



# L&T-Cloudfiniti

A brand of Larsen & Toubro

## L&T Data Center & Cloud Services: Powering India's Digital Future

# Larsen & Toubro

**85**  
Years  
of Imagineering

 **50+**  
Countries

 **\$27Bn+**  
Annual Revenue

 **200,000+**  
L&Tites



# Evolution of L&T



During World War II, import challenges led L&T to manufacture dairy equipment locally, marking its entry into manufacturing

1940

1938

1950



Founded by Henning Holck-Larsen and Søren Kristian Toubro



Transformed into a public limited company from a partnership firm.

# Evolution of L&T



Larsen & Toubro Infotech Limited (LTI) was founded (1996)

1996



*L&T Technology Services*

L&T Integrated Engineering Services founded in 2006, rechristened as L&T Technology Services in 2012.

2006



1994



Larsen & Toubro Finance Holdings (LTFH) was founded (1994)



2000

L&T expanded globally, including in the Middle East and Asia-Pacific regions



Mindtree

Larsen & Toubro completed takeover of Bengaluru-based company Mindtree

2019

# Evolution of L&T



Divestment of E&A Business

2020



LTIMindtree became India's 5<sup>th</sup> largest by Market Cap.

Launched L&T Data Center and Cloud Services

Started L&T-SuFin and L&T EduTech

Divestment in L&T IDPL



Entered Green Energy Business

2023



Entered Semiconductor Business - Fabless

2022

Onwards

Journey Continues .....

# Global Recognitions



Forbes 2023  
World's Best  
Employer



No. 1 Middle East  
International  
Contractor  
(Head Quarter  
Outside China)



ATD BEST Awards 2024 in  
Talent Development



Stevie Award for  
Great Employers  
2023



Ranked 17<sup>th</sup> in Top  
International  
Contractors  
(Head-Quarter outside  
China)



