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portation Infrastructure	10
y Civil Infrastructure	14
er Transmission & Distribution	20
r & Effluent Treatment	24
llurgical & Material Handling	28
t World & Communication	30

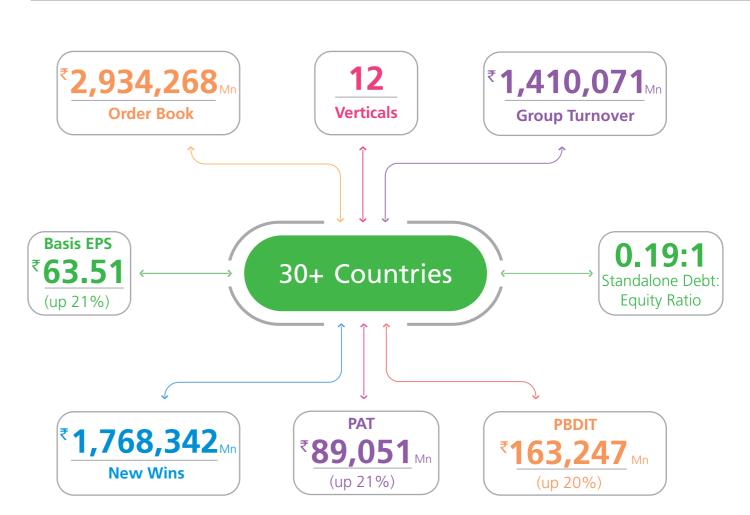
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er Plants & Equipment	40

y Engineering	44
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L&T at a **Glance***







A. M. Naik Group Chairman



S. N. Subrahmanyan CEO & Managing Director



R. Shankar Raman Whole-time Director & Chief Financial Officer



D. K. Sen Whole-time Director & Sr. Executive Vice President (Infrastructure)

Subramanian Sarma Non-Executive Director, L&T CEO & Managing Director (L&T Hydrocarbon Engineering)



M. V. Satish Whole-time Director & Sr. Executive Vice President (Buildings, Minerals & Metals)



Hasit Joshipura Sr. Vice President & Head Electrical & Automation

S. N. Roy Whole-time Director & Sr. Executive Vice President (Power)



J. D. Patil Whole-time Director & Sr. Executive Vice President (Defence, L&T-NxT)



*Figures for FY 19

CONSTRUCTION

- **Buildings & Factories** Transportation Infrastructure
- Heavy Civil Infrastructure
- **Power Transmission & Distribution**
- Water & Effluent Treatment
- Metallurgical & Material Handling
- Smart World & Communication
- L&T GeoStructure

Ranked among the world's top 15 contractors, L&T Construction contributes significantly to building the image and stature of Larsen & Toubro across the world and driving L&T's reputation as 'the builder of the India of the 21st century'.

Many landmark projects in India – and increasingly overseas – bear L&T Construction's indelible stamp of excellence - reflecting a track record spanning over eight decades.

The multiple businesses of L&T Construction have distinct but complementary capabilities, addressing different segments of infrastructure and industry.

L&T Construction executes projects on a turnkey basis, with single-source responsibility, adopting innovative design engineering and a global supply chain. Digitalization, mechanization and the ability to mobilise large, highly-trained crews, enable it to meet stringent deadlines and rigorous standards.

At every project site and establishment of L&T Construction, the highest priority is accorded to the environment, health and safety. A safe work culture is intensively propagated to conform to – and even surpass – international standards.

Buildings & Factories

The expertise of this business vertical lies in offering 'turnkey solutions', right from 'concept to commissioning' across the entire spectrum of urban infrastructure. Powered by dedicated engineering design centres, competency cells, advanced formwork systems, mechanised project execution, a wide network of consultants and vendors, digitized project control and a talented pool of employees, the business is an industry leader in its space in India and in targeted markets overseas.

