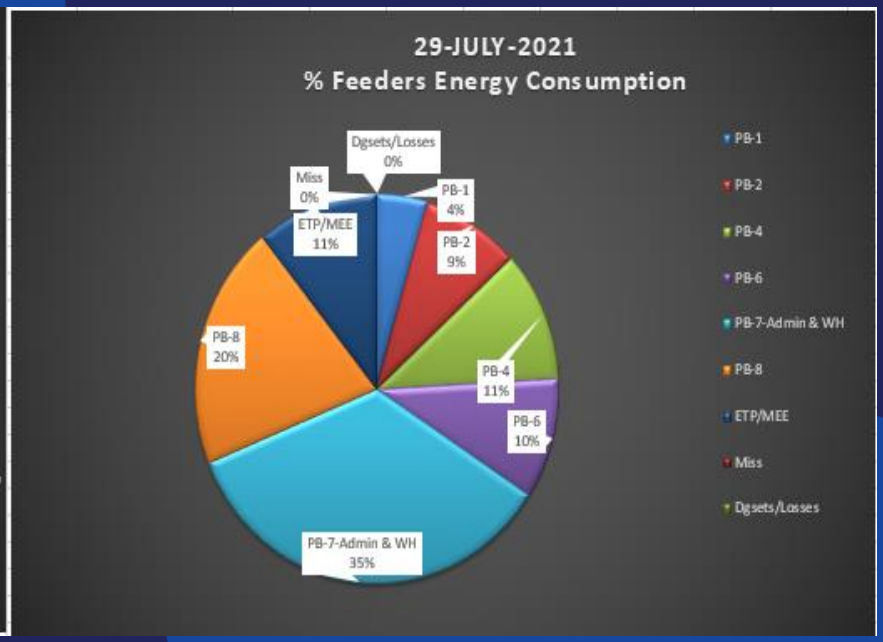
Unit IV

10.2 Energy Monitoring

Energy Review @ Sai





b) Weekly & Monthly Energy Review to discuss on capex approvals, status of energy projects

Mr. Ramesh . M	- Associate Vice President	(Site Head)
Mr. Shrinivas	- GM	(HOD-Engineering)
Mr. Kotagi.M	- DGM	(Utility-Engg)
Mr. Venkatesan	- Sr.Manager	(Electrical-Engg)
Mr. Venu Gopal	- Energy Manager	(Process Engineering)
Mr. Surya Prakash	- Associate Vice President	(Corporate- Engineering)

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10.3 Internal benchmarking & Asset SEC

