STTelemedia
Global Data Centres

STT GDC India

Energy and Operational Efficiency Drive

August 22, 2023

A COMPANY OF ST TELEMEDIA

PUE – Trend Last 4 Yrs.

FY	PUE Achieved	Energy KW	Cost Saving INR	Co2 Ton
2019-20	1.98 -> 1.94 =0.04	722.12	5.5 CR	**5926.17**
2020-21	1.725 -> 1.69 =0.035	575.98	4.21 CR	**4745.064**
2021-22	1.68 -> 1.66 = 0.02	889.79	6.25 CR	**6691.40**
2022-23	1.72 ->1.65= 0.069	986.5	Yet to be calculated	**8126**

3174.39 KW FY 19-Feb 23

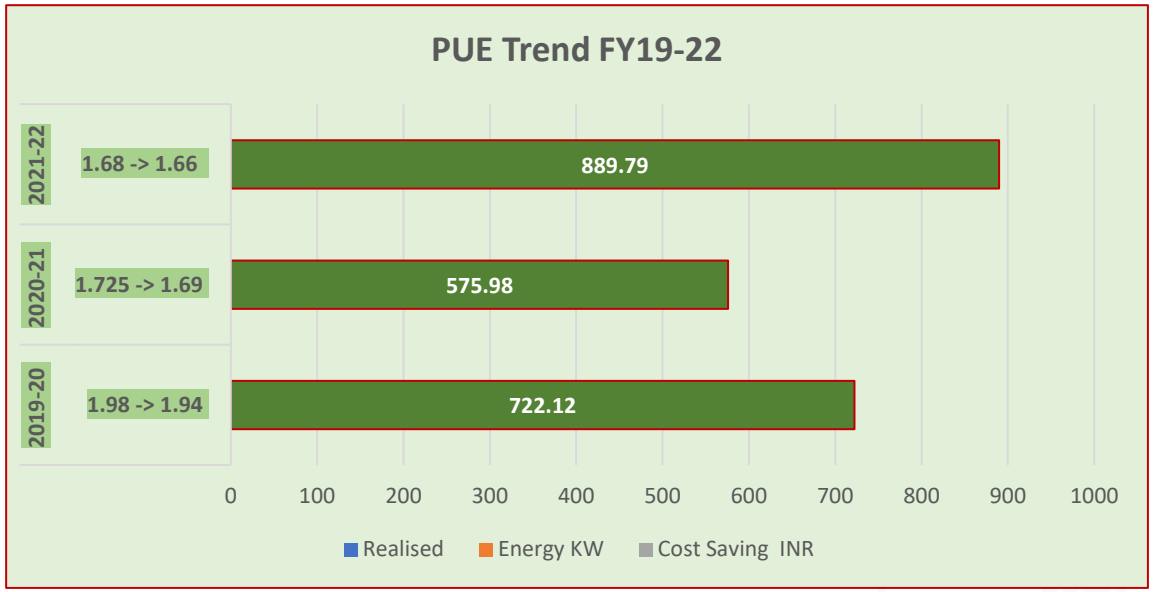
Energy Savings Opportunity

15.96 Cr FY19-Mar 22

Cost Savings

25488.63 Tons CO2 avoidance

Carbon Emission reduction



The PUE calculation includes all equipment KWH consumption including the losses.

The PUE improvement initiatives taken over the last 5 years is reflecting.

Few of those initiatives are,

- Replacement of old equipment with high efficient equipment even at lower operating load condition (part of H&H)
- Close monitoring of temperature in various parts of the facilities, balance and optimize.
- Initiative and continuous focused monitoring on leakages (CAC, HAC, False floor tiles) and arresting.
- Keeping the condenser approach as low as possible for the chillers.
- No deviation on the maintenance practices (filter cleaning, replacement, etc)
- Dedicated COE team formed to monitor and drive across PAN India.

STT GDC INDIA OPERATIONS – ENERGY EFFICIENCY AND ESG APPROACH

Datacenter Energy Efficiency improvement

ESG Measures DC Operations

- Water usage measurement
- Refringent top up
- Hazardous waste Management
- E-Waste Management
- Fuel Consumption
- PUE Monitoring

Cooling Infrastructure Energy Efficiency Strategy

Tech Refresh-Replacement:

- Condenser + ODU
- CRAC , Chillers , PAHU
- Automation of Chillers with CPM

Best Practices:

- Air balancing through CFM Grill
- Water Balancing through Chilled water Piping
- Temp control @ PAHU room
- Adequate Refrigerant level
- Cable dressing and management

Best Practice

- Qualitative Air Balancing Assessment of datacenter facility.
- Provides recommendation of best practices for efficient functioning
- CAC /HAC Deployment + Air Tightening
- Provided Blanking Panels in unused rack Space
- Concealing of Air leakage
- Replacement of Return Air Grills
- Filters replacement, Installation VAHU's

Electrical Infrastructure Energy Efficiency Strategy

- High efficiency UPS Tech refresh +Consolidation
- Continual PF improvement
- Energy Measurement points and data recording
- PUE Template standardization
- Watch on losses : TRX , UPS , Chillers
- Replacement of Conventional lights with LED lights

STT GDC India -Operational Excellence

- Launch of Mock drills Practice with Various Simulated Scenarios FY22 ~ 180 Mock drills completed
- LoL – Learning over Lunch – Specific to Site SOP's and Practicing FY22 ~ 86 LoL Completed
- Weekly Action Tracker – for the Site rounds and observations to action on proactive measures | 9213 Observations , 586 WIP |
- Established formal waste management policies and procedures for hazardous and non-hazardous wastes, General Waste , Hazardous Waste and E waste Disposal completed Value INR 14.054 Cr Benefit till end of Feb 2023
- SOP's & RCA Standardization with the Quality Improvement , Simplified Block Diagrams , Site Walk thro Postures
- PMO – Key Projects drive and timely execution
- Dynamic Risk Register (DRR) Tracker and Monthly review , Operations Comprehensive Monthly dashboard and Publish
- Standardization of Energy measurements and Calculation formalized and practiced with the Uniformity Approach
- Various PoC Set ups and evaluation at our COE Centre (UPS –Li-ON Battery)
- Introduction of C10 Battery discharge Maintenance Program Across Sites , to check the health of Battery cells
- Automation Drive – Electrical Control and Mechanical Control Systems Implementation including the Complex VSB Sites

STT GDC India ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG)

- STT GDCI and Group has Committed to be Net Carbon-Neutral by 2030
- 36% of our Electricity consumption is derived from Zero-Carbon Renewable Sources
- We are constantly updating our data Centre's with more efficient technologies and are implementing energy-saving initiatives to improve our PUE
- Women empowerment -Successful integration of women in mission critical operational roles
- Fostering a safe and diverse workplace
- 0 TRIR across our operations 3 years in a row

- STT GDC India Experience Centre @ Bangalore
- Specialized facilities designed with Simulation of DC Critical Infrastructure for the Skills developments of Students Via Practical Training
- 2 Batches ~ 120 Students Trained and certified – Placement Completed at Various mission Critical Operations role
- 3rd Batch 60 Students Program is on going

- Water Usage effectiveness (WUE) 0.55 across India
- Aiming towards zero Liquid discharge by Capturing Surface rainwater Example :160 kL roof rainwater collection sump and treatment for reuse @ Bangalore DC3
- Rainwater harvesting pits provided at the Storm water drains .Example at Bangalore DC3 42 kL Capacity
- We reduce our water consumption by installing Water-recycling technologies and using recycled water for the water-cooled chiller cooling tower purpose
- Tech refresh with zero / low Ozone depletion potential refringent (Ex. R22 gas is getting phased out)

OPERATIONAL EXCELLENCE

Consistent quality across our global portfolio

Strong global-local leadership

- Enabling market entry for our customers across our global platform
- Global strength matched by our local expertise, with accredited and qualified teams on the ground who know their home markets best

Built and operated to global standards of excellence

- Centre of Operational Excellence department to adopt best practices and communication across STT GDC platform

TIA-942 SS 564 SSAE18 ..and more

State-of-the-art, new data centres

- Purpose-built data centre designed to the highest technical specifications
- Modular approach providing customer expansion options in future

Reliability

- Robust systems and procedures in place to manage change control and incidents
- High power availability for customers' mission-critical data, providing peace of mind and reliability they need

Wide range of connectivity options

- Carrier-neutral
- Interconnection and peering fabrics
- Ready connectivity via both local and global network service providers
- Direct connectivity to Cloud Service Providers

Physical security

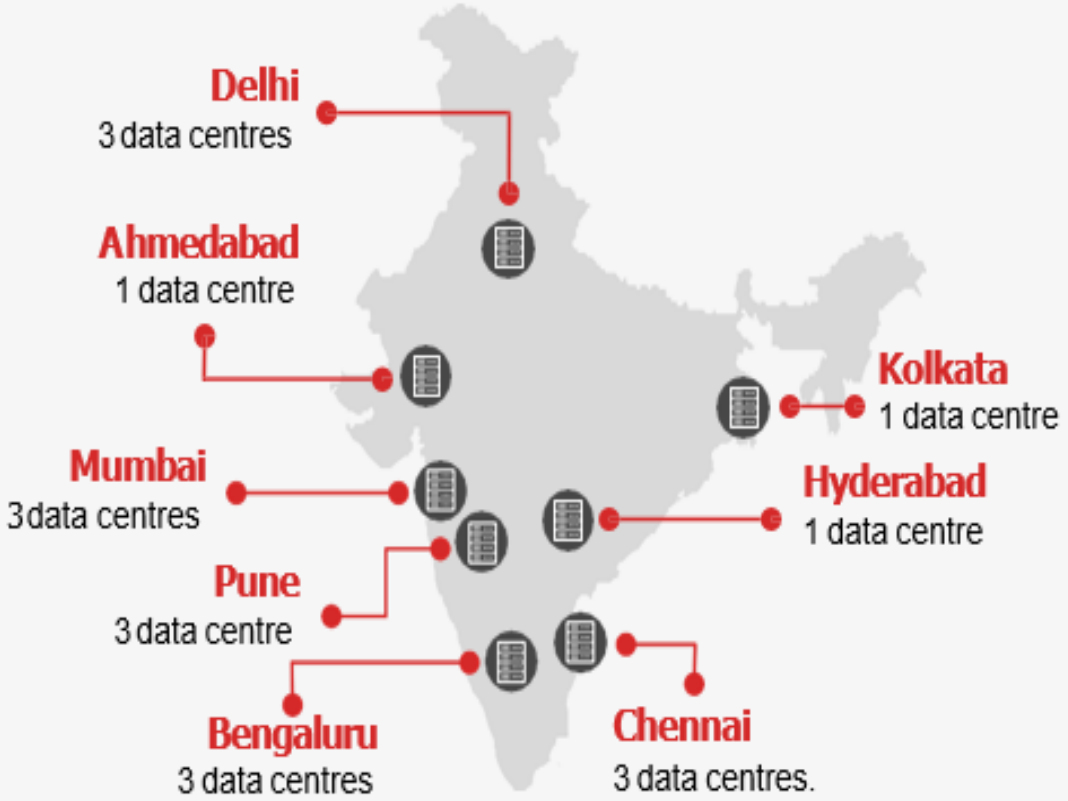
- Multi-layer security at all sites
- On-site security personnel
- Enhanced security measures
  e.g. intrusion detection, physical access controls, 24x7 CCTV monitoring