Golden Peacock HR  
Excellence Award 2023

Great  
Place  
To  
Work<sup>®</sup>

Certified

FEB 2024 - FEB 2025

INDIA<sup>™</sup>

# MARQUEE PROJECTS



# World's Tallest Statue

182 Meters

Built in 33 months



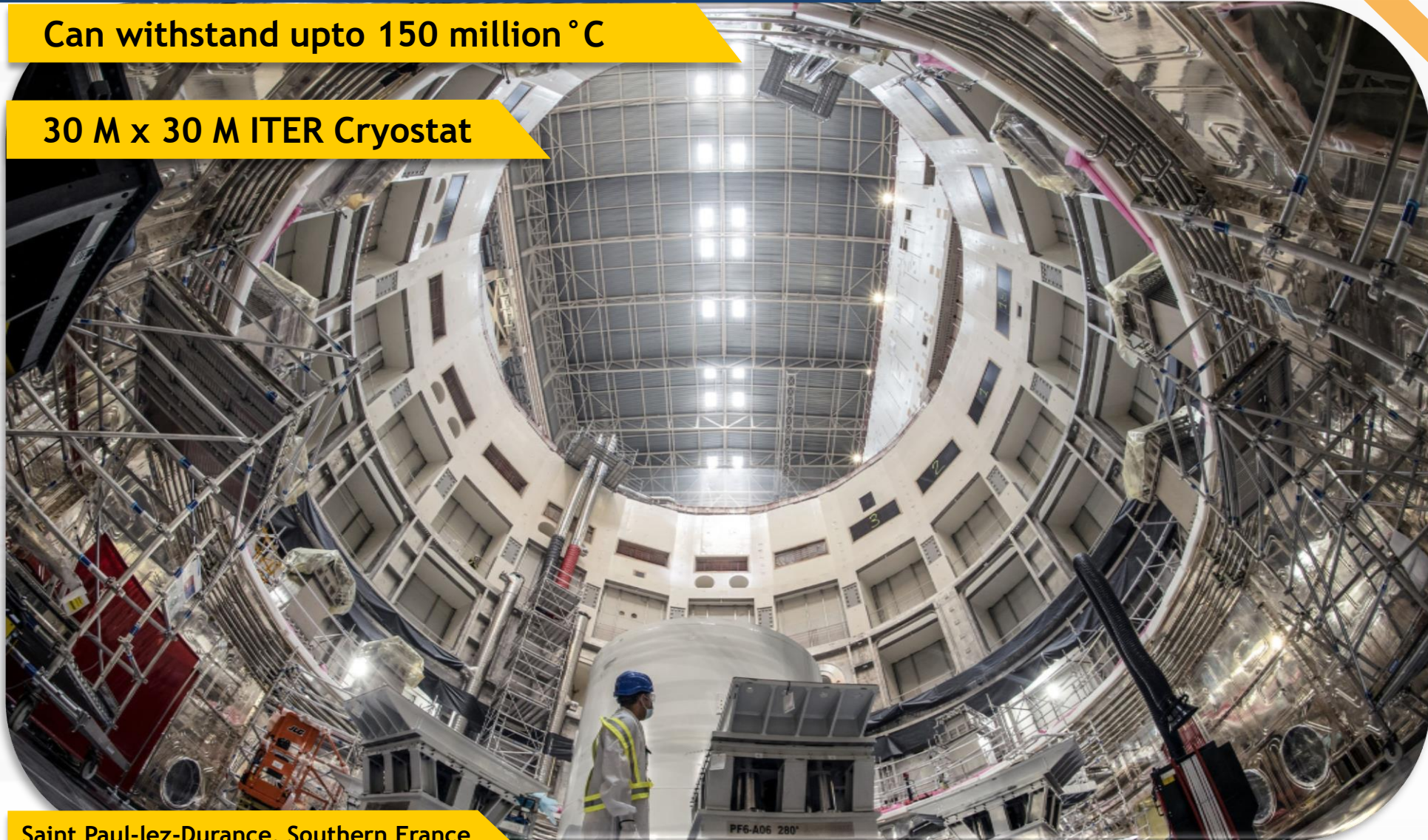
Gujarat, India



# World's Largest High-vacuum Pressure Vessel

Can withstand upto 150 million °C

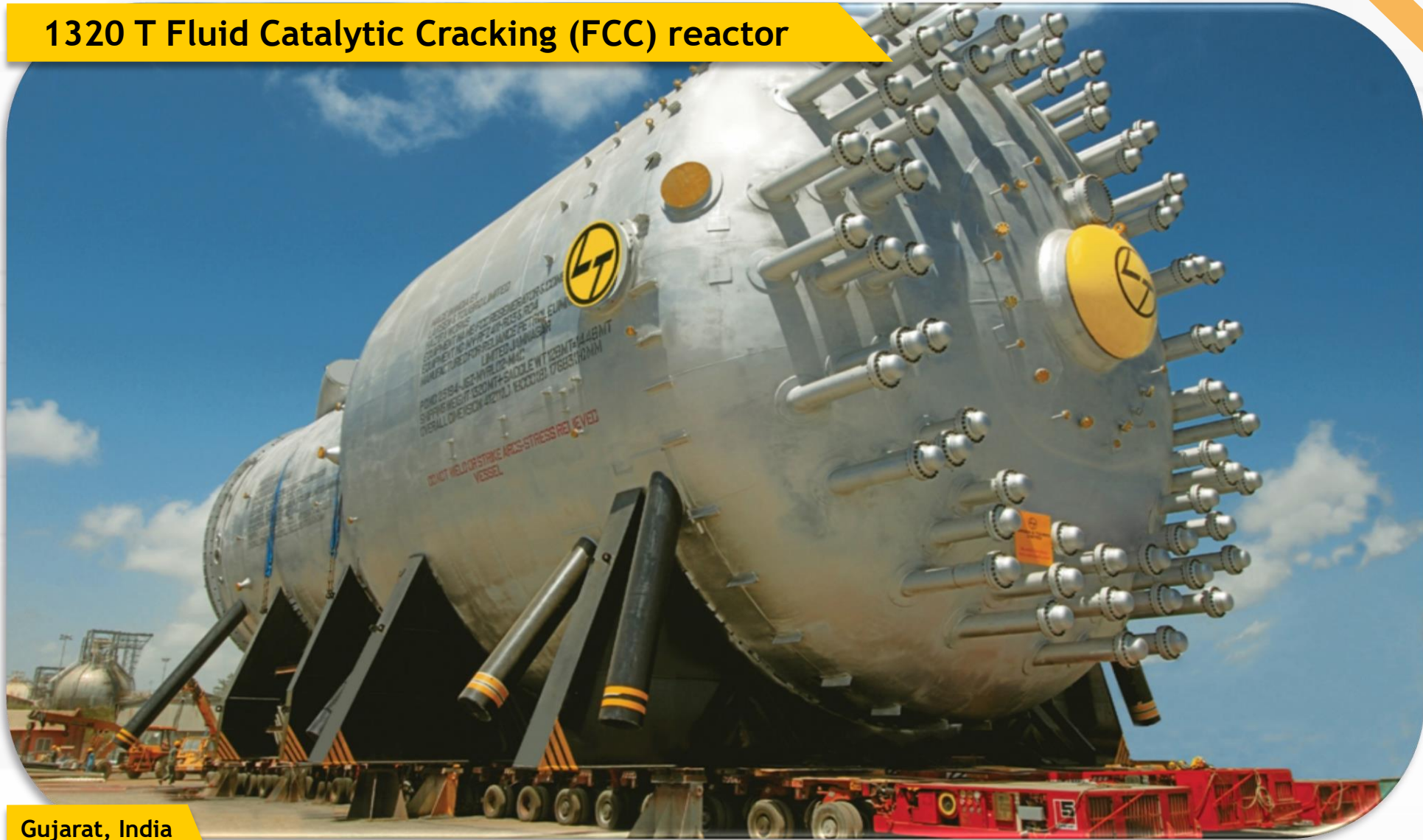
30 M x 30 M ITER Cryostat



Saint Paul-lez-Durance, Southern France

# World's Largest FCC Reactor

1320 T Fluid Catalytic Cracking (FCC) reactor



Gujarat, India

# World's Largest AI-based Crowd Management System

250 million pilgrims congregating across a 100 sq. km area - the Kumbh Mela 2019



Uttar Pradesh, India

# World's Longest Heated and Insulated Crude Oil Pipeline

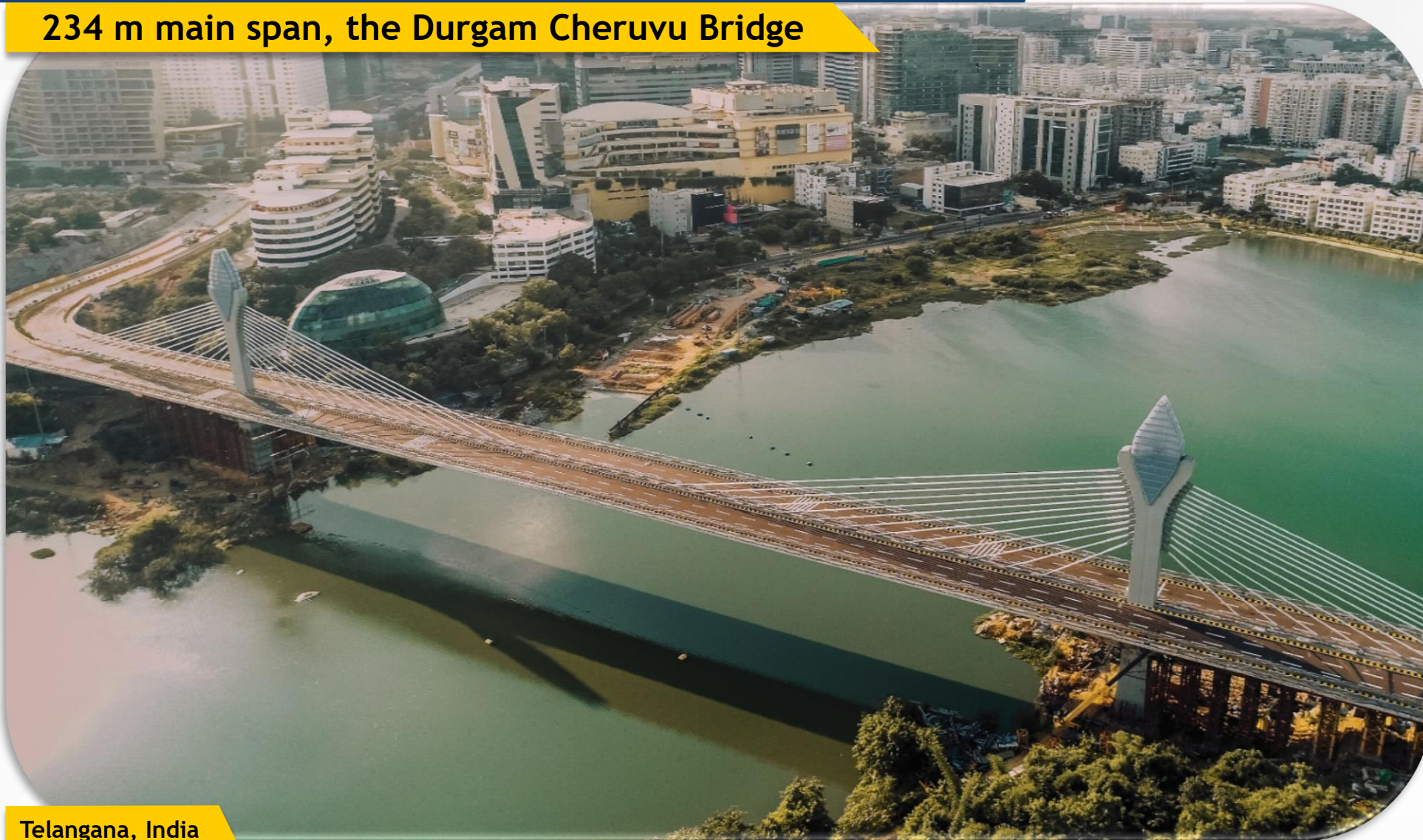