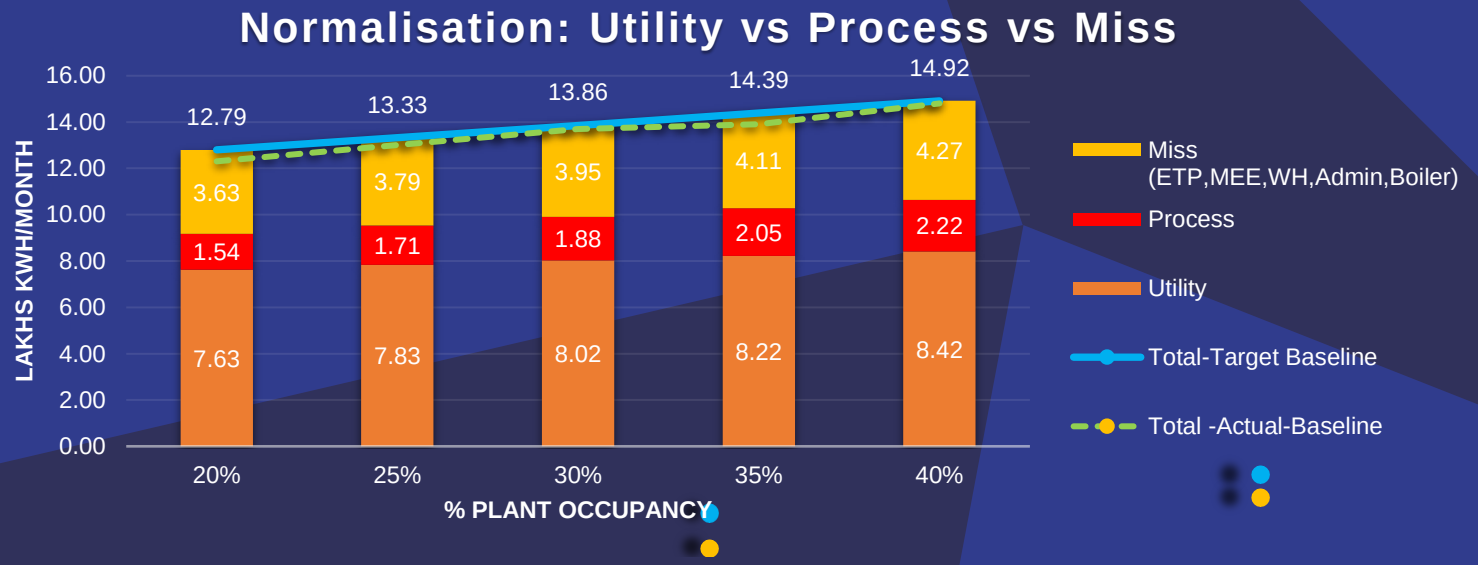
Energy Review @ Sai

Energy Benchmark

a) Utility Energy w.r.t % Occupancy
b) Process Energy w.r.t % Occupancy
c) Miss Energy w.r.t % Occupancy

Assets SEC

a) KPI Chiller – ikW/TR (<0.55 ikW/TR)
b) KPI Pumps Efficiency - % (>60%)
c) KPI Air Comp – kW/CFM (< 0.20 kW/CFM)
d) KPI Transmission losses (< 5% losses)



Date	Time		PB-4 315 TR, Daikin Chiller (DWCC05)						PB-4 28TR, Voltas Brine Chiller (DCRC07)					
DD-MMM-YY	HH:MM	kw	%load	TR	Temp °C Limit > 6 °C	ikW/TR Limit < 0.60	Condenser Approach limit < 3 °C	kw	%load	TR	Temp °C Limit < -15 °C	ikW/TR Limit < 1.50	Condenser Approach limit < 3 °C
01-Jul-21	13:00	65.4	30%	107.14	7.10	0.61	1.83	40.38	73%	22.21	-14.70	1.82	2.9
02-Jul-21	14:00	54.0	25%	107.14	7.10	0.50	1.73	37.15	68%	17.51	-13.80	2.12	1.5
03-Jul-21	12:00	59.1	27%	113.10	7.10	0.52	2.01	38.25	70%	26.91	-15.70	1.42	3.0
17-Jul-21	13:00	89.1	41%	130.95	6.80	0.68	3	38.74	70%	23.49	-14.30	1.65	0.8
18-Jul-21	12:00	79.4	36%	130.95	7.00	0.61	2.84	40.20	73%	23.49	-14.30	1.71	0.8

Date	PB-8- Utility Pumps Monitoring														
	SF1D					SF2D					SF3D				
DD/MMM/YY	Pressure KSC (2kg/cm2)	inlet/outlet (Temp)	No of pumps running	Frequency Hz	RPM	Pressure KSC (2kg/cm2)	inlet/outlet (Temp)	No of pumps running	Frequency Hz	RPM	Pressure KSC (2kg/cm2)	inlet/outlet (Temp)	No of pumps running	Frequency Hz	RPM
28-Jul-21	2.4	106.4	1	30	1482	2	18.1	1	30	2628	1.6	6.7	1	45	2812
29-Jul-21	2.1	105.2	1	30	1480	2	16.5	1	31.7	2262	1.3	7	1	45	2812
30-Jul-21	2	106	1	31.8	1480	2	17.6	1	29.8	2317	1.7	6.9	1	45	2812

Target SEC: Is challenging in CRMS due to multiple products and stages of operations

Unit IV

10.4 Sustainability Initiatives & Energy Awareness

Energy Review @ Sai

- Green Chemistry : Adoption of green chemistry principles in process development
- As per the standards GRI (Global Reporting Initiative) started publishing sustainability report .
- Green belt development program (4000 Nos Tree Plantation in Fy-2020-21)
- Energy Efficiency Awareness programs/Trainings
- Daily Shop floor Effectiveness Team (SET & AET meeting) to track Energy KPIs, Energy Conservation Action points, Kaizen Projects.