Our Corporate Factsheet

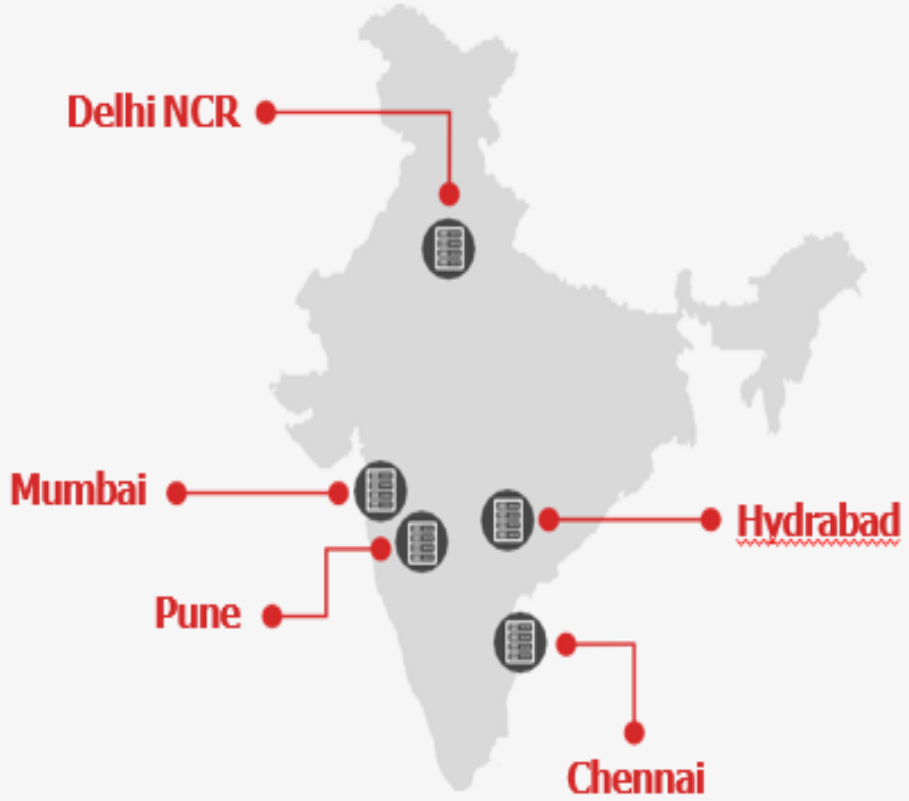
STTelemedia Global Data Centres

Operating since 2004 in India, 33% market share in India colocation market. 21 DCs live in 8 cities, 220 MW IT load projected to double in 3 years.

18 Existing DCs with 220 MW IT load



Upcoming DCs, total 2x of current IT load



STT GDC India - Pune DC1
Energy and Operational Efficiency Drive

Presented by -

Ramdas Manekar – Assistant General Manager DC Operations

STT GDC Datacenters Limited, Pune (MH).

Singapore | India | APAC

www.sttelemediagdc.com

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OUR DC OPERATIONS APPROACH

STTelemedia Global Data Centres

Consistent quality across our Data centres

People

- Dedicated ops staff with desired qualification and critical infrastructure experience
- A dedicated EHS Manager for Campus
- Organization structure and staffing plan will meet all required competencies.
- Skill development through Various drills
- Knowledge Management through Trainings (Technical, Behavioural and Soft), Seminars & factory visits.

Process

- ITIL aligned operational processes.
- Well-defined site-specific SOP/EOPs.
- Risk management, RCA, BCP processes.
- ISO 45000 framework aligned EHS processes.
- Structured 52 weeks PPM process
- Operations Governance: Weekly, Monthly and Quarterly Operations Reviews.
- Material management process aligned to customer's implementation plan.
- Asset Lifecycle management program (Annual)

Physical security

- Separate ring-fencing to segregate the DC buildings within campus
- Enhanced security measures such as UVSS, Turnstiles, Boom Barrier shall be implemented
- Flood lights around the fencing with comprehensive patrolling.
- BGV Process .Both Internal as well as Complying to customer specific requirements

Tools

- DC setup will have dedicated fully integrated IBMS system,
- Fully automated and redundant CPM system.
- Fully automated and redundant EPMS systems.
- SNOW tool for Operations Management (Incident , Problem ,Change, Escalation Management)
- Capacity Management and PMMs portal

Partnership

- SLA governance. With underpinning contracts.
- Monthly and quarterly performance review Engagement
- Critical Spares and Inventory management.
- Robust Contractor Pre-qualification and Selection process that includes clear contractual language on EHS standards and expectations.

Quality Management

- Early engagement of operations team right from Concept design to IST and HOTO.
- Quality standards adherence and certifications.
- CoE lab for any simulations, testing, POC, etc.
- Simplified SLD , Block Diagrams
- NO/NC Indicators
- Weekly Site / Campuses Walk thro
- Waste Management

Information of Data Center Competitors National & Global benchmark

STTelemedia Global Data Centres

Global Benchmark			
Description	Standard	Good	Better
PUE	2	1.5	1.2
Temperature as per ASHRAE guideline	19- 27 deg C		
Humidity as per ASHRAE Guideline	40%-80%		

Sr No.	National / Global	Name of Competitor	PUE	Remarks
1	National	Pune DC2	1.65	Actual
2	Global	Google Data Center US	1.11	Source: Internet

Pune Data Center

STTelemedia Global Data Centres

Pune Data Center – Fact Sheet

Building Infrastructure

Operational – Capacity 10.17 MW , Area 2.0 Lakh Sq .ft.

– STT GDC Pune has 3 Data Centre towers in Pune, DC01 (Jade Building), DC02 and DC03 which are suit to build data center for one of the hyper scaler customer.

TIA-942-Rated 3, Purpose built DC, Seismic zone 3

Clear height of ~4.3 m (Slab to Slab) for accommodating Racks up to 48 U (Flexibility to go vertical)

Load bearing Capacity of 1500kgs/white space & Technical areas

On-site HSD fuel storage of 48 hours at full load.

Ramp less Design, Two Material lifts , One Passenger Lift ,One Scissor lift .

Electrical Infrastructure

Modular design with N+N Redundancy at GIS 220kv Onsite Substation

Key systems equipped with Dual Feed from Two independent paths.

Rack Capacity : 2049 Rack

Designed for up to 8 KW density and average rack density of 5 KW

Floor Level Infrastructure Design with Distributed Redundancy.

Rack level power Design with 2N mode. Each rack is fed from two independent UPS & PDU Sources

Cooling Infrastructure

Chillers N+N configuration with N+N diverse chilled water piping system

Water Cooled- 1150 TR x 3 Nos

Water Cooled- 1050 TR x 1 No

Air Cooled Chiller Net Capacity- 460 TR x 4 Nos

Primary Pumps 3200 x2 gpm 160kW & Redundant Condenser Pumps 4800x2 gpm 110kW

IBMS Infrastructure

Integrated with respect to Electrical, Cooling, Security & Safety Infrastructure

Fully Automated Cooling System

Tailor made Dashboards like BMS Network, Fire Safety, Security systems

Redundant BMS network path from Distribution Level onwards

Installed Addressable Safety Systems & Advanced Suppression systems suitable for Technical areas

Integrated ACS, CCTV

Certifications

ISO/IEC 20000-1:2018
ISO 14001 : 2015
ISO/ IEC 27001 : 2013
ISO/ OSHAS:45001
TL 9000-V R6.2/R5.7
PCI DSS 3.2.1

Datacenter Facility footprint

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Utility Power
- 2 X 220 kV feeders with substation on site
- N+1 transformers Bank
- Campus scalable up to 10.19 MW of IT Load

UPS
- Distributed Redundant (N+N/2) for each server hall with up to 13 mins of battery backup as well as By pass UPS protection
- Concurrent maintainability no Single Point of Failure

Generator
- N+1 configuration and as well as 3*3MVA and 2.5MVA HT DG sets For Critical Chiller and Power Backup

Fuel Tanks
- 1.1 KL U/G HSD fuel tanks yard
- 48 hrs. backup on full load

Design Uptime
- 99.982% of power uptime in line with tier-3 specifications

Floor Loading – 1,500 kg/sq. meters

Heights
- Slab to Slab – 5 mts
- Raised Floor to False Ceiling height – 4.2m
- False Floor height - 0.8m

Loading Dock
- Dedicated Raised loading dock and staging area available for Customer

Elevators
- Passenger – 2 Nos
- Freight elevator – 2 Nos
- 2 x 3 Ton capacity,

CRAC/HVAC
- N+1 for each server hall
- N+N Water cooled and Air Cooler chiller system Cooling Protection

Humidity Maintained – 35 to 70 %

Temperature
22 to 27 degree Celsius, customer specific to ASHRAE guidelines

Fire System
- Smoke detectors and VESDA for fire detection
- Inergen for fire suppression

Data Center Facility Energy Data

STTelemedia Global Data Centres

Parameters	Units	FY20 – 2021	FY21- 2022	FY22- 2023
Annual Electrical Energy Consumption, purchased from utilities	kWh	620,316,79	296,381,04	921,722,1.43
Annual Electricity Generation (in-situ), through Diesel Generating	kWh	489,089	178,574	312,760
Annual Renewal Electricity (Solar + Open access)	Kwh	246,350,2	294,729,80	58053006
Total Annual Electricity Consumption, Utilities + DG/GG Sets + Renewal	kWh	649,842,70	592,896,58	675,829,87.07
Annual Cost of Electricity Consumed from utilities :	million INR	554.03	430.86	500.65
Annual Cost of Electricity generated through DG/GG Sets	million INR	45.24	16.51	30.44
Total Annual Electricity Cost, Utilities + DG/GG Sets	million INR	599.27	447.37	531.09
Built Up Area	Sq.Ft	112,000	112,000	112,000
No of floors in the building	Level	G+2	G+2	G+2