619 km long and 24" diameter



Rajasthan to Gujarat, India

# World's Longest Extradosed Bridge

234 m main span, the Durgam Cheruvu Bridge



Telangana, India

# World's Heaviest LC Max Reactors

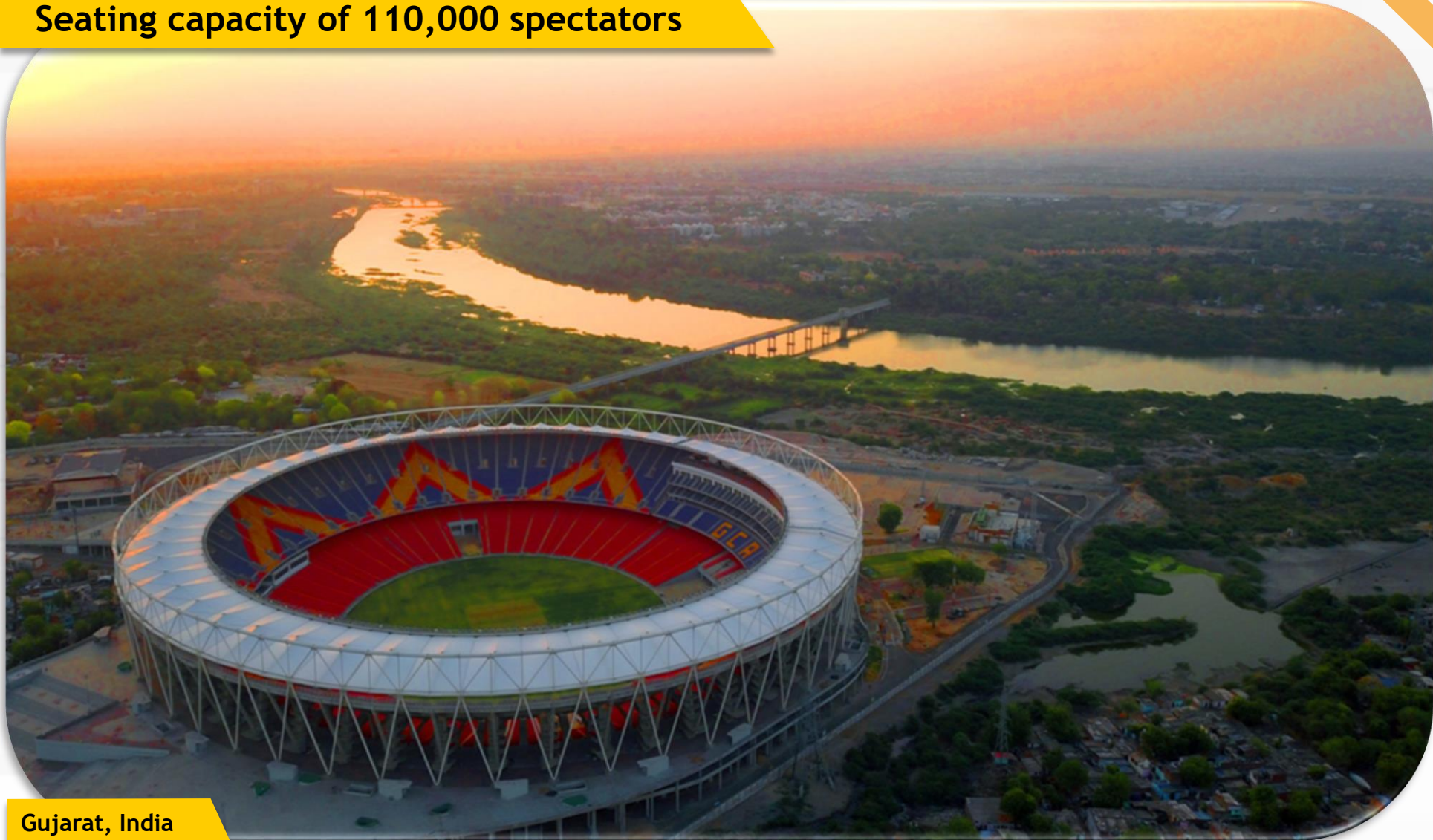
Weighing 2,313 tonnes



Andhra Pradesh, India

# World's Biggest Cricket Stadium

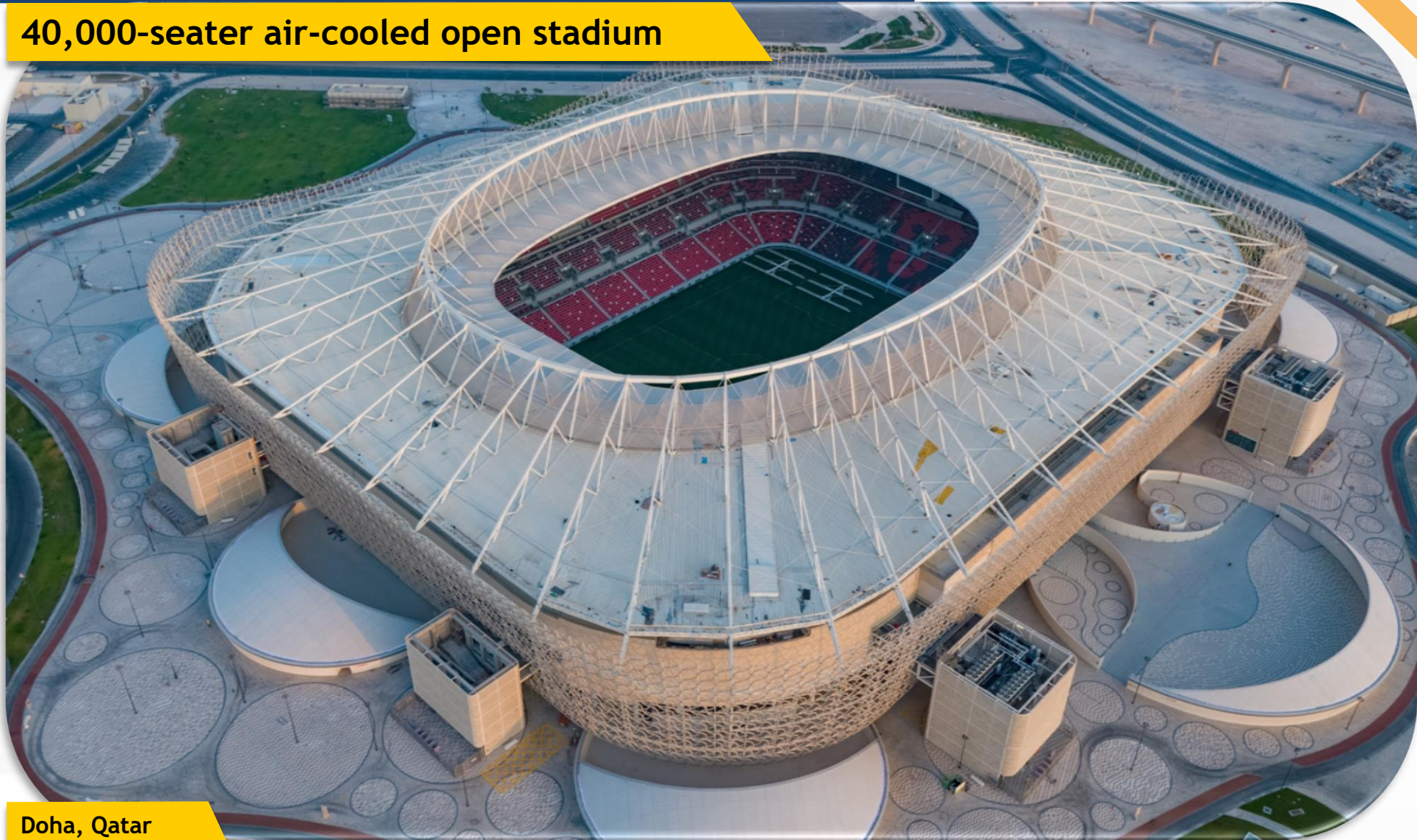
Seating capacity of 110,000 spectators



Gujarat, India

# Al Rayyan Stadium for the 2022 FIFA World Cup

40,000-seater air-cooled open stadium



Doha, Qatar





# Introduction to L&T Datacentre's

# Why L&T Data Center?



Deep Understanding  
Of The Indian  
Business Ecosystem



Proven Track  
Record In Executing  
Hyper Scale DC



Expertise In  
Providing End To  
End Managed  
Services



Strong Existing  
Relationships With  
Government  
Customers

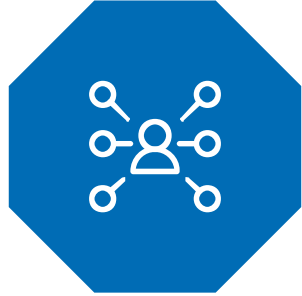


Consumption Of  
Green Energy To  
Power Up 70% Of  
Proposed Datacenter  
Capacity



Availability of Land  
Parcels

# L&T's Capabilities Across Datacenter Spectrum



**Buildings & Factories  
IC**

**Power Transmission &  
Distribution IC**

**L&T Technology  
Services**

**LTIMindtree**

1

2

3

4

**NATION BUILDERS**

Design & Build  
Infrastructure Space

**LEADING**

Power Infra Industry  
Including Renewables

**MANAGING**

Government Data Center For  
Critical Operations

**LEADING PLAYER**

IT / ITes & Cloud Services

**Legacy Businesses**

**Next-Generation Businesses**

# Data Centers Executed By L&T



# Redundant Infra to Achieve 99.999% Uptime

	CHENNAI	PANVEL
<b>POWER SOURCE</b>	N+N (Sriperumbudur SS and Kanchipuram SS from TANGEDCO)	N+N