Sai Make it better together

Sustainable Development Goals

April 01, 2019

At Sai Life Sciences, we are committed to playing our part towards a more sustainable future. As a company committed to a healthier tomorrow, we understand our responsibility towards socio-economic development, climatic change mitigation and resource conservation.

Considering FY 2019 as the baseline year, by the end of FY 2022 we commit to:

- Reduce specific water consumption by 10%
- Reduce specific greenhouse gas emission by 10% and replace 10% of our overall energy requirement with renewable sources
- Reduce specific hazardous waste generation by 10% and recycle 70% of hazardous waste through co-processing and alternate reuse
- Create more opportunities for women and increase the percentage of women employees in total workforce to 12%
- Provide education and create livelihood for 1500 people from financially and socially less privileged communities through our CSR programmes
- Provide free medical screening to 10,000 people through our healthcare programmes
- Perform competency profiling and risk assessment for all critical raw material suppliers

Krishna Kanumuri
Managing Director & CEO

Sivaramakrishnan Chittor
Chief Operating Officer

Sai Make it better together

Energy Policy

March 19, 2021

Sustainability is integral to every facet of our business. Every day and in every way, we implement a sustained strategy that creates a positive impact on people and planet.

Ever mindful of social responsibilities and environmental concerns, our Energy Policy ensures reduction in energy consumption and adoption of renewable energy. Our Sustainable Development Goals include:

- Be one of the most energy efficient CDMO company in the sector
- Reduce energy consumption in plant operations, leading to lower carbon emission.
- Purchase energy at cost-effective tariffs and increase utilisation of renewable energy.
- Work towards investment in and implementation of a greater number of energy-efficient technologies.
- Set energy targets and constantly review benchmarks.
- Create an understanding of our Energy Policy among Saimers, customers and business partners.
- Adhere to statutory requirements and compliances related to energy management.

K Ranga Raju
Chairman

Krishna Kanumuri
Managing Director & CEO

Sai

Unit IV

10.5 Few Kaizen Projects

Energy Review @ Sai

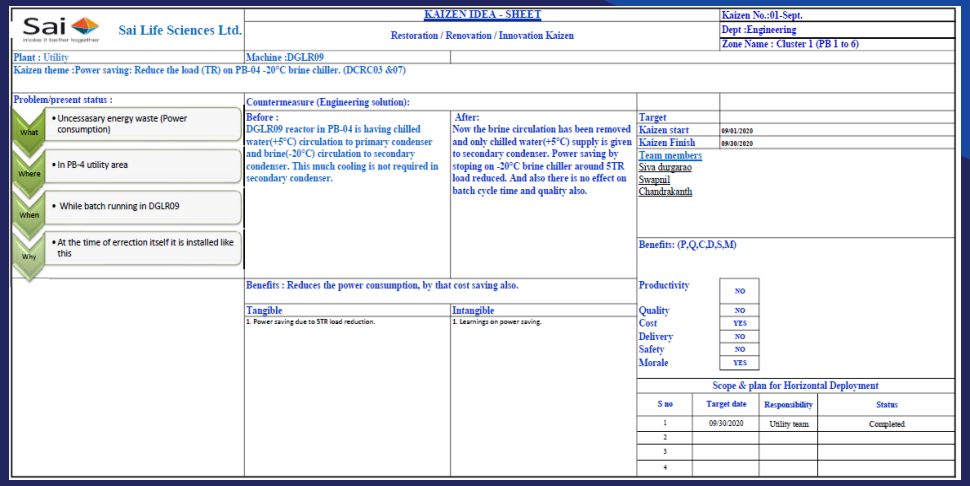
FY21:

Total Nos of Kaizen : 27 Nos

a) Completed : 19 Nos

b) Under implementation : 2 Nos

c) Under approval : 6 Nos



Sai Life Sciences Ltd.