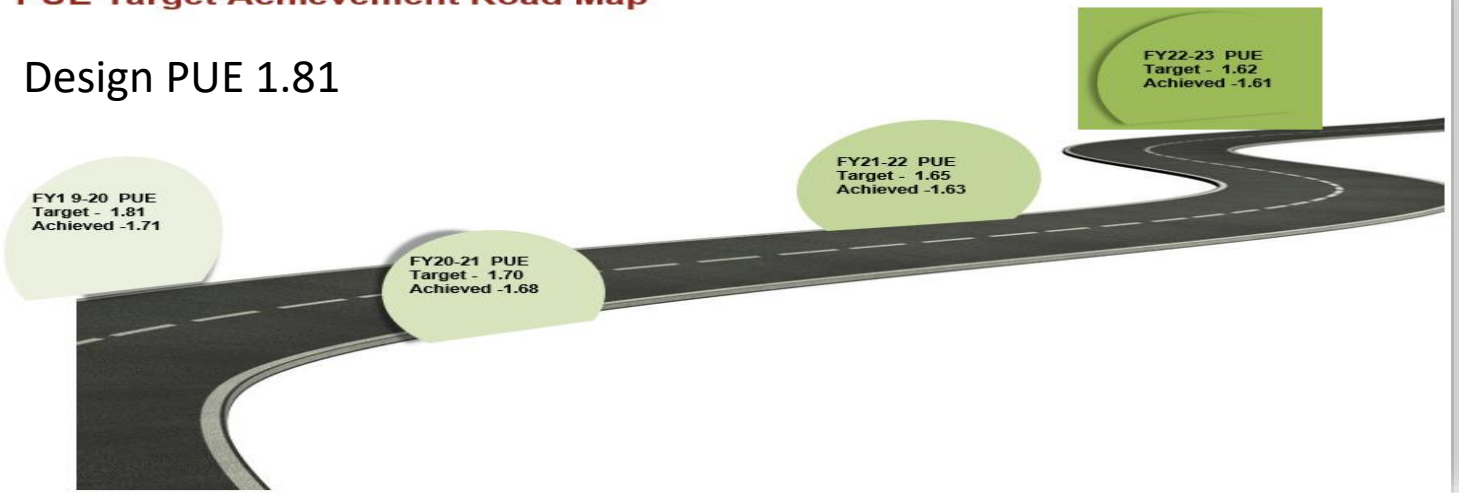
Facility consumption trend – Continuous PUE improvement

STTelemedia Global Data Centres

The facility has been in operation since 2009 and has a design PUE of 1.81, but our constant endeavor and approach to reduce the power usage effectiveness (PUE) continues year after year, thereby we are reducing our carbon footprint and achieve Our target PUE benchmark , basically PUE is a metric used to determine the energy efficiency of Data Center.

PUE Target Achievement Road Map

Design PUE 1.81



Yearly PUE Trend

Year	Target	Achived
FY 19-20	1.81	1.71
FY 20-21	1.7	1.68
FY 21-22	1.65	1.63
FY 22-23	1.63	1.61

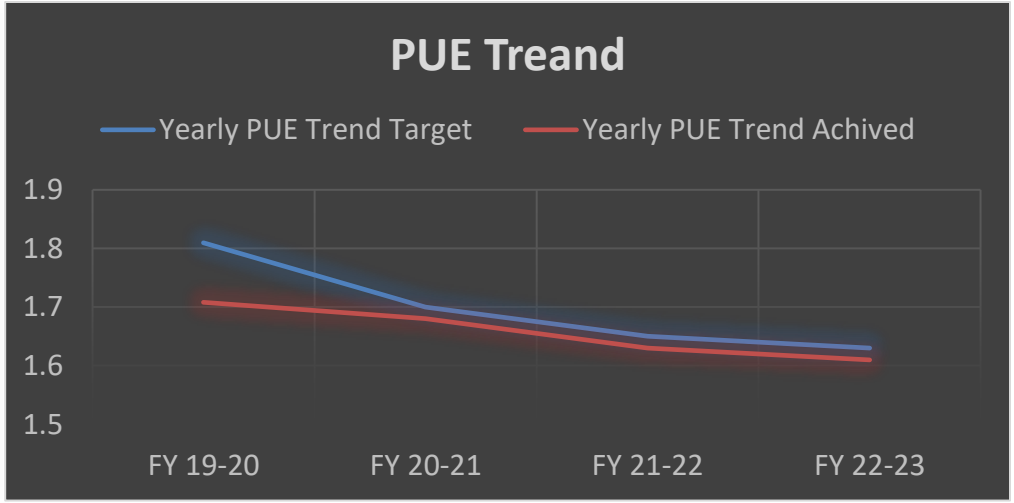
PUE

Lesser PUE

- DC Operators quote lesser PUE's in Technical round
- PUE used for power pay out is quoted separately in Commercial Section else there is administrative charges included
- Some operators giving very aggressive PUE's are on Water Cooled Chillers.

Water Usage Effectiveness

- The world's water usage rises by about 1% every year. which means a 28% increase by the year 2050. Water Scarcity is an impending global problem. Therefore, data centers that use water cooling solutions must work to reduce water usage.
- Water Usage Effectiveness (WUE) is a parameter in the data center that analyzes how efficiently water is being utilized. It has become the natural extension of PUE.



List of Major Encon Projects in FY 22-23

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DC-1 Pune Major Encon Projects FY 22-23				
Sr. No	**Investment**	**Invested Value in Million**	**Annual Electrical saving Million KWH**	**Annual Electrical cost savings millions**
1	4 Nos of 500KVA UPS replaced with New 4*500KVA UPS under EOL Guidelines	Rs. 12	6526	53514.84
2	2 Nos of VFD installation done for water-cooled pumps (160kw)	Rs. 3		
3	2*55 Watt old tube light fittings replaced with new 2*36-watt LED fittings (600nos)	Rs. 1.5		
4	4 Nos of 1150TR water-cooled chiller descaling done	Rs. 0.7		
	Total	Rs.17.2		

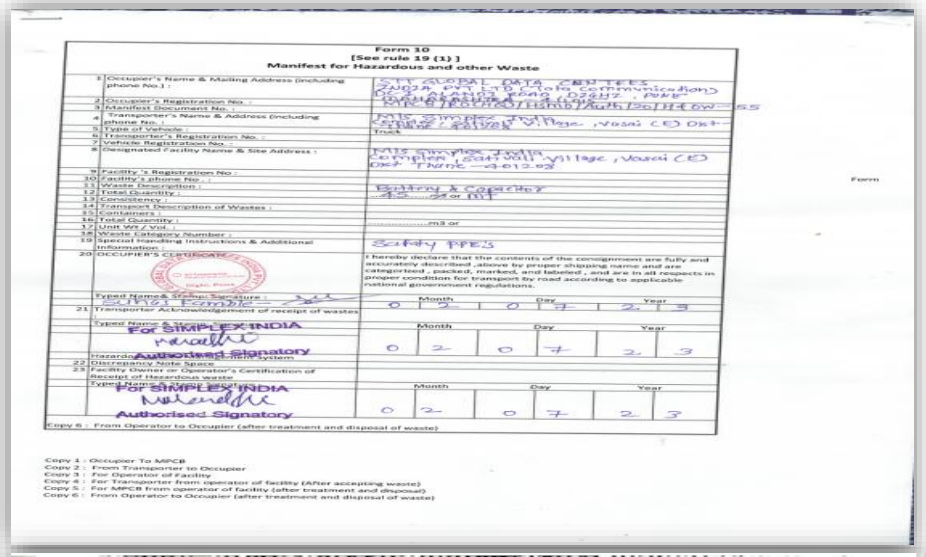
Waste utilization and management

STTelemedia Global Data Centres

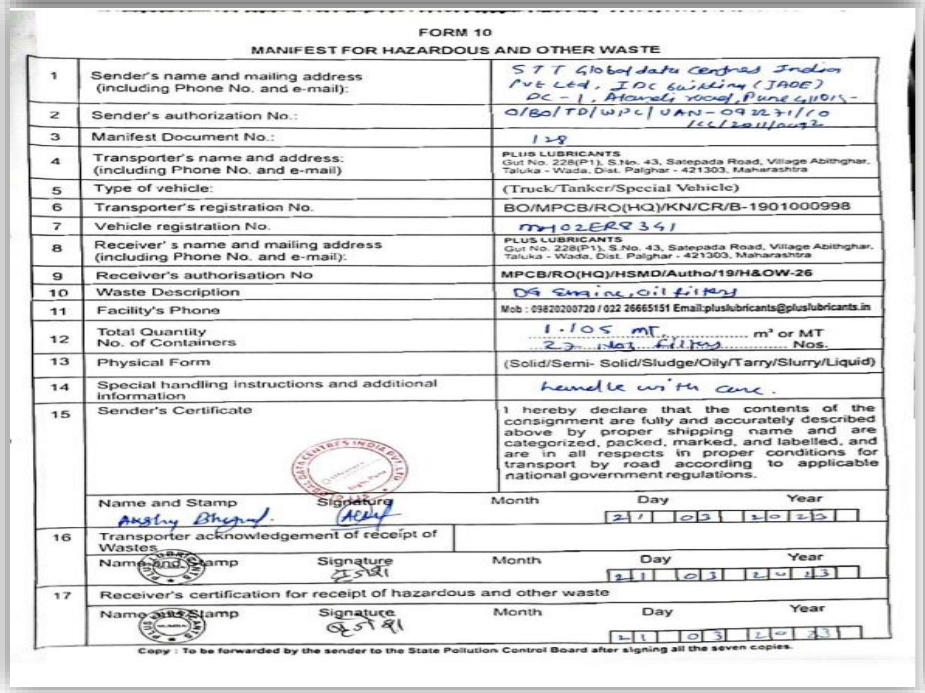
WASTE MANAGEMENT

S. No	Type of waste	Quantity	Disposal Method (with Supporting Documents)
1	Hazardous Waste(DG +Transformer Oil)	1.105MT /Year	Wastes are collected, segregated and stored at our inhouse Hazardous storage area. These wastes are disposed Govt approved vendor For Recyling .
2	Battery Waste	45 MT /Annual	Wastes are collected, segregated and stored at our inhouse battery storage area. These wastes are disposed approved vendor.

We believe in "waste to wealth" and we adapted the system of segregation and recycling since beginning.