	CHENNAI	PANVEL
<b>CHILLERS</b>	N+2 (Quick Start Chillers)	(N+1) CRAC Units

	CHENNAI	PANVEL
<b>TRANSFORMER</b>	N+N	N+1

	CHENNAI	PANVEL
<b>DG SETS</b>	N+1	N+1

	CHENNAI	PANVEL
<b>UPS BACKUP</b>	N+N	N+N



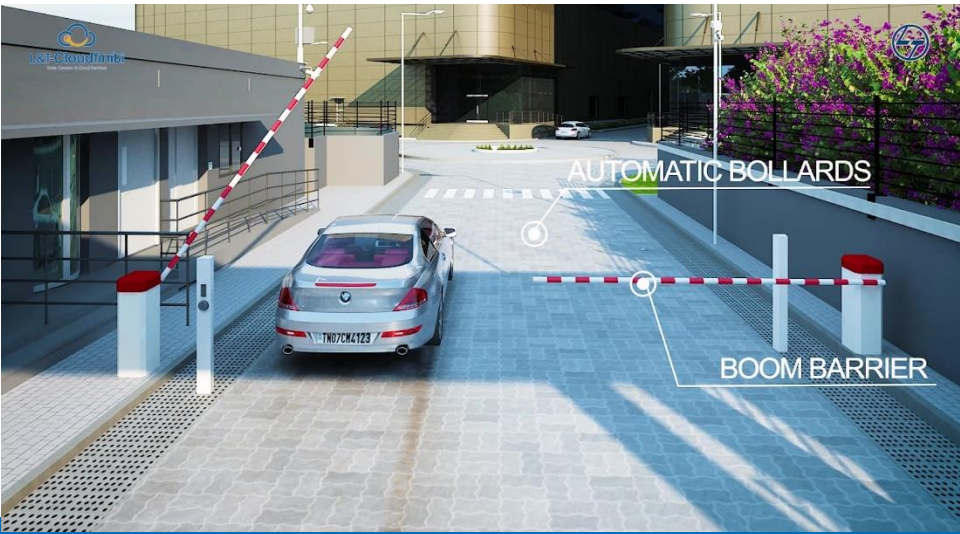
**L&T Panvel Datacenter**





CATEGORIES	PARAMETERS	PANVEL
Configuration	No. of Racks	285
	IT Load	2 MW
	Design PUE	1.5
Site Specifications	Building Floors	G+1
	Floor Loading	15 KN/m <sup>2</sup>
	Racks / Floor	285
	Height (Slab to Slab)	6 m
	Loading dock & Staging Area	Available
	Elevator No. & Capacity	1 x 3T

# Seven Layers Of Physical Security



- ✓ Perimeter Fencing
- ✓ Video Surveillance
- ✓ Boom Barriers
- ✓ Authorized Entry Only

- ✓ Physical Security
- ✓ Door Frame Scanners
- ✓ Digital Id Card
- ✓ Mantrap Entrance

- ✓ Lift Access Control
- ✓ Biometric Face Reader
- ✓ PIN 2-Factor Authentication
- ✓ Anti-Tailgating Facility





## L&T Chennai Datacenter



# Chennai Datacenter Facility Overview



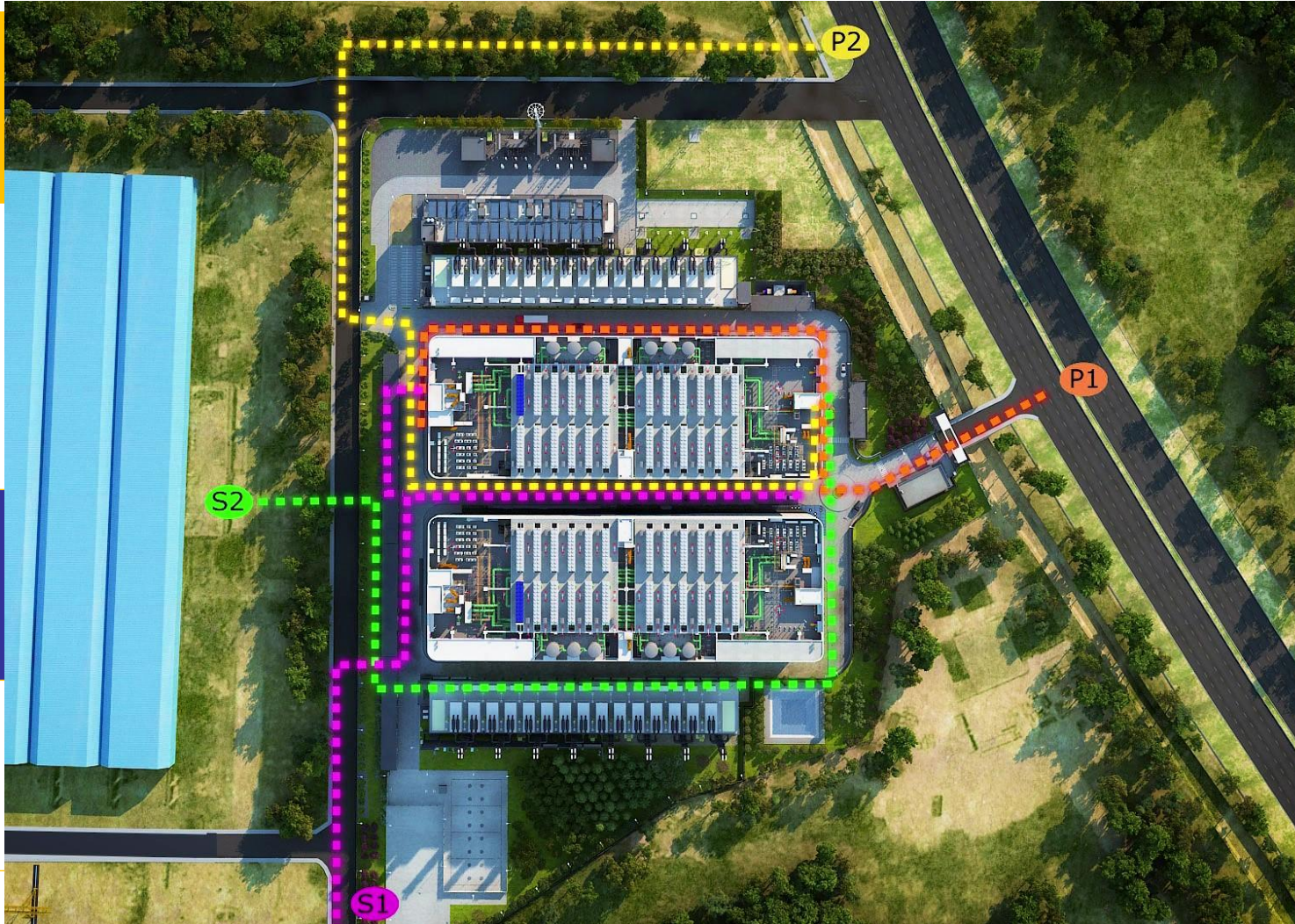
CATEGORIES	PARAMETERS	CHENNAI	
Configuration	No. of Racks	3000	
	IT Load	30 MW	
	Design PUE	1.5	
Site Specifications	Building Floors	G+5	
	Floor Loading	15 KN/m <sup>2</sup>	
	Racks / Floor	600	
	Height (Slab to Slab)	6 m	
	Loading dock & Staging Area	Available	
	Elevator No. & Capacity		2 x 4T
			2 x 20 pax