Key Offerings:

Airports
Hospitals
Stadiums
Hotels
Institutional spaces
IT parks and office buildings
High-rise structures
Mass-housing complexes
Factory structures and cement plants



ICC Towers, Mumbai

Statue of Unity, Gujarat – The world's tallest statue at 182 m

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New Orders				
20 Projects				
4	Airports		1	Elite Housing
3	Hospitals		1	Mass Housing
4	Public Spaces		2	IT & Office Spaces
5	Factories			



Bengaluru International Airport

Ford Global Business Centre, Chennal





Government Medical College, Odisha

Hero Factory, Halol, Gujarat

Transportation Infrastructure

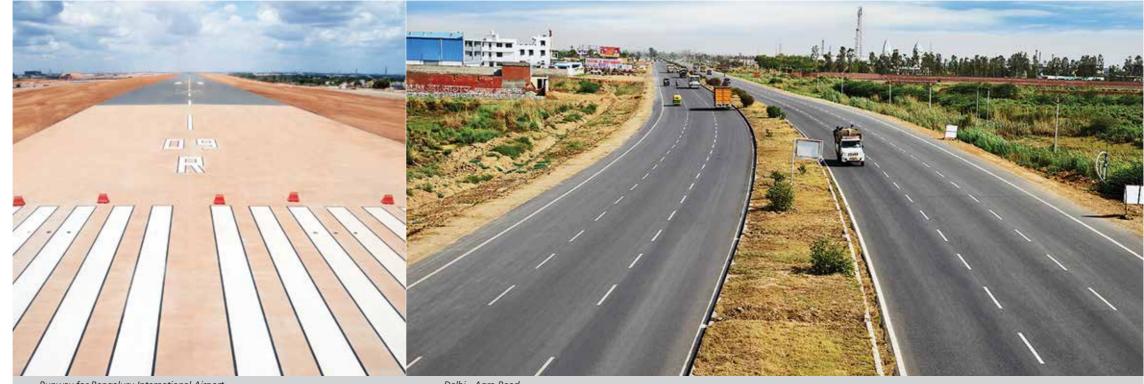
Well-diversified in terms of its product range, the Transportation Infrastructure business leverages its vast experience in Project Management, Engineering Design and Construction Management, to achieve operational efficiency in mega-scale projects spread across India and in targeted geographies overseas.

Key Offerings:

Roads	
Elevated Corridors	
City Infrastructure (Transportation)	
Runways (Airside Construction)	
Railway Construction	
Railway Systems	
Dedicated Freight Corridors	
Integrated Transit Systems (LRT/ Monorail)	



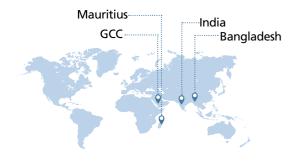
Overhead Electrification for Delhi Metro



Runway for Bengaluru International Airport

Delhi - Agra Road

Key Geographies





8,800 Lkm3.62 Mn. sq. m.HighwaysRunways2,469 Tkm5,701 TkmTrack ConstructionElectrification	Ongoing Projects			
2,469 Tkm 5,701 Tkm	8,800 Lkm 3.62 Mn. sq. m.			
	Highways	Runways		
Track Construction Electrification	2,469 Tkm	5,701 Tkm		
	Track Construction	Electrification		





Completed section of the Western Dedicated Freight Corridor

A section of the 13 km Phase 1 of the Mauritius Metro

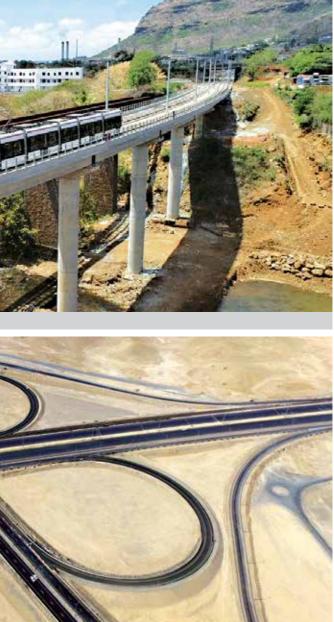


Al Mafraq-Ghweifat Highway, Abu Dhabi

Al Batinah Expressway Interchange, Oman

Commissioned Projects





Heavy Civil Infrastructure

The Heavy Civil Infrastructure business vertical of L&T Construction undertakes design, engineering and construction of projects in several segments that are crucial to the economy.