Form 10
[See rule 19 (1)]
Manifest for Hazardous and other Waste



FORM 10
MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (including Phone No. and e-mail):	STT Global data Centres India Pvt Ltd, IDC Building (JADE) DC-1, Mahape, Navi Mumbai, Pune 400 071
2	Sender's authorization No.:	01801TD/WPC/UAN-0922171/10
3	Manifest Document No.:	128
4	Transporter's name and address: (including Phone No. and e-mail)	PLUS LUBRICANTS Gut No. 228(P1), S.No. 43, Satepada Road, Village Abithghar, Taluka - Wada, Dist. Palghar - 421303, Maharashtra
5	Type of vehicle:	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	BO/MPCB/RO(HQ)/KN/CR/B-1901000998
7	Vehicle registration No.	MH02ER8341
8	Receiver' s name and mailing address (including Phone No. and e-mail):	PLUS LUBRICANTS Gut No. 228(P1), S.No. 43, Satepada Road, Village Abithghar, Taluka - Wada, Dist. Palghar - 421303, Maharashtra
9	Receiver's authorisation No	MPCB/RO(HQ)/HSMD/Autho/19/H&OW-26
10	Waste Description	DG Engine oil filters
11	Facility's Phone	Mob : 09820200720 / 022 26665151 Email:plusluibricants@pluslubricants.in
12	Total Quantity No. of Containers	1.105 MT ..... m³ or MT 23 Nos. filters ..... Nos.
13	Physical Form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)
14	Special handling instructions and additional information	Handle with care.
15	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations. Name and Stamp: Ashley Bhagwat Signature: Month Day Year 27 03 2023
16	Transporter acknowledgement of receipt of Wastes	Name and Stamp Signature Month Day Year 27 03 2023
17	Receiver's certification for receipt of hazardous and other waste	Name and Stamp Signature Month Day Year 27 03 2023

Copy : To be forwarded by the sender to the State Pollution Control Board after signing all the seven copies.

UTILIZATION OF RENEWABLE ENERGY SOURCE

STTelemedia Global Data Centres

UTILIZATION OF RENEWABLE ENERGY SOURCE and EMMISSIO Reducation				
Year	Total Open Access Renewable Energy Consumption, kWh/Year	Total slolar Renewable Energy Consumption, kWh/Year	Total Energy Renewable Energy Consumption(Open Access+Solar), kWh/ Year	CO2 emission avoided, tons of CO2/year
FY20-2021	-	24,63,502	24,63,502	2,020.07
FY21-2022	2,77,19,098	17,53,882	2,94,72,980	24,167.84
FY22-2023	5,51,13,051	29,39,955	5,80,53,006	47,603.46
Total 73791 Ton Carbon Per Year Emission have been Reduced through Renewal Energy				73,791.38

Co2 Reduction 73791 Tons /Year

- 1.Meeting the present demand of our business require us to consume energy—primarily electricity—to power our data centres. Challenging climate change requires the world to changeover to a clean energy. That's why we have made it a top priority not only to become more energy efficient, but also to ensure the energy we purchase comes from clean sources, such as renewables.
- ST Telemedia GDC India is one of the largest user of renewable energy in India majorly from solar power producer. To date, we've contracted to purchase 58053006 of KWH Per renewable energy for our STT Pune DC-1 facility and objective to reach more than the present usage of renewable energy.
- Through we are looking beyond our business to drive wide-scale adoption of renewable energy. We're supporting new energy purchasing models such as our pioneering commitment to long-term contracts to buy renewable energy directly from developers (power purchase agreements, or PPAs) and our support of renewable energy purchasing programs with utilities.
- Green Supply Chain: STT GDCI is procuring Renewable Energy (Wind & Solar Power) both from onsite & offsite sources (under Open Access route) and year on year has rapidly increased its green power portfolio.
- Presently we are meeting our green power through RE entered with reputed green Power Suppliers.

Off-site Renewal wind energy

GHG EMISSION TREND

STTelemedia Global Data Centres

GHG EMISSION TREND						
CO2e year	Scope 01	Emission factor CO2e / unit = 2.70	Scope 02			Total Emission, CO2 in tons
	Fuel consumed in litters	Total GHG Emission in TCO2e	EB Energy Consumption in kWh	Emission Factor CO2e / unit	Total GHG Emission in TCO2e	
FY 20-2021	1,74,907	473	64872640	0.793	51444	51917
FY 21-2022	1,04,279	282	36530744	0.71	25937	26219
FY 22-2023	1,56,965	425	9402971	0.71	6676	7101

241171 Tons of CO_2

GHG Road Map

DG set operation

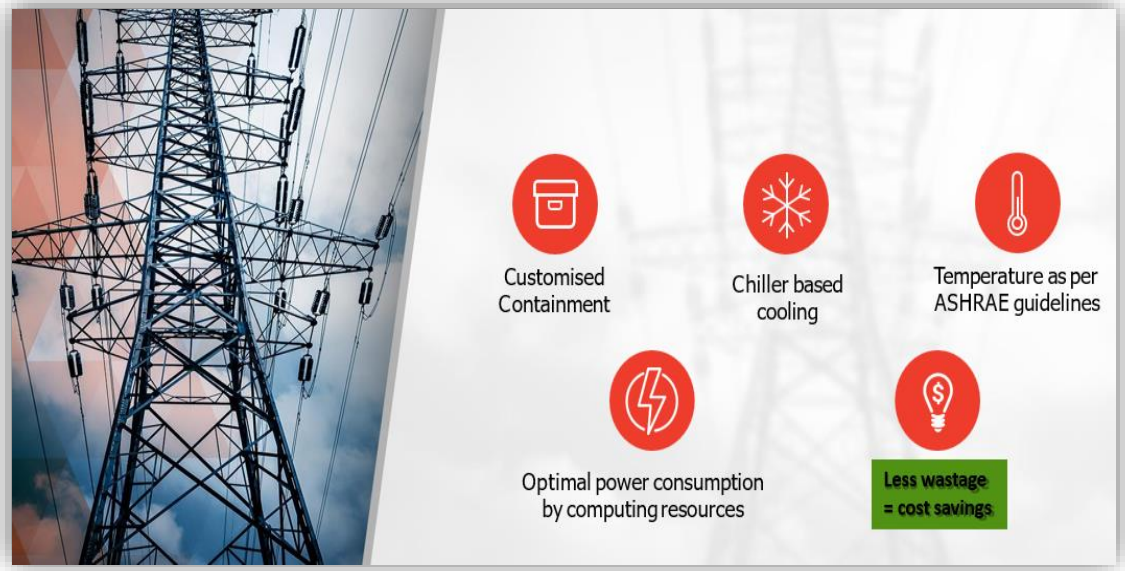
Renewal Energy purchase

Optimization in DG set daily test

- ✓ *A check frequency test reduced from 2 in Week to once in weekly .*
- ✓ *Annually 2.16 kL of Diesel consumption reduced.*
- ✓ *Approx. 5.72Tons of CO_2 emission reduction per Year*

RE purchase – Solar and Open access

- ✓ *We Purchase Extra 90 % open access Power in 2023*
- ✓ *60% energy consumption drawn from Renewal Energy Purchase and on site 2.7 MW Solar power Planform Carbon foot print Reeducation*
- ✓ *241171Tons of CO_2 off-set Generation*



Sustainable Initiatives for Water Management

STTelemedia Global Data Centres

Water Saving Details

Description	Units	live	Stand By
CoC Without Nalco		3	3
Avg COC		7.8	7.7
Recirculation Rate	m3/hr	1090	1090
Temp. Diff.	Deg C	4	4
Hours of Operation	Hour	24	24
Evaporation	m3/day	161	161
Total Blowdown With Nalco	m3/day	23.7	24.1
Total Blowdown Without Nalco Nalco	m3/day	80.6	80.6
Total Saving in Blowdown	m3/ day	57	57
Water charges	Rs / m3	28	28
Total cost for Makeup water	Rs/ day	1592	1583
Total Cost for make up water	Rs / month	47,775	47,478
Total annual cost of Make up water	Rs/ year	5,73,299	5,69,734
Saving On Makeup water cost	**Rs / year**		**11,43,033**

- Our Data Center facility utilize the common STP commissioned in the Separate zone and The Wastewater are treated in STP and reused back for gardening purpose
- Our Data Center facility is Zero Liquid Discharge
- Our intend and initiatives are inline with Green Campus