KAIZEN IDEA - SHEET

Restoration / Renovation / Innovation Kaizen

Kaizen No.:01-Sept.
Dept :Engineering
Zone Name : Cluster 1 (PB 1 to 6)

Plant : Utility
Machine :DGLR09

Kaizen theme :Power saving: Reduce the load (TR) on PB-04 -20°C brine chiller. (DCRC03 &07)

Problem/present status :

What: • Uncessasary energy waste (Power consumption)
Where: • In PB-4 utility area
When: • While batch running in DGLR09
Why: • At the time of errection itself it is installed like this

Countermeasure (Engineering solution):

Before :
DGLR09 reactor in PB-04 is having chilled water(+5°C) circulation to primary condenser and brine(-20°C) circulation to secondary condenser. This much cooling is not required in secondary condenser.

After:
Now the brine circulation has been removed and only chilled water(+5°C) supply is given to secondary condenser. Power saving by stoping on -20°C brine chiller around 5TR load reduced. And also there is no effect on batch cycle time and quality also.

Target
Kaizen start 09/01/2020
Kaizen Finish 09/30/2020
Team members
Siva durgarao
Swapnil
Chandrakanth

Benefits: (P,Q,C,D,S,M)

Benefits : Reduces the power consumption, by that cost saving also.

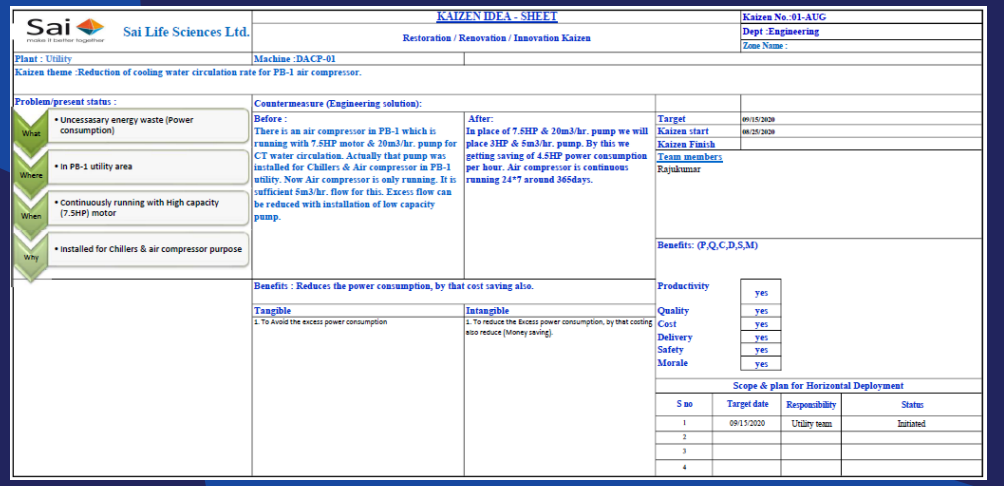
Tangible
1. Power saving due to 5TR load reduction.

Intangible
1. Learnings on power saving.

Productivity	NO
Quality	NO
Cost	YES
Delivery	NO
Safety	NO
Morale	YES

Scope & plan for Horizontal Deployment

S no	Target date	Responsibility	Status
1	09/30/2020	Utility team	Completed
2			
3			
4			



Sai Life Sciences Ltd.

KAIZEN IDEA - SHEET

Restoration / Renovation / Innovation Kaizen

Kaizen No.:01-AUG
Dept :Engineering
Zone Name :

Plant : Utility
Machine :DACP-01

Kaizen theme :Reduction of cooling water circulation rate for PB-1 air compressor.

Problem/present status :

What: • Uncessasary energy waste (Power consumption)
Where: • In PB-1 utility area
When: • Continuously running with High capacity (7.5HP) motor
Why: • Installed for Chillers & air compressor purpose

Countermeasure (Engineering solution):

Before :
There is an air compressor in PB-1 which is running with 7.5HP motor & 20m3/hr. pump for CT water circulation. Actually that pump was installed for Chillers & Air compressor in PB-1 utility. Now Air compressor is only running. It is sufficient 5m3/hr. flow for this. Excess flow can be reduced with installation of low capacity pump.

After:
In place of 7.5HP & 20m3/hr. pump we will place 3HP & 5m3/hr. pump. By this we getting saving of 4.5HP power consumption per hour. Air compressor is continuous running 24*7 around 365days.

Target 09/15/2020
Kaizen start 09/25/2020
Kaizen Finish
Team members
Rajukumar

Benefits: (P,Q,C,D,S,M)

Benefits : Reduces the power consumption, by that cost saving also.