The business' in-house design strengths and unique construction methodology cells provide competent concept-to-commissioning solutions to meet the complex requirements of its customers.

Key Offerings:

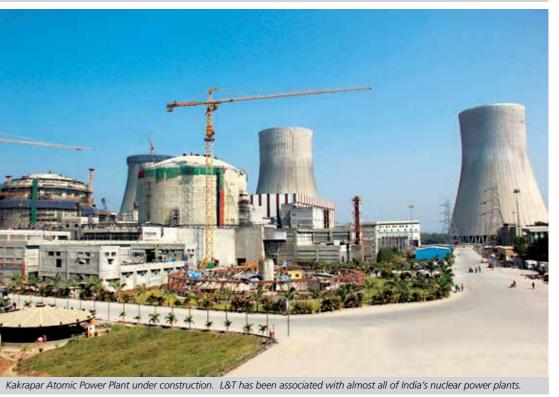
Metros
Nuclear Plants
Hydel Projects
Ports
Special Bridges
Tunnels
Defence Infrastructure



The Mumbai Trans Harbour Link being built by L&T will be India's longest sea-bridge, when completed.



One of the underground tunnels of the Mumbai Metro project







New Orders

5 Projects

2

Underground Metro Projects

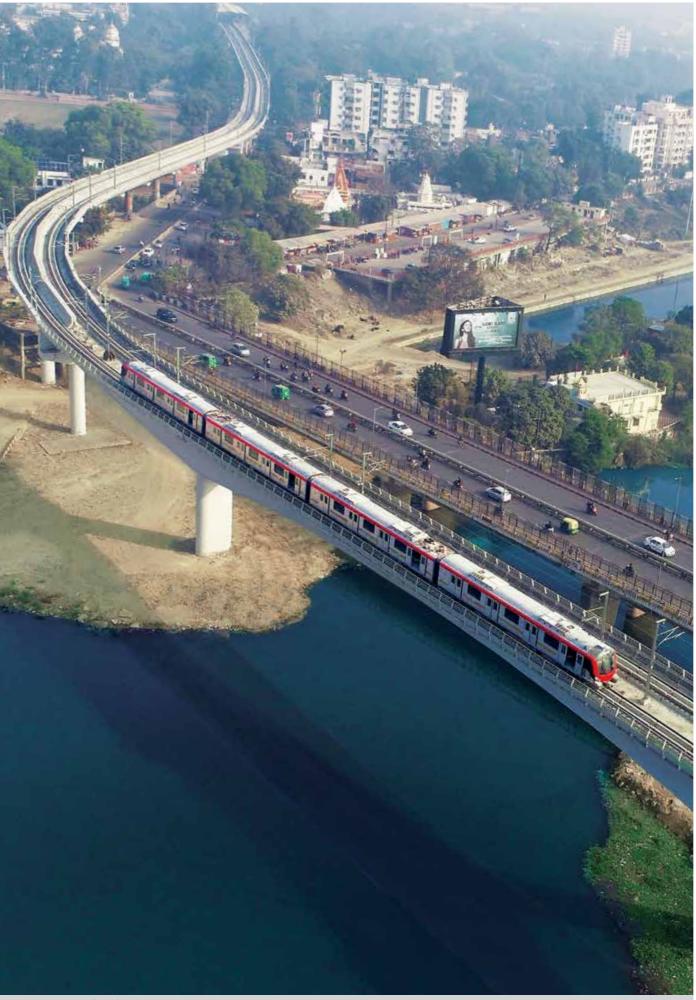
Coastal Road Projects

Thane Creek Project

2

1

9.76 km Kachhi Dargah Bridge across river Ganga in Bihar, once completed, will be one of the longest extradosed river bridges in India