Sustainable Initiatives CBMS project @ Pune DC-1

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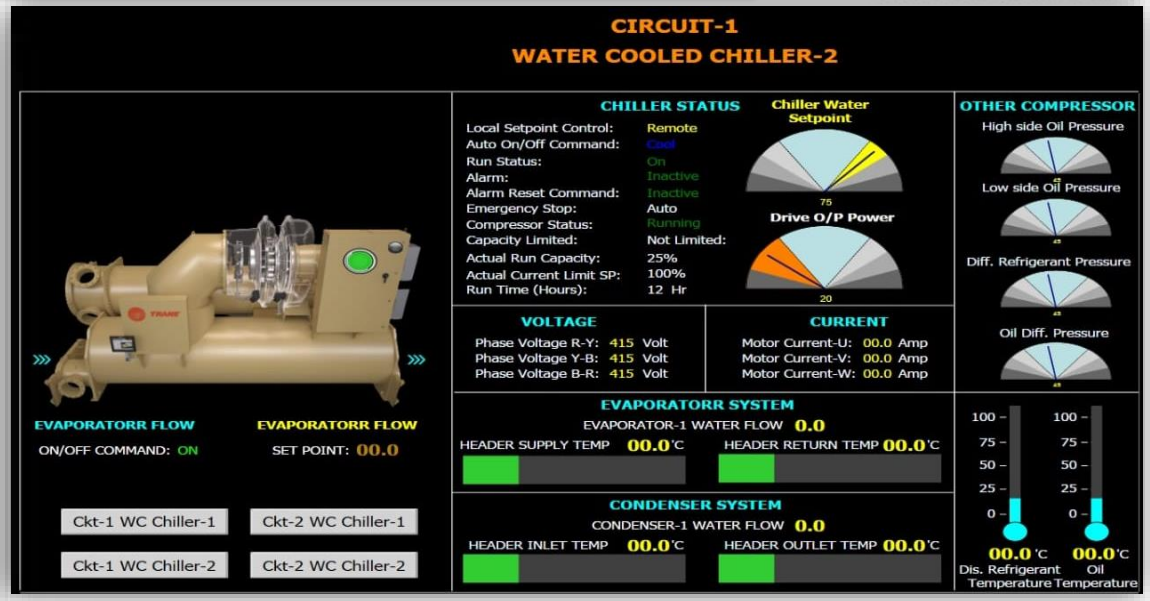
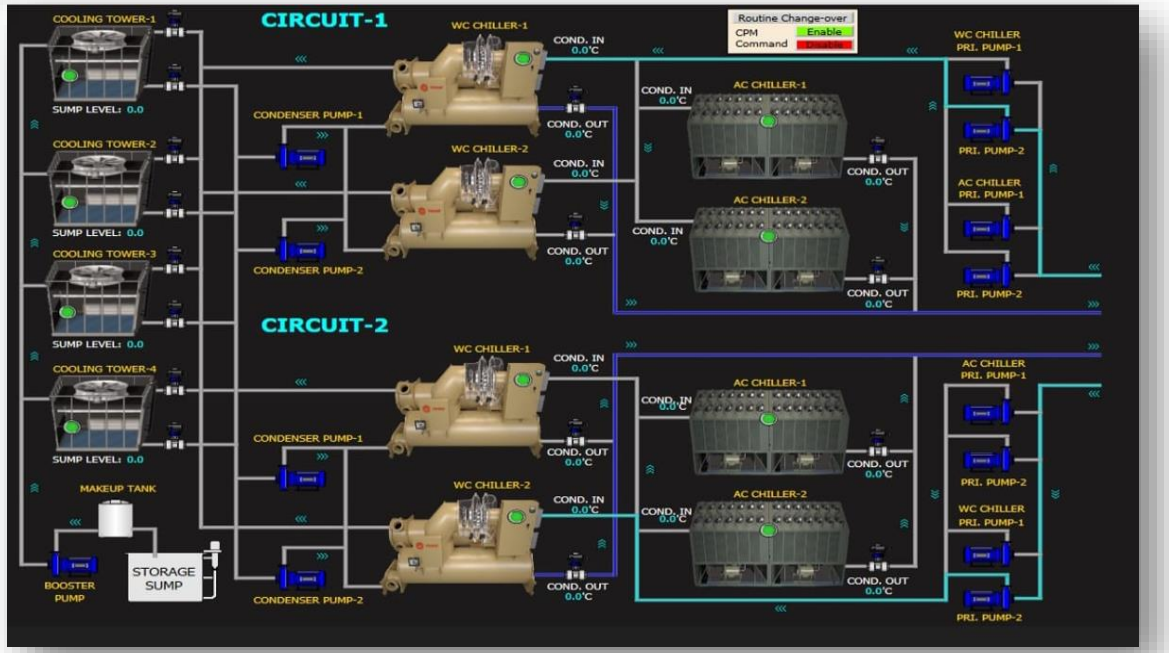


- Data Center 33% Energy Utilization By Cooling Infrastructure - Hence our Focus is High on the cooling infra thro Design ,Equipment's selections ,Operation to Achieve Higher Efficiency and Energy Conservation
- Water Cooled System With Economizer highly Efficient Water-Cooled Chiller offers 0.53 TR for 1KW IT Load
- Selection of the chiller and all associated Equipment's are with High Efficiency With High Quality
- Automatic Chiller Building Management System Which Improve The Efficiency and Reduced Manual intervene for Operation sustainability
- Periodic Energy Audit to Evaluate the Chiller Efficiency and Tracking as well as It's Performance
- Effective and Periodic Maintenance which Includes Validation of quality of the water and to ensure no water wastages and to ensure the Data Center UPTIME



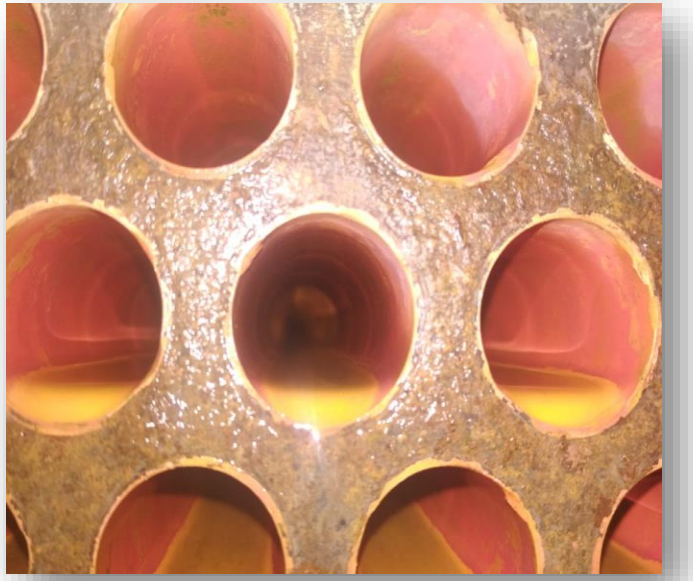
Sustainable Initiatives of Chiller Plant Descaling Activity @ Pune DC-1

STTelemedia Global Data Centres

Chiller No	Average Approach Before descaling	Average Aproach After cleaning	Difference in AT
	Degree C	Degree C	Degree C
LIVE 2	6.3	2.1	**4.2**
LIVE 3	6.3	1.7	**4.6**
SB1	4.1	1.2	**2.9**
SB2	3.5	1.1	**2.4**

Energy Performance Saving

Parameter	Units	SB Chiller 1	SB Chiller 2	LIVE Chiller 2	LIVE Chiller 3
Total Chiller Capacity	Tons	1,200	1,200	1,200	1,200
Load	%	82%	90%	91%	88%
Operating Chiller Capacity	TR	984	1,080	1,092	1,056
KW/TR- Design	INR/KW-HR	0.68	0.68	0.68	0.68
Total Kw	KWH	669	734	743	718
No OF Hr.	hrs/day	12	12	12	12
Total KW Per Day	KWH	8,029	8,813	8,911	8,617
No of Day Operation per year	days/year	360	360	360	360
Total Energy Consumption		28,90,598	31,72,608	32,07,859	31,02,106
Increased Approach Without Nalco	Degree C	2.9	2.4	4.2	4.6
1 Degree Increase impacts Cost 3%		9%	7%	13%	14%
KW/TR Due to Increased Approach	Kw/TR	0.74	0.73	0.77	0.77
Total Energy Consumption	INR/year	31,42,080	34,01,036	36,12,049	35,30,196
Excess Energy Consumption	INR/year	2,51,482	2,28,428	4,04,190	4,28,091
Unit Cost/ kW	Rs	8	8	8	8
Grand Total Potential Energy Saving	INR/year	20,11,856	18,27,422	32,33,522	34,24,725
					1,04,97,525



Sustainable Initiatives for Chiller Pump Energy Saving @ Pune DC-1

STTelemedia Global Data Centres

Chilled water 160 KW Pump Technical Evaluation		
Nameplate Parameters (Designed)		
1	Voltage	415
2	Ampere	264
3	PF	0.89
4	Flow (M3/Hr)	726.8
5	Head Mtr	51.8
6	Rated Power KW	160
7	Motor Efficiency	93

Existing Pump Motor Power Consumption				
1	Rated Power	Name Plate	160.00	KW
2	Motor Efficiency	Rated	93.00	%
3	Power Drawn	Rated Power/Efficiency	172.04	KW
High Efficiency IE3 Pump Motor Power Consumption				
4	Rated Power	Name Plate	132.00	KW
5	Motor Efficiency	Rated	95.00	%
6	Power Drawn	Rated Power/Efficiency	138.95	KW
7	Power Saving	(172 - 138.95)	33.10	KW/Hr
		(33.10 X 8760 x 2 Pumps)	579835.65	KW/Year
8	Electricity Price		8.20	Rs/Kwh
9	**Saving**	579836 X 8.2	**4754652.36**	
			47.54	**Lac/Year**
10	**Investment**	2 CHW Pump with VFD	**130.00**	**Lac**
11	**Pay Back Period**	Investment/Saving	**2.73**	**Years**

Sustainable Initiative for Green and energy saving Equipment Procumbent

STTelemedia Global Data Centres

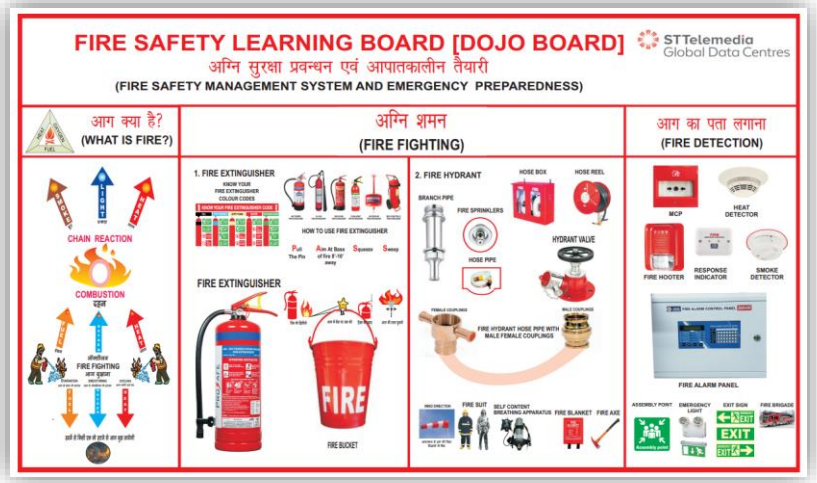
- ***Energy efficient LED lights, motion sensor***
- ***Cold Aisle containment for all Server Room to avoid Hot and Cold Air***
- ***Energy efficient transformer, UPS and PAHU***
- ***Common share point is being used at site by team to maintain documents thereby minimizing the usage of hardcopies***
- ***STP treated water using for flushing and garden.***
- ***Best Industrial Safety Awareness Trainings for environmental for best practices***

Server Room Led Light

Server Room Cold Aisle containment

Energy efficient transformer, UPS Server Room

Best Safety Awareness Good Practices



Data Center Equipment's and Environment Air Quality Monitoring Details

STTelemedia Global Data Centres

- *Energy Efficiency best management practices at every level/ through Datacenter life cycle.*
- *DG Noise and Stack Testing asper CPCB*
- *Using STP treated water for gardening*
- *Indoor Environmental Air quality*
- *Utilization of waste*
- *Plantation*
- *Encourage employees to use public/pooled transport*

• Indoor Environmental Air quality

GREEN ENVIROSAFE
Engineers & Consultant Pvt Ltd.