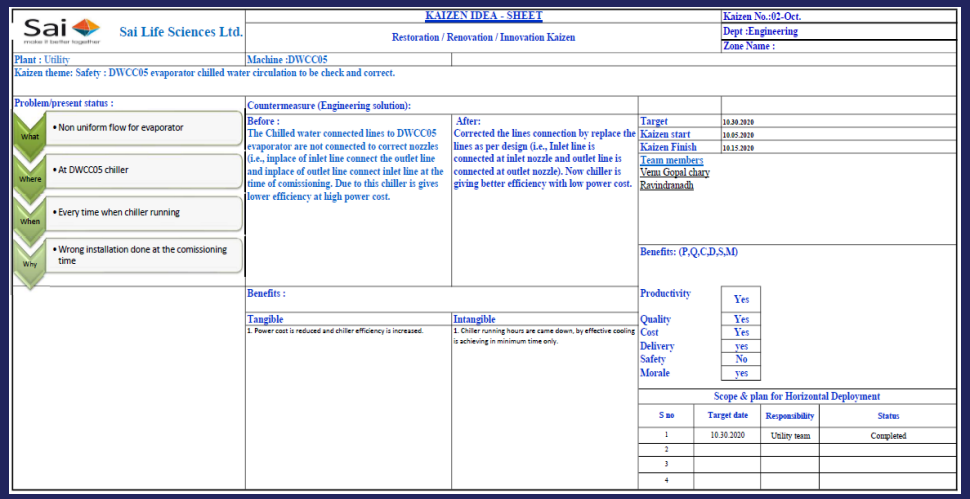
Tangible
1. To Avoid the excess power consumption

Intangible
1. To reduce the Excess power consumption, by that costing also reduce (Money saving).

Productivity	yes
Quality	yes
Cost	yes
Delivery	yes
Safety	yes
Morale	yes

Scope & plan for Horizontal Deployment

S no	Target date	Responsibility	Status
1	09/15/2020	Utility team	Initiated
2			
3			
4			



Sai Life Sciences Ltd.

KAIZEN IDEA - SHEET

Restoration / Renovation / Innovation Kaizen

Kaizen No.:02-Oct.
Dept :Engineering
Zone Name :

Plant : Utility
Machine :DWCC05

Kaizen theme: Safety : DWCC05 evaporator chilled water circulation to be check and correct.

Problem/present status :

What: • Non uniform flow for evaporator
Where: • At DWCC05 chiller
When: • Every time when chiller running
Why: • Wrong installation done at the comissioning time

Countermeasure (Engineering solution):

Before :
The Chilled water connected lines to DWCC05 evaporator are not connected to correct nozzles (i.e., inplace of inlet line connect the outlet line and inplace of outlet line connect inlet line at the time of comissioning. Due to this chiller is gives lower efficiency at high power cost.

After:
Corrected the lines connection by replace the lines as per design (i.e., Inlet line is connected at inlet nozzle and outlet line is connected at outlet nozzle). Now chiller is giving better efficiency with low power cost.

Target 10.30.2020
Kaizen start 10.05.2020
Kaizen Finish 10.15.2020
Team members
Venu Gopal chary
Ravindranadh

Benefits: (P,Q,C,D,S,M)

Benefits :

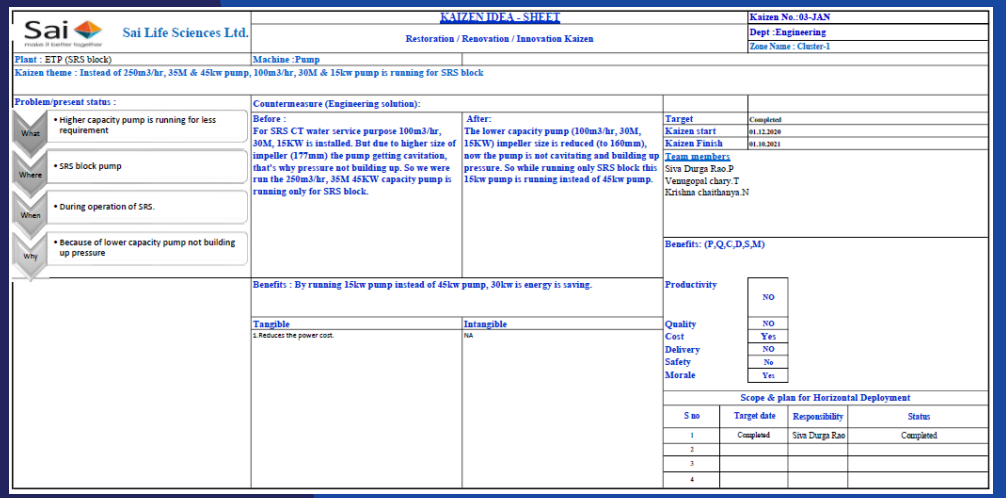
Tangible
1. Power cost is reduced and chiller efficiency is increased.