Track Record				
18.5 km of Cable-stayed bridges	33 km of Railway Bridges	46 km of Road Bridges	8,080 mw of Reactor Containment Structures	315 km of Metro Projects (including on-going jobs)
8,315 mw of clean and green power	90 km of tunnelling in difficult Himalayan terrain	12 km Dams / Barrages / Weirs	7 Powerhouses (including both underground and surface structures)	200 m below ground level – one of the largest LPG underground storage caverns of its kind, and the first of its kind in South Asia
5 Greenfield Ports commissioned	43.83 kms of Breakwater/ Rock Structures	8 km of Berthing Structures	3 Shipyard Structures	

One of the stations of Riyadh Metro



Depot at Riyadh Metro

1.6 km Medigadda Barrage, Telangana, was built in a record 24 months

Power Transmission & Distribution

A leading EPC player in the field of power transmission and distribution and solar energy, this business vertical offers integrated solutions and endto-end services encompassing design, manufacture, supply, installation and commissioning. Its unique in-house capabilities include one of the world's largest tower manufacturing and testing stations and a proprietary tracker mechanism.

Key Offerings:

Transmission Lines
Substations
Underground Cable Networks
Distribution Networks
Power Quality Improvement Projects
Solar PV Plants
Battery Energy Storage Systems
Mini / micro-grid Projects





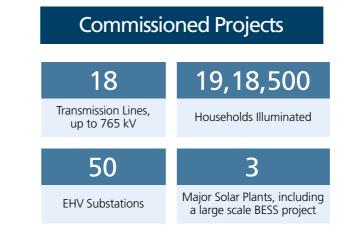




Value: ₹ 210,000 Mn

Overall order value combining both domestic and global orders









220 kV Uttarakhand Transmission Line



22 MWp HFE Solar PV, Karnataka

Track Record 770 **34,200** ckm Substations Including India's First **1200** kV AIS and **765** kV GIS of Transmission Lines **1,36,200** Habitations Electrified Over 2 GWp of Solar Plants

Water & Effluent Treatment

L&T's Water and Effluent Treatment business' range of offerings includes creating world-class water infrastructure covering virtually every area of the Water, Irrigation & Wastewater spectrum – powered by in-house detailed engineering, process knowhow and impeccable project management skills.

Key Offerings:

Urban and Rural Water Supply
Water Treatment Plants
Wastewater Treatment and Collection Network
Industrial Water and Effluent Treatment
Desalination Plants
Micro and Lift Irrigation Projects
Integrated Infrastructure Development
Water Management



48 MLD Water Treatment Plant, Gadag, Karanataka



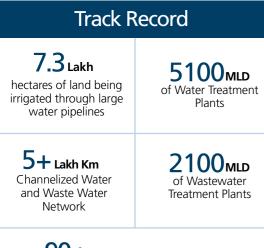
55 MLD Sewage Treatment Plant, Nellore, Andhra Pradesh

250 MLD Water Treatment Plant, Nagaur, Rajasthan





Value: ₹ **25,000** cr



90+ Million people benefitted





10.6 MLD Water Treatment Plant, Bagidora, Rajasthan





Pump house for Mohanpura Lift Irrigation Project, Madhya Pradesh

Metallurgical & Material Handling

L&T's Metallurgical & Material Handling business is a leading EPC solutions provider in the fields of minerals, metals and bulk material handling for large industrial, steel and aluminium complexes, associated facilities and the mining industry. The business offers integrated solutions for a wide range of systems and equipment, powered by in-house design, engineering, manufacturing, construction and commissioning capabilities.