## Carrier Neutral Data Center

4 Independent Entry Points with Two Primary and Two Secondary Paths into Premises.

All Major Telcos available

Redundant Meet Me Room





## Power Supply & Sustainability Overview

- Dual Active 230 kV express feeders
- From two independent utility substations
- Redundant 230 x 11 kV captive gas insulated substation powers entire campus



## Fiber Connectivity:

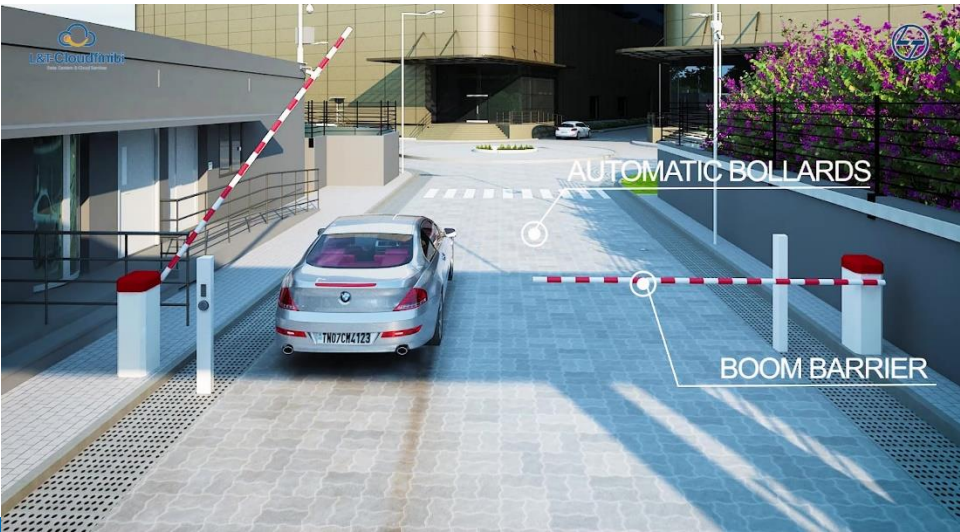
Four dedicated fiber paths for high-speed connectivity

## Infrastructure:

- ✓ Captive 230 kV gas-insulated substation
- ✓ DG for backup power
- ✓ HSD yard for fuel storage
- ✓ Water treatment plant for sustainable operations
- ✓ Sewage treatment plant for environmental responsibility



# Seven Layers Of Physical Security



- ✓ Perimeter Fencing
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Offering high power density racks from 12.5 kW to 80 kW, ensuring efficient and scalable solutions for all your data needs. Equipped with advanced cooling options such as direct liquid cooling for optimal performance.

## Cooling Technologies:

### 1. Direct Liquid Cooling:

Fluid circulates through plates on chips for effective cooling. Requires complex plumbing, common in high-performance computing.

### 2. Liquid Immersion Cooling:

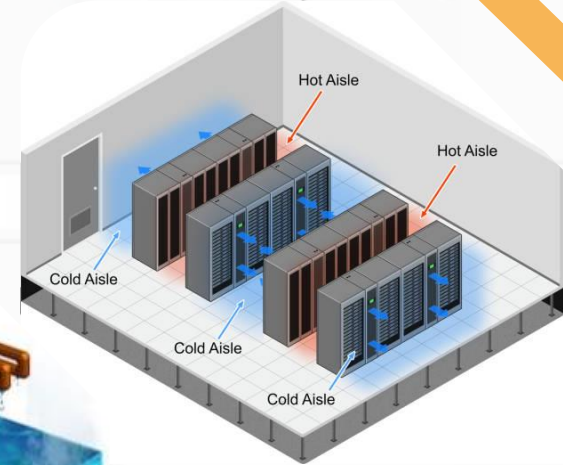
Servers are submerged in nonconductive fluid like mineral oil, enabling efficient cooling up to 100 kW with minor server modifications.

### 3. Rear Door Heat Exchanger (RDHx):

Coils in cabinet doors remove heat. Passive units cool up to 32 kW; those with fans handle up to 60 kW, eliminating hot and cold aisles.

### 4. In-Row Cooling:

Units between server racks provide targeted cooling, improving efficiency and reducing energy costs.