Intangible
1. Chiller running hours are came down, by effective cooling is achieving in minimum time only.

Productivity	Yes
Quality	Yes
Cost	Yes
Delivery	yes
Safety	No
Morale	yes

Scope & plan for Horizontal Deployment

S no	Target date	Responsibility	Status
1	10.30.2020	Utility team	Completed
2			
3			
4			



Sai Life Sciences Ltd.

KAIZEN IDEA - SHEET

Restoration / Renovation / Innovation Kaizen

Kaizen No.:03-JAN
Dept :Engineering
Zone Name : Cluster-1

Plant : ETP (SRS block)
Machine :Pump

Kaizen theme : Instead of 250m3/hr, 35M & 45kw pump, 100m3/hr, 30M & 15kw pump is running for SRS block

Problem/present status :

What: • Higher capacity pump is running for less requirement
Where: • SRS block pump
When: • During operation of SRS.
Why: • Because of lower capacity pump not building up pressure

Countermeasure (Engineering solution):

Before :
For SRS CT water service purpose 100m3/hr, 30M, 15KW is installed. But due to higher size of impeller (177mm) the pump getting cavitation, that's why pressure not building up. So we were run the 250m3/hr, 35M 45KW capacity pump is running only for SRS block.

After:
The lower capacity pump (100m3/hr, 30M, 15KW) impeller size is reduced (to 160mm), now the pump is not cavitating and building up pressure. So while running only SRS block this 15kw pump is running instead of 45kw pump.

Target Completed
Kaizen start 01.12.2020
Kaizen Finish 01.10.2021
Team members
Siva Durga Rao.P
Venugopal chary.T
Krishna chaithanya.N

Benefits: (P,Q,C,D,S,M)

Benefits : By running 15kw pump instead of 45kw pump, 30kw is energy is saving.

Tangible
1.Reduces the power cost.

Intangible
NA

Productivity	NO
Quality	NO
Cost	Yes
Delivery	NO
Safety	No
Morale	Yes

Scope & plan for Horizontal Deployment

S no	Target date	Responsibility	Status
1	Completed	Siva Durga Rao	Completed
2			
3			
4			

Sai

Unit IV

10.6 Energy Management Road Map

Energy Management Approach @ Sai

- Improving energy efficiency at Sai Life Group level
- Transforming the energy management to a system driven approach.
- More brainstorming on energy conservation activities.
- Enhancing investment in new energy efficient technologies.
- More involvement of Saimers in Energy Management activities.
- **Energy Policy** **: Rolled out Jan-2021**

The way forward

- **ISO 50001:2018 Energy Management System** **: Targeting Sept-2021**
- **GreenPro or IGBC rating** **: Targeting by 2022**

Sai

Unit IV

Achievements

Certification, recognition and achievements

ISO 14001 & 45001

Corporate office, R&D and Manufacturing facilities are now IMS certified

CII EHS Excellence Awards 2019

Twin win - 5 star rating in EHS excellence and runner up in Pharma category

Bronze medal

Achieved score of 48, improvement from previous year

Golden Peacock

Winner of Golden Peacock National Quality Award 2020

SCMPro forums IPLF Awards 2020

SCM shines with awards in Supply Risk & Supplier Relationship Management

CII- 21st National Energy Management Award 2020

Energy Efficient Unit-2020

CII EHS Excellence Awards 2020

5 star rating in EHS excellence in Pharma category

Golden Peacock

Winner of Golden Peacock Award - Training – 2021

Thank You

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