Key Offerings:

Mineral Beneficiation

Iron and Steel Making

Aluminium, Zinc and Copper Refiners and Smelters

Specialty Conveyors

Material Handling & Mining Equipment

Key Geographies





Bucket Wheel Stacker Reclaimers at Adani Dhamra Port – DPCL

LSAW Pipe Mill Project, UAE



Coke Oven Battery

KSM-404 Largest Surface Miner in Indian Coal Mines at Gevra, Chhattisgarh - Manufactured by L&T at Kansbahal



Commissioned Projects

4	2	2
Steel Plants	Beneficiation Plants	Material Handling Plants
5	4	2

Track Record

8 Blast Furnaces	24 Million Tonnes of Iron Making	6 Coke Ovens
3 Steel Melt Shops	4 Hot Strip Mills	13 Mineral Beneficiation Plants
8 Al/Zn Smelter Refinery Plants	92 Material Handling Plants	445 _{km} of Conveyors
132 Stockyard Equipment	118 Wagon Tipplers	8 Ash Handling Plants
1,000+ Crushers	21 Sand Plants	65 Surface Miners

Smart World & Communication

With the Smart City Mission gaining momentum, the Smart World & Communication business is well-positioned to be a key Master System Integrator (MSI) to manage smart city projects, end-to-end. The business has expertise in the areas of city surveillance, intelligent traffic management systems, transport and logistics, OFC cabling, communication networks including backbone, telecom infrastructure, smart governance and education, critical infrastructure and smart city development.

The business has already ventured into the area of next-gen technologies and is creating solutions in the areas of Artificial Intelligence, Picture Intelligence, Facial Recognition, Cyber Security and first-oftheir-kind Emergency Response Systems like Hybrid Dial-100 and Early Warning Dissemination. It has also created and implemented a gamut of Use Cases based on advanced analytics to improve the quality of life of citizens.

Key Offerings:

Security Solutions Communication Technology Smart Cities



Command & Control Centre, Prayagraj – L&T rose to the challenge of effectively managing the world's largest religious gathering by integrating a range of smart technologies.





High	lights
20,000+ WiFi Access Points	30,000+ CCTV Cameras
400+ ANPR/RLVD	300+ Variable Messaging Displays
30	0+

Adaptive Traffic Control Systems

New Orders19 Projects3Communications Projects1e-education System

Commissioned Projects

11 Pr	rojects
Smart Infra	Communications
4 Smart Cities	2 Metros
Surveillance & Command Control Centres	Smart metering
	2 Data Centres
	EWDS

Track Record

- India's first AI-based crowd management at the Kumbh Mela – the world's largest religious gathering
- Disaster management of Cyclone Fani
- India's largest CCTV-based surveillance system (Mumbai)
- Digital connectivity to 12000 Gram Panchayats
- India's first smart city (Jaipur)
- Technology Innovation Centre
- Surveillance and intelligent traffic management systems in major cities
- Jharkhand State Wide Area Network 2.0
- Largest roll-out of smart meters for EESL
- Metro communication systems



L&T GeoStructure

Specialised in executing projects across sectors comprising Elevated & Embedded Retaining Structures, Ground Improvement Works, Marine Structures, Deep Foundation-supported Bridges and Intake Structures, this entity provides breakthrough 'Design & Build' solutions. It has sophisticated ground engineering equipment to execute challenging projects, both in terms of complexity and time.

Key Offerings:

Marine Structures
Multi-cellular Intake Structures
Composite Dams
Basement Structures
Cut-off Walls
Large Diameter Bored and Driven Piles
Stone Columns and Vibro-compaction Works





Reverse Circulation Drilling (RCD) rigs in operation at MTHL, Mumbai



Multi-modal terminal at Sahibganj, Jharkhand

EPC PROJECTS

Hydrocarbon

Power Plants & Equipment

From offshore oilfields to power plants, L&T's range of EPC solutions are powered by an array of unmatched in-house design-to-delivery capabilities.

Larsen & Toubro has acquired a high degree of expertise in undertaking projects of unprecedented scale, scope and sophistication on an EPC (Engineering-Procurement-Construction) basis for the entire hydrocarbon engineering spectrum, as well as power plants and equipment. L&T collaborates with global majors for the design and execution of projects, and is making its mark in the EPC world.