TEST REPORT

Test Report No: -	GESEC/PRO/2023-24/04/265	Date	24/04/2023
Sample Code: -	GESEC/PRO/2023-24/04/265		
Name & Address of the Client	Client Name: M/s. STT GLOBAL DATA CENTRES INDIA PRIVATE LIMITED Address: TATA Communications, Jade, Alandi Road, Dighi, Pune 411015		

INDOOR AIR SAMPLE DETAILS

Type	Location		Sampling done by
Indoor Air Quality	Ground Floor - Sitting Area		Perfect Pollucon Services, Thane
Date of Sampling	Sample Receipt Date	Analysis Start Date	Analysis End Date
17/04/2023	19/04/2023	20/04/2023	24/04/2023

Sample Test Details

Sr. No	Parameters	Method	Unit	Permissible Limits of Exposures (T.L.V)	Result
1.	Sulphur Dioxide (SO_2)	IS 5182 (part-2) -2001 (RA 2012)	ppm	<5ppm[a]	BDL
2.	Sulphur Trioxide (SO_3)	NIOSH -1988	ppm	<5ppm[a]	BDL
3.	Oxides of Nitrogen (NOx)	NIOSH-6014-issue-2 Feb1998	ppm	<5ppm[a]	0.61
4.	Ozone (O_3)	IS5182 (part 10)-1974 (RA 2014)	ppm	0.1ppm[a]	BDL
5.	Ammonia (NH_3)	NIOSH 6015-issue-1 Aug1994	ppm	<50ppm[a]	BDL
6.	Oxygen (O_2)	NIOSH-6601-issue-Aug 1994	% (v/v)	19.5 to 25.0%	20.8
7.	Temperature	ASTME-337	°C	20°c to 26.0°c	25.5
8.	Relative Humidity	ASTME-337	%	30 to 65%	50
9.	Hydrogen Fluoride (HF)	OSHA - 1989	ppm	<3 ppm[a]	BDL
10.	Chlorine as (Cl_2)	OSHA 3144-06R2003	ppm	<1 ppm[a]	BDL
11.	Hydrogen Sulphide (H_2S)	NIOSH - 1983	ppm	<10 ppm[a]	BDL

Remark- BDL – Below Detectable Limit.
a-NIOSH- National Institute of Occupational Safety and Health

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

Terms and conditions
1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of laboratory, GESEC.
4. Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not reveal to third party unless required by the statutory or legal requirement.
6. MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.

•Outdoor Environmental Air quality

GREEN ENVIROSAFE
Engineers & Consultant Pvt Ltd.

TEST REPORT

Test Report No: -	GESEC/PRO/2023-24/04/255	Date	24/04/2023
Sample Code: -	GESEC/PRO/2023-24/04/255		
Name & Address of the Client	Client Name: M/s. STT GLOBAL DATA CENTRES INDIA PRIVATE LIMITED Address: TATA Communications, Jade, Alandi Road, Dighi, Pune 411015		

AAQM SAMPLE DETAILS

Type	Location	Sampling done by	
Ambient	Near DG Set (Sterling)	M/s. Perfect Pollucon Services, Thane	
Sampling Time			
Start Time	Stop Time		Total Hrs.
10.30 AM	10.30 AM		24
Ambient Temperature °C	35.0	Wet Bulb Temperature °C	26.0
Dry Bulb Temperature °C	35.0	Relative Humidity % RH	47
Date of Sampling	Sample Receipt Date	Analysis Start Date	Analysis End Date
17/04/2023	19/04/2023	19/04/2023	24/04/2023
Name of Instrument	PPS-04,1,04,2,04,3	Date of Calibration	31-05-2022
Calibration Certificate No.	TECH/CAL/2022/05.C/10,11,12	Due Date of Calibration	30-05-2023

Sample Test Details

S. No	Parameters	Method	Unit	NAAQ Standards	Result
1.	Sulphur Dioxide (SO_2)	IS:5182 (PART 2):2017	µg/m³	≤ 80	40.5
2.	Oxides of Nitrogen (NO_2)	IS:5182 (PART 6):2018	µg/m³	≤ 80	46.2
3.	Particulate Matter PM_{10}	IS:5182 (PART 4):2019	µg/m³	≤ 100	61.6
4.	Particulate Matter $PM_{2.5}$	IS:5182 (PART 24):2019	µg/m³	≤ 60	44.5
5.	Ozone (O_3)For 1 Hrs.	Method 411, Air Sampling and Analysis 3rd Edition ,2013	µg/m³	≤ 180	BDL
6.	Ammonia (NH_3) For 24 Hrs.	Method 401, Air Sampling and Analysis 3rd Edition ,2013	µg/m³	≤400	BDL
7.	Carbon Monoxide (CO)	IS 5182 (PART 10):2019	mg/M³	≤ 04	0.54
8.	Benzene (C_6H_6)	IS 5182 (PART 11):2019	µg/M³	≤ 05	BDL
9	Benzo(a)Pyrene (BaP)	IS 5182 (PART 12):2019	ng/M³	≤ 01	BDL
10.	Arsenic (As)	IS 5182 (PART 22):2019	ng/M³	≤ 06	BDL
11.	Nickel (Ni)	IS 5182 (PART 26):2019	ng/M³	≤ 20	BDL
12.	Lead (Pb)	IS 5182 (PART 22):2019	µg/M³	≤1.00	BDL

Remark-
- NAAQS-National Ambient Air Quality Standards
- BDL – Below Detectable Limit

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

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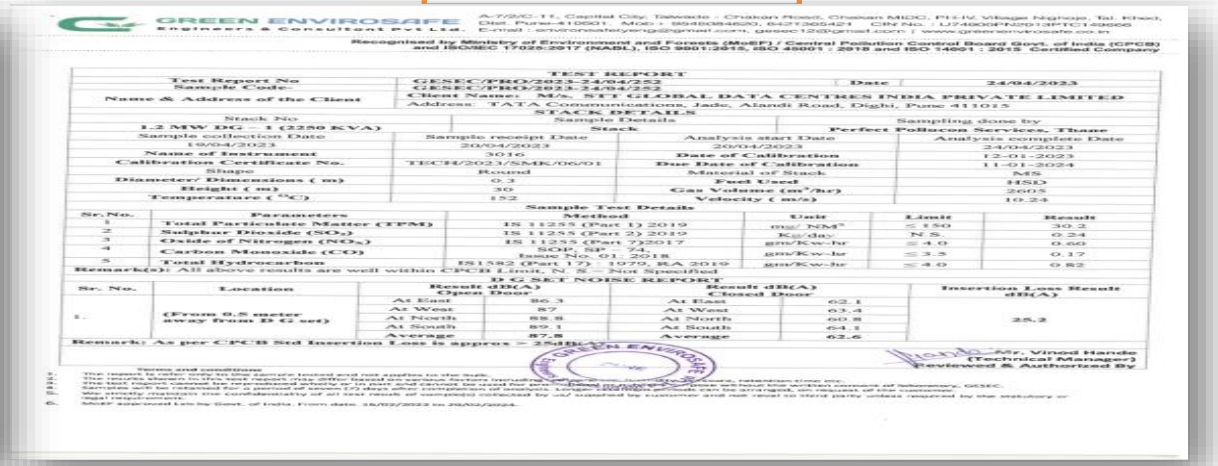
Synopsis:- Quarterly once indoor air quality measured through third party vendors Ambient air quality monitoring station installation was completed on April'23

Status	CO2 (ppm)
Excellent	0-775
Good	776-865
Satisfactory	866- 955
Moderate	956-1100
Poor	1101-1500
Very Poor	1500-3000

• DG Set Stack Monitoring



GREEN ENVIROSAFE
Engineers & Consultant Pvt Ltd.

TEST REPORT

Test Report No	GESEC/PRO/2023-24/04/252	Date	24/04/2023
Sample Code	GESEC/PRO/2023-24/04/252		
Name & Address of the Client	Client Name: M/s. STT GLOBAL DATA CENTRES INDIA PRIVATE LIMITED Address: TATA Communications, Jade, Alandi Road, Dighi, Pune 411015		

STACK DETAILS

Stack No	Sample Details		Sampling done by
1.2 MW DG – 1 (2250 KVA)	Stack		Perfect Pollucon Services, Thane
Sample collection Date	Sample receipt Date	Analysis start Date	Analysis complete Date
19/04/2023	19/04/2023	20/04/2023	24/04/2023
Name of Instrument	3016	Date of Calibration	12-01-2023
Calibration Certificate No.	TECH/2023-Y/SMK/0601	Due Date of Calibration	11-01-2024
Shape	Round	Material of Stack	MS
Diameter/ Dimensions (m)	0.3	Fuel Used	HSD
Height (m)	30	Gas Velocity (m/Sec)	20.05
Temperature (°C)	152	Velocity (m/s)	10.24

Sample Test Details

Sr.No.	Parameters	Method	Unit	Limit	Result
1	Total Particulate Matter (TPM)	IS 11255 (Part 1) 2019	mg/ Nm³	≤ 150	30.2
2	Sulphur Dioxide (SO_2)	IS 11255 (Part 2) 2019	Kg/ day	N.S.	0.24
3	Oxide of Nitrogen (NO_x)	IS 11255 (Part 7)2017	gm/Kw-hr	≤ 4.0	0.048
4	Carbon Monoxide (CO)	SOP, SP 74, Issue No. 01, 2018	gm/Kw-hr	≤ 3.5	0.17
5	Total Hydrocarbon	IS1582 (Part 1) 1979, RA 2019	gm/Kw-hr	≤ 4.0	0.82

Remarks: All above results are well within CPCB Limit. N.S. – Not Specified

DG SET NOISE REPORT

Sr. No.	Location	Result dB(A) Open Door		Result dB(A) Closed Door		Insertion Loss Result dB(A)
1.	(From 0.5 meter away from D G set)	At East	86.3	At East	62.1	25.2
		At West	87	At West	61.4	
		At North	88.3	At North	60.8	
		At South	89.1	At South	64.1	
		Average	87.8	Average	62.6	

Remark: As per CPCB Std Insertion Loss is approx > 25dB(A)

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

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FY 22-23 Energy saving and CO2 Reduction Initiatives Activity of DC-1 Pune