# Green Initiatives For Sriperumbudur Datacenter


## IGBC Platinum Certified Green Building

- 
- ✓ Natural Topography
  - ✓ Eco-friendly Refrigerant
  - ✓ Energy Management System
  - ✓ Green Products E-Waste Management


## Renewable Energy

- 
- ✓ Consumption Of Green Energy To Power Up 70% Of Proposed Datacenter Capacity
  - ✓ 60 KW Captive Solar Power – Roof Top Solar Street Lighting

## Net Zero Water System

- 
- ✓ Water Recharging Pits
  - ✓ Water Efficient Plumbing
  - ✓ Wastewater Treatment & Reuse

## Green Initiatives

- 
- ✓ Replanted 100+ Trees on Project Sites
  - ✓ Use of Triple Blend Mix Concrete – 40% Less Cement Consumption (less CO2 release)





The Power of AI  
**RE-IMAGINEERED**

Adapting to AI Using a High-Density Colocation Data Center with L&T-Cloudfiniti

**Beyond The Aisle –**  
Unlocking sustainable  
Liquid Cooling Technology

**High Density Powerhouse**  
Availability Of Flexible  
Power Density

**Sustainability At Its Core**  
Aiming to achieve a 70% green  
power feed

**Unmatched Scalability**  
Future growth &  
changing AI needs

**Reliable Connectivity**  
Connect your digital infrastructure  
at your fingertips

**Built To Suite - AI Ready**  
To host your Digital Infrastructure

**Unwavering Security**  
Your AI infra is safe with  
offered digital vaults



## AI at Scale

- ✓ Pure Infrastructure Play (BareMetal)

## Targeted Verticals



- ✓ Defence
- ✓ Media
- ✓ Government / Public Services
- ✓ Education & Research

AI

## Enterprise AI

- ✓ Software Play
- ✓ (Platform, Modelling, Industry Specific Solutions)

## Targeted Verticals



- ✓ BFSI
- ✓ Retail
- ✓ Healthcare
- ✓ Manufacturing

# Datacenter Certifications In Process



# L&T boosts AI, data centre ambitions with E2E Networks deal

Nehal Chaliawala, Shouvik Das | 4 min read | 05 Nov 2024, 10:07 PM IST



Budget 2024 Financial Literacy International Business Markets

## 21% stake in E2E Networks for

SHARE PRINT AA FOLLOW US

Larsen & Toubro (L&T) announced a significant investment of Rs 1,407.02 crore to acquire a 21% stake in cloud services provider E2E Networks Ltd. This strategic move aims to bolster L&T's presence in the rapidly expanding cloud ... Read More



NEW DELHI, Infrastructure major Larsen & Toubro (L&T) on Tuesday said it will acquire 21 per cent stake in E2E Networks Ltd, a cloud services company, for Rs 1,407.02 crore. The move assumes significance as it will increase L&T's reach in cloud and AI services -- the key growth areas in the

technology sector.

"The company has entered into an investment agreement on November 5, 2024

# Larsen & Toubro Networks for Rs 1,300 crore

The company will not acquire control in minority shareholder with certain prote

Share

# E2E Networks Limited Announces Strategic Partnership with L&T to Accelerate Cloud and AI Innovation for Indian Enterprises

November 05, 2024 at 12:29 am EST

E2E Networks Limited announced a strategic partnership with Larsen & Toubro. The partnership is a significant step towards adoption of GenAI solutions in India to foster a fundamental shift in the way Accelerated Computing on Cloud

PRESS RELEASE

## L&T Announces Strategic Partnership with E2E Networks to Accelerate Cloud and AI for Indian Enterprises

COtoday News Desk | 6 days ago



L&T to also acquire 21% equity in E2E Networks

Larsen & Toubro (L&T), India's premier tech-led conglomerate, has announced a strategic partnership with E2E Networks, an Indian Cloud and AI Cloud provider. The partnership is a significant step towards the adoption of GenAI solutions in India to foster a fundamental shift in the way Accelerated Computing on Cloud is used by Indian organisations. The transformative journey for organisations in AI adoption is a fundamentally different approach to implementing GenAI software solutions using Cloud GPUs to utilise an organisation's deep learnings to deploy and evolve production-grade self-adapting AI Software. L&T will also

THE ECONOMIC TIMES | tech  
English Edition • | 11 November, 2024, 03:05 PM IST | Today's ePaper