STTelemedia Global Data Centres

- Green and Smarter Energy Transformation of our Data centers i.e., 55 % of Energy usage on renewable's – Wind, Solar etc & The usage of renewable energy is expected to grow up through our continual PPA approach
- The DG no load test frequency has been reduced, earlier we used to take no load test 2 times a week, after analysis we reduced this and implemented the load trail only once a week, which gives us an estimated 4.3 KL manages to save fuel and have reduce CO2 emissions in environment
- Cooling monitoring of server room through CFD software and proper analysis of cooling requirement in server room, to increase the availability of network and we reduce the incident
- Server room air quality monitoring was done through Corrosion Coupon Test Kit, from which we can know what is the condition of temperature, humidity, silver and copper limit of our server room and whose analysis we can prevent failure of our critical equipment
- Selection a of High efficiency -next generation technology Equipment's such as PDU , CRAC, UPS, Chillers , Led Lights etc to enhance our Energy conservations
- Energy efficient lighting fixtures – LED's Installation Activity
- Strictly adopted hot and Cold Aisle containment into the complete DC raised floor area's i.e., all 1 L sq. Ft of DC
- Tight concealing of Air GAPs using Stand size of cable cut out openings with cold locks & customized closure method which is implemented at the site where it's clearly witnessing the hot zone is hotter and Cold zone is colder & mix of AIR cold /hot is almost negligible
- Use of Blanking panels on the unused rack space – This is one of the most challenging task due to the racks /Cabinet's ownership with the customers however our constant focus Via Customer education created awareness to them to ensure the blanking panels refix post their work -also we do have daily floor walk thro to get this recheck and fix the blanking panels
- Monthly Cooling Monitoring and analysis Air Requirement in Server Room through CFD simulation and Reduced the unwanted CRAC Unit operation
- Migration of Low Efficiency 2*200KVA UPS In High Efficiency 600kva those are already Working at Low Load After This Migration we Save 10% Power Loss and saving approximate 200 kw Yearly
- Replacement of old Low Efficiency Chiller Pump Motor to High Efficiency IE3 Pump Motor and Saving approximate 579835.65 KWH/Year and 47.54 Lack Per Year
- Potential Energy savings opportunity Via our smart Energy usage and minimising the losses
  0.3 mw Potential savings opportunities through energy efficient drive
- Huge reduction on Carbon <CO2> footprint reduction
- Emissions: During the financial year ended 31 March 2023, our onsite and offsite green energy

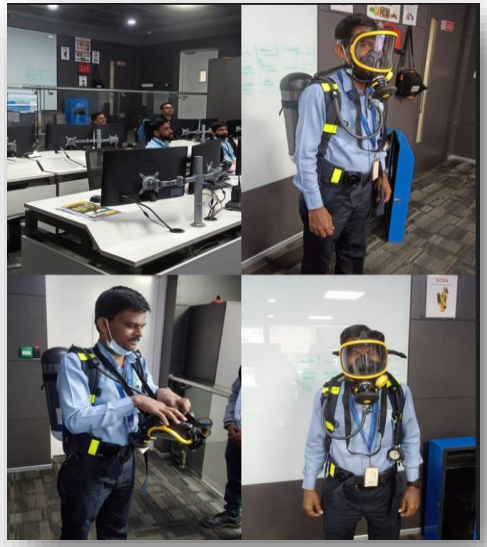
TeamWork Employee Involvement & Monitoring

STTelemedia Global Data Centres

Data Center Energy monitoring system

- • We Have Online Real Time energy Monitoring recording and consumption Software SCADA & "Azbil BMS system
- Daily every morning Email Energy Reports To Energy Manager , Regional Head and DC Manger For Review and Suggestion for Further Implement
- Additionally manual recording by MST Every Shift in a day
- Weekly/monthly review meeting of Energy and on going Project for Energy Management and Data Center 100% Uptime by Regional Manager , DC Manger , Energy manger, SMS and Operation Team
- Periodical review by Higher Management
- Monthly Operation Team training/familiarization with New learning and Technology on Different topic For Energy saving and 100% Up time management
- periodic visit by advisor/consultants and advice to technical Recommendation for Energy saving and Reeducation of Carbon Emission
- The campus has a dedicated Energy Manager.
- Annual Energy conservation budgets are available for projects that meet the internally laid out NPC criteria.
- Trainings: Inhouse & external trainings are provided to employees on a regular basis.

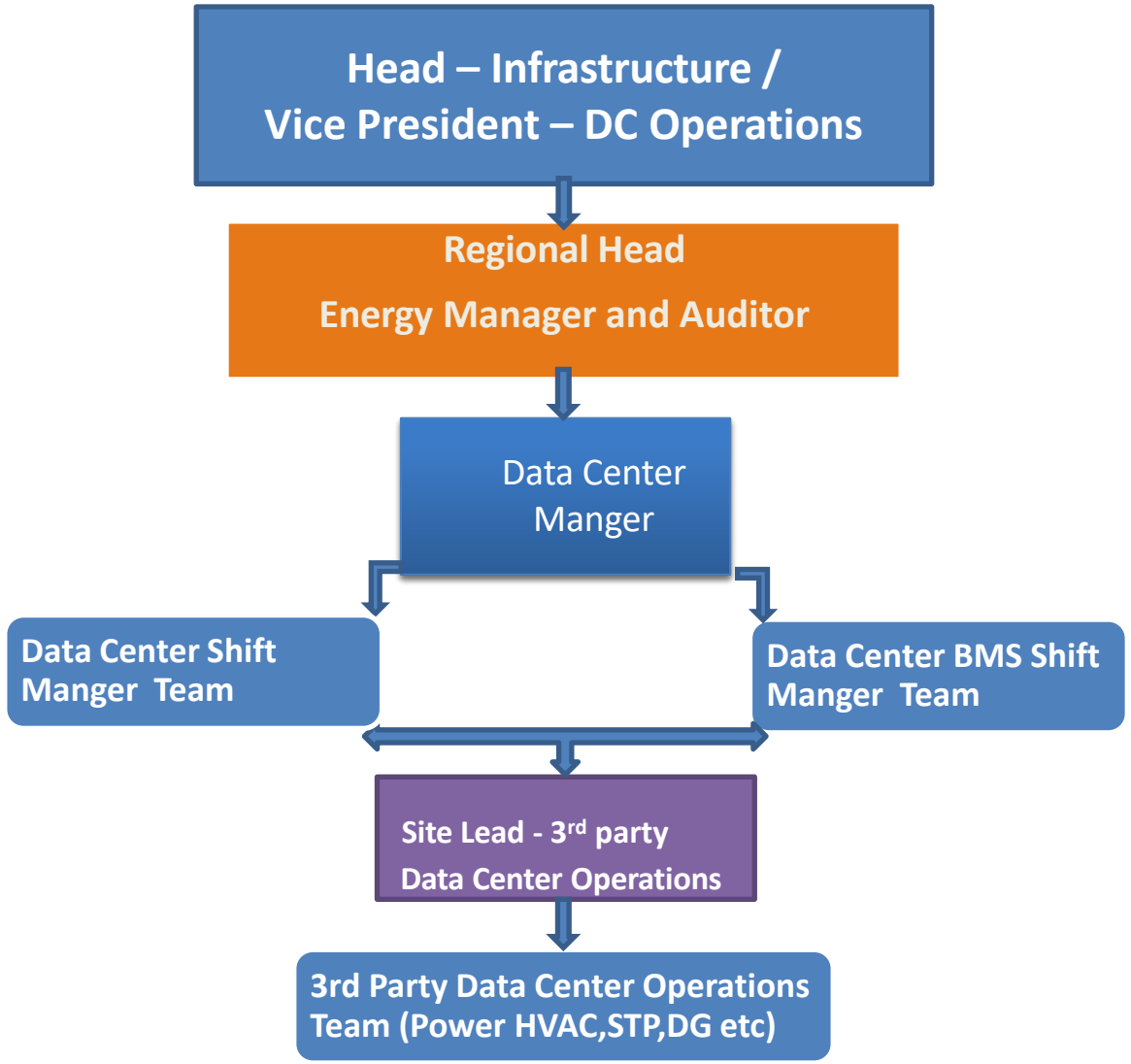
Operation Team Training

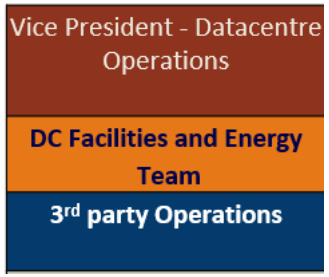


Data Center Operation Team Structure

STTelemedia Global Data Centres

Certifications





Energy Manager Details and Responsibility

STTelemedia Global Data Centres

Energy Manager Responsibility

- ✓ • *develop and implement an energy policy;*
- ✓ • *generate management information on energy consumption;*
- ✓ • *communicate effectively with energy users; • educate staff in energy awareness;*
- ✓ • *develop housekeeping practices for staff;*
- ✓ • *identify training needs for energy related matters where necessary;*
- ✓ • *spot cost-effective opportunities for increasing energy efficiency;*
- ✓ • *formulate an investment program for reducing energy consumption;*
- ✓ • *review procedures for establishing the value for money of energy; management activities to senior management.*

Energy Manager's Golden Rules

1. *Gain control. The first thing is to gain control over energy consumption.*
2. *Measure how well you are doing. Constantly monitor and record achievements.*
3. *Report in a simple, clear and relevant way. Provide simple clear reports that match the information managers are used to*
4. *Share the glory. Ensure that people get praise and credit for their energy savings.*
5. *Promote your achievements with your senior managers. Publicis your success in order to maintain funding.*

BEE Certified Energy Manager – Mr. Nitin Mittal

BEE Certification No-EA – 15647

BUREAU OF ENERGY EFFICIENCY

Examination Registration No. : EA-15647 Serial Number: 10136

Certificate Registration No. : 10136

Certificate For Certified Energy Manager

This is to certify that Mr./Mrs./Ms. NITIN MITTAL Son/Daughter of Mr./Mrs. BUDH PRAKASH MITTAL who has passed the National Examination for certification of energy manager held in the month of September 2012 is qualified as certifed energy manager subject to the provisions of Bureau of Energy Efficiency (Certification Procedures for Energy Managers) Regulations, 2010.

This certificate shall be valid for five years with effect from the date of award of this certificate and shall be renewable subject to attending the prescribed refresher training course once in every five years.

His /Her name has been entered in the Register of certified energy manager at Serial Number 10136 being maintained by the Bureau of Energy Efficiency under the aforesaid regulations.

Mr./Mrs./Ms. NITIN MITTAL is deemed to have qualified for appointment or designation as energy manager under clause (/) of Section 14 of the Energy Conservation Act, 2001 (Act No.52 of 2001).

Given under the seal of the Bureau of Energy Efficiency, this 4th day of March, 2014

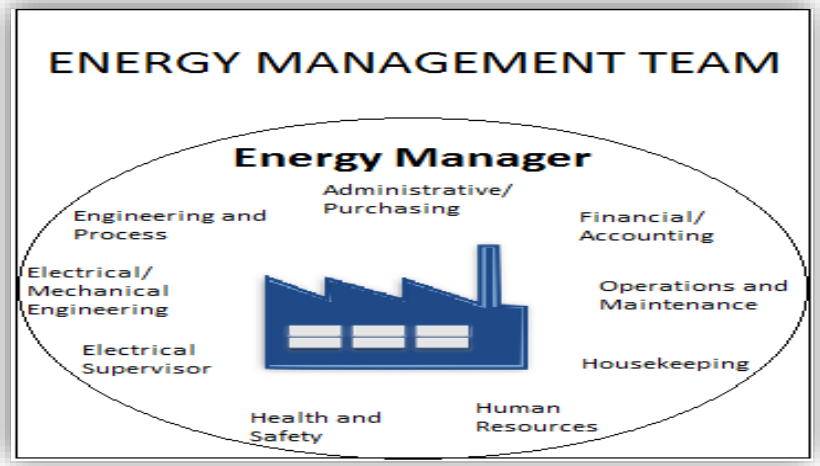
Digitally Signed: RAKESH KUMAR RAI
Fri Dec 23 16:52:20 IST 2022
Secretary, BEE New Delhi

Secretary
Bureau of Energy Efficiency
New Delhi

Dates of attending the refresher course	Secretary's Signature	Dates of attending the refresher course	Secretary's Signature
26.06.2022			

Function	Responsible Person				
	Director	Mgr A	Mgr B	Asst. C	Asst. D
Measure consumption	▲		■		●
Identify energy cost centres			▲	✱	■
Track performance					
Set targets for energy usage					
Develop conservation programme	▲	■		●	
Inspect equipment					
Select projects for improvement					
Allocate budget and resources					
Prepare documentation					
Provide training					
Review new projects for energy efficiency					
Carry out energy management audits					

Key: ▲ Approval Authority ■ Responsible for Work ●Perform Work ✱ Provide Technical Support



Our Certification For Sustainable and Green Data Center Initiatives

STTelemedia Global Data Centres

DATA CENTRE STAN

ANSI/TIA-942-B:2017
Rated 3 Certified

2017

OPERATIONAL EXCELLENCE

ISO 14001: 2015

OPERATIONAL EXCELLENCE

TL 9000-V R6.2/R5.6

OPERATIONAL EXCELLENCE

ISO 45001 : 2018

CERTAC
Certification & Accreditation

Certificate of Conformance
Constructed Facilities

This is to certify that the constructed data center facilities of

STT Global Data Centres India Private Limited

located at

PNQ DC1, Pune-Alandi Road, Dighi
Pune – 411 015, Maharashtra
India

has been independently assessed and found to conform to the requirements of:

ANSI/TIA-942-B:2017
Rated-3

for the following scope:

Architecture	Mechanical	Electrical	Telecom
Rated-3	Rated-3	Rated-3	Rated-3

CERTIFICATE NUMBER: 9120202012270040
Certificate validity: 27-Dec-20 until 26-Dec-23

Surveillance audits due by: Dec 2021, Dec 2023

Karin Kok
Certification Manager

Audited by:

TIA-942 .ORG

This certificate can be verified at www.tia-942.org.
Lack of fulfillment of certification terms and conditions may render this certificate invalid.
This certificate remains the property of Certac Pte Ltd, to whom it must be returned upon request.
Version 1.0

ANSI/TIA-942-B:2017

bsi.

Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

STT Global Data Centres India Pvt. Ltd.
Mumbai - (BKC)
Plot C-21 & C-36, 'G' Block
Bandra Kurla Complex,
Mumbai 400 098
Maharashtra
India

Holds Certificate No: **EMS 737631**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

Providing Data Centre Services.

For and on behalf of BSI:

Theuns Kotze, Managing Director Assurance - IMETA

Original Registration Date: 2017-03-30
Latest Revision Date: 2023-03-27

Effective Date: 2023-03-30
Expiry Date: 2026-03-29

Page: 1 of 4

...making excellence a habit.

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.
An electronic certificate can be authenticated online.
Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone +91 11 2692 9000.
Further clarifications regarding the scope of this certificate and the applicability of ISO 14001:2015 requirements may be obtained by consulting the organization.
This certificate is valid only if provided original copies are in complete set.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.

CERTIFICATE

This is to certify that

STT Global Data Centres India Private Limited
Plot No. C 21 & C 36, G Block
Bandra Kurla Complex, Vidyanagari P.O.
Mumbai - 400 098
Maharashtra
INDIA

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**.

Scope:
Provision of Data Centre Services across 15 Locations in India.

Product Categories:
e-Business and Content Hosting; 9.6

Through an audit documented in a report, in accordance with QuEST Forum Code of Practice for TL 9000 Registrars and ISO/IEC 17021 Conformity Assessment - Requirements for bodies providing audit and certification of management systems, it was verified that the management system fulfills the requirements of the following standards:

TL 9000-V R6.2/R5.7 **ISO 9001 : 2015**

TL Id number	7104
Certificate registration no.	50251816 TL
Date of original certification	2016-03-29
Date of certification	2021-09-14
Valid until	2024-09-13

DQS Inc.

Brad McGuire
Managing Director

Accredited Body: DQS Inc., 1500 McConnor Parkway, Suite 400, Schaumburg, IL 60173 USA
Administrative Office: Deutsch Quality Systems (India) Pvt. Ltd., 5th Floor, Anjaneya Techno Park, 147, HAL Airport Road, Kodihalli, Bangalore - 560 017 - India

1 / 4

Our Certification For Sustainable and Green Data Center Initiatives

STTelemedia Global Data Centres

bsi ISO/IEC 27001 Information Security Management CERTIFIED

OPERATIONAL EXCELLENCE

bsi ISO/IEC 20000-1 Service Management CERTIFIED

OPERATIONAL EXCELLENCE

PCI DSS CERTIFIED BY NETWORK INTELLIGENCE Global cybersecurity provider

DATA SECURITY

bsi.

Certificate of Registration

INFORMATION SECURITY MANAGEMENT SYSTEM - ISO/IEC 27001:2013

This is to certify that:

STT Global Data Centres India Pvt. Ltd.
Mumbai - (BKC)
Plot C-21 & C-36, 'G' Block
Bandra Kurla Complex,
Mumbai 400 098
Maharashtra
India

Holds Certificate No: **IS 737629**

and operates an Information Security Management System which complies with the requirements of ISO/IEC 27001:2013 for the following scope:

Information Security Management System for Service Delivery and Support Operations of the Following Data Centre Services.
• Colocation Services
• Remote Hands Services in accordance with the latest Statement of Applicability

For and on behalf of BSI:

Theuns Kotze, Managing Director Assurance - IMETA

Original Registration Date: 2008-03-27
Latest Revision Date: 2023-03-31

Effective Date: 2023-03-27
Expiry Date: 2025-10-31

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This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.
An electronic certificate can be authenticated online.
Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone +91 11 2692 9000.
Further clarifications regarding the scope of this certificate and the applicability of ISO/IEC 27001:2013 requirements may be obtained by consulting the organization.
This certificate is valid only if provided original copies are in complete set.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.

bsi.

Certificate of Registration

IT SERVICE MANAGEMENT SYSTEM - ISO/IEC 20000-1:2018

This is to certify that:

STT Global Data Centres India Pvt. Ltd.
Mumbai - (BKC)
Plot C-21 & C-36, 'G' Block
Bandra Kurla Complex,
Mumbai 400 098
Maharashtra
India

Holds Certificate No: **ITMS 737630**

and operates an IT Service Management System which complies with the requirements of ISO/IEC 20000-1:2018 for the following scope:

The IT Service management system supporting the provision of the following data centre services in accordance with service catalogue
• Colocation services
• Remote Hands Services.
This is in accordance with the latest Service Catalogue.

For and on behalf of BSI:

Theuns Kotze, Managing Director Assurance - IMETA

Original Registration Date: 2008-03-27
Latest Revision Date: 2023-03-31

Effective Date: 2023-03-27
Expiry Date: 2026-03-26

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A Member of the BSI Group of Companies.

A PCI QSA Firm

NETWORK INTELLIGENCE

THIS

CERTIFICATE

OF COMPLIANCE

IS PRESENTED TO

STT Global Data Centres India Pvt. Ltd.

This is to certify that STT Global Data Centres India Pvt. Ltd. has been assessed by Network Intelligence Pvt. Ltd. & was found to be compliant with the PCI DSS version 3.2.1

Nature of the business:
Service Provider

Scope of Work:
Co-Location Services

Locations:

Mumbai-BKC : Plot C-21 & C-36, 'G' Block, Bandra Kurla Complex, Mumbai 400 098, Maharashtra, India
Mumbai-LVSB: Lokmanya Videsh Sanchar Bhavan, Kashinath Dhuru Marg, Opp. Kirti College, Prabhadevi, Mumbai – 400 028, Maharashtra, India.
Pune-Dighi DC1: Pune-Alandi Road, Dighi, Pune 411 015, Maharashtra, India
Delhi-CX1 DC1 & DC2: Broadband Tower (DC1) & Nextgen Tower (DC2), Opp. Savitri Cinema Flyover, Greater Kailash - I, New Delhi 110 048, India.
Chennai-DC3 (Ambattur): 226, Thiruvallur Satellite Earth Station, Red Hills Road, Kallikuppam, Ambattur, Chennai 600 053, Tamil Nadu, India.
Chennai-DC1 (VSB): Videsh Sanchar Bhavan, No. 4, Swami Sivananda Salai, Chennai – 600 002, Tamil Nadu, India.
Hyderabad-VSB: Videsh Sanchar Bhavan, CFC-1, Software Units Layout, Madhapur, Hyderabad 500 081, Telangana, India.
Gujarat-GIFT: Building No. 48, Data Centre Building, Gyan Marg, GIFT City, Gandhinagar 382 355, Gujarat, India.
Kolkata-VSB: Videsh Sanchar Bhavan, 1/1B, C.I.T Scheme VII-M, Ultadanga, Kolkata 700 054, West Bengal, India.
Bengaluru-DC3 (KIADB): #142, 143, 144 & 145-P, EPIP Industrial Area, Sy. No. 367, Hoodi Village, KR Puram Hobli, Whitefield, Bangalore - 560 066, Karnataka, India.
Bengaluru-DC2 (KIADB): #18, 19 & 20, EPIP Layout, KIADB, Whitefield, Bengaluru – 560 066, Karnataka, India

Date of Assessment: 13th October 2022 Valid till: 12th October 2023

Certification Number: STTG355131022

Vishal Gurule
PCI QSA

NETWORK INTELLIGENCE

STTelemedia
Global Data Centres