## Larsen & Toubro Engineers Rs 1,300 crore ladder to the cloud



# L&T Announces Strategic Partnership with E2E Networks

THE HINDU BUREAU

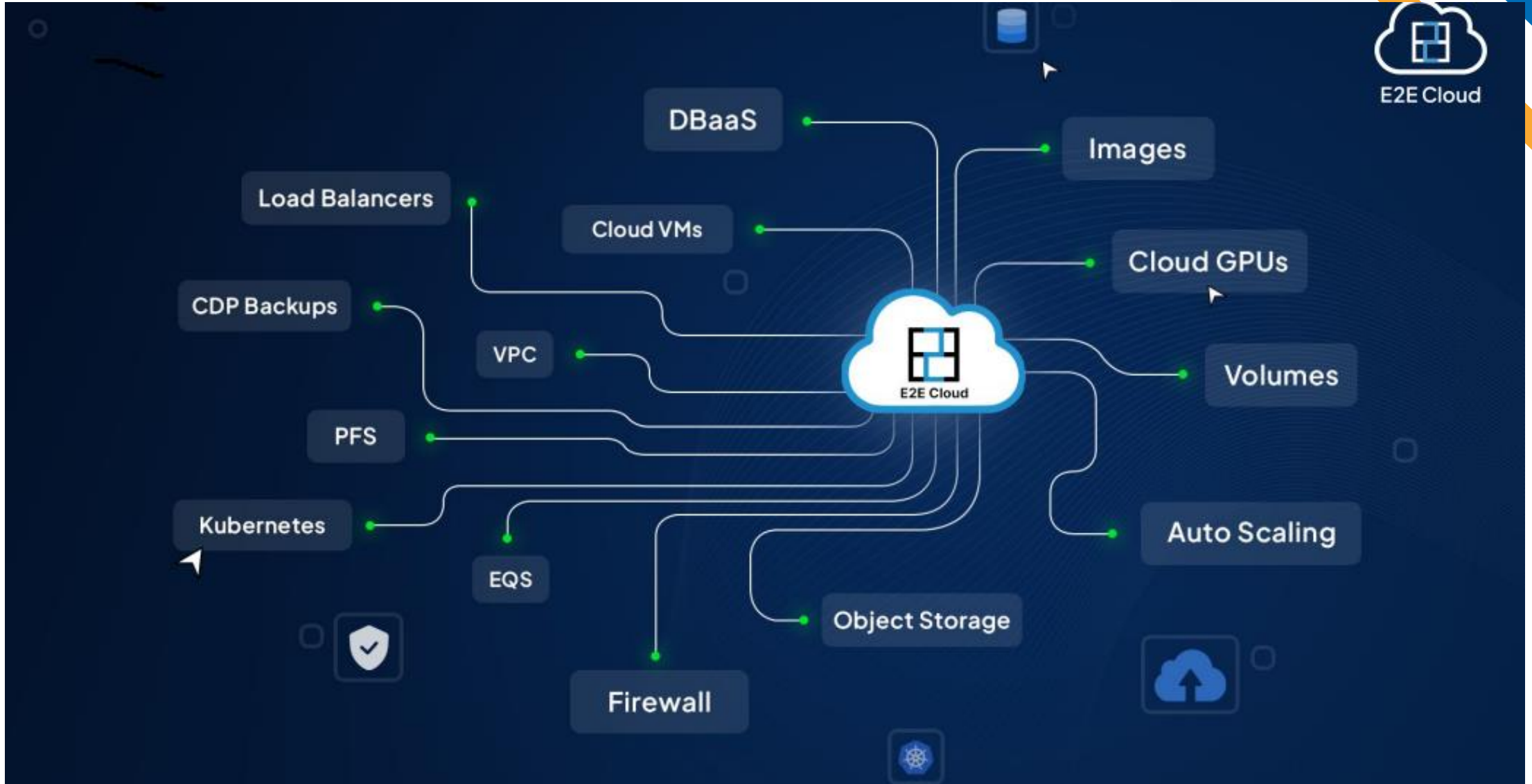


L&T will integrate E2E Networks' Cloud and AI Cloud platform with its expertise in data centre management and cloud solutions to cater to the startups and enterprises. | Photo Credit: Reuters



# How L&T and E2E Strategic Partnership Service Offerings







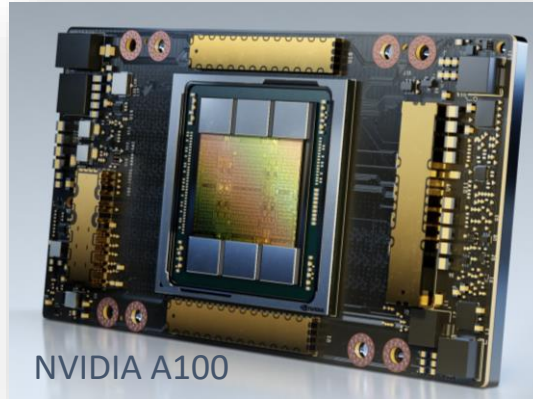
# Leveraging NVIDIA GPUs for your AI/ML workloads





# GPU Market-trend and Roadmap

Current trend shows most of the CSPs and Hyperscalers are offering NVIDIA A100, L40, L40 S, A2 Tensor, A10 Tensor, A16, A30, A40 as their GPU as a Service



H200 has shown better performance with 141 GB Memory, 4.8TB/s Memory Bandwidth, NVLink®: 900GB/s and PCIe Gen5: 128GB/s

What latest products we are offering is NVIDIA H200, which will transform your GPU based AI/ML Journey

*With all these technological advancements H200 GPU further benefits us over and above old generation GPUs in the following ways.*

## 1. Faster Inference for Large Language Models (LLMs)

The H100 struggles with slower inference speeds when running large models like GPT or Llama2, which can hinder real-time applications. The H200 fills this gap by delivering up to 2x faster inference, reducing latency and improving responsiveness for customer-facing AI.

## 2. Increased Memory Capacity for Deep Learning

With 80GB of memory, the H100 limits the size and complexity of models that can be deployed. The H200 overcomes this limitation with 141GB of HBM3e memory, enabling larger, more complex models to run seamlessly without memory bottlenecks.

## 3. Higher Bandwidth for Real-Time Processing

The H100's 3.35 TB/s bandwidth can restrict performance in high-resolution image and video processing. The H200 addresses this shortfall with 4.8 TB/s of bandwidth, a 43% increase that accelerates data handling and boosts throughput for demanding real-time workloads.

## 4. Improved Multi-Instance Capacity for Concurrent Workloads

While the H100 supports up to 10GB per Multi-Instance GPU (MIG), this can be limiting for running multiple tasks simultaneously. The H200 increases this capacity to 16.5GB per MIG, enabling more efficient concurrent processing and improved performance on large data tasks.

## 5. Enhanced Energy Efficiency for HPC

The H100's high power usage raises the total cost of ownership (TCO) in power-intensive applications. The H200 is designed with up to 50% lower energy consumption, reducing operational costs and supporting sustainability goals in high-performance computing.

# L&T TECH ACQUIRES CALIFORNIA-BASED AI SOFTWARE FIRM, INTELLISWIFT

Expands footprint in Hyperscalers and big tech spenders

The acquisition aims at enhancing L&T Tech's AI and software capabilities through:

- Industry leading software product development, data & platform engineering capabilities
- Intelliswift's AI-led automation framework which provides end-to-end automation solutions across platforms and processes.
- Digital enterprise & Integration services through agile engineering and next generation technologies



**IF YOU CAN  
DREAM IT,  
WE CAN DO IT.**

**Thank You**

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<https://lntcloudfiniti.com/>