Hydrocarbon

L&T Hydrocarbon Engineering Limited (LTHE), a wholly-owned subsidiary of Larsen & Toubro, provides integrated 'design-tobuild' engineering and construction solutions to offshore and onshore hydrocarbon projects, worldwide.

The Company's track record includes simultaneous execution of multiple, complex, large-value projects, meeting stringent delivery schedules, quality and safety norms. In-house capabilities are complemented by partnerships with global leaders.

Competitive strengths in project management, engineering, procurement, fabrication, manufacturing, construction, installation and commissioning, combined with best-in-class HSE standards, enable the Company to consistently deliver on all parameters.

Safety as a core value:

- 74 million LTI-free construction man-hours at a stretch
- Zero LTI status in 31 projects under execution and at 3 modular fabrication facilities
- Best safety performance with lowest ever LTI frequency rate of 0.02
- Received 29 HSE awards from prestigious institutes and esteemed clients across the globe

Key Businesses:

Onshore Construction Services Modular Fabrication AdVENT^	Offshore
Modular Fabrication	Onshore
	Construction Services
AdVENT^	Modular Fabrication
	AdVENT^

^ Advanced Value Engineering & Technology



40,000 MTPA Melamine Plant for Gujarat State Fertilizers & Chemicals, Vadodara, India

Key Geographies





^ Advanced Value Engineering & Technology

The heaviest, fully integrated gas platform in Saudi Aramco's history, installed by float-over method for Hasbah II



Offshore

LTHE undertakes FEED and EPCIC projects encompassing the entire hydrocarbon value chain – from oil & gas production to processing. LTHE has comprehensive engineering capabilities spanning the complete project life-cycle, while its in-house fabrication facilities at three strategic locations impart flexibility in project control and cost-competitiveness. LTS 3000, a heavy-lift-cum-pipelay vessel and LTB 300, a pipelay-cum-work barge help expedite offshore installations, ensuring on-time completion of projects.

Key Offerings:

Process Complexes and Wellhead Platforms Gas Compression Modules Subsea Pipelines and Systems Brownfield Projects Living Quarters FPSO Modules and Jack-up Rigs Decommissioning

Onshore

The Company has in-house FEED, process and detailed engineering, procurement, fabrication, construction and commissioning (EPCC) capabilities built over three decades, delivering execution excellence to its global customers. The Company has experience in executing projects based on technologies from leading global Process Licensors and also executes projects on a License + EPCC package basis, depending on client requirements.

Key Offerings:

Upstream Oil & Gas Processing and Treatment Facilities

Petroleum Refining Projects

Fertiliser Projects

Petrochemical Projects

Cross-country Pipelines and Terminals

Cryogenic Storage Tanks and Regasification Terminals

Coal / Pet-coke Gasification



Neelam Re-development & B-173 AC Project executed for ONGC, on EPCIC basis



Gathering Centre (GC 30) for Kuwait Oil Company (KOC)

Track Record

	w Process tforms	80	Wellhead Platforms
	s mpression odules		O+ km Pipelines
	k-up Rigs Turbished	214	Platform Modifications
8 FPS (En	iO Topsides gineering)	9	Living Quarter Modules

2 Deepwater Projects

Track Record50+Petroleum
Refining Units21Oil & Gas
Processing
Projects11Petrochemical
Complexes9Petrochemical
Units6,500+
Cross Country Pipelines10Oil & Gas
Terminals9Syn Gas &
Ammonia Projects9Cryogenic
Storage Systems

83 Cracking Furnaces and Reformers

Modular Fabrication Services

The Company offers comprehensive Modular Engineering, Procurement and Fabrication solutions for offshore and onshore projects.

Our world-class modular fabrication facilities at Hazira and Kattupalli (India) and Sohar (Oman) – with an annual fabrication capacity exceeding 200,000 MT – are accredited with global certifications and pre-qualifications from oil & gas majors.

Equipped with load-out jetties for worldwide dispatch of large, heavy modules, they provide the advantage of flexibility and effective project control and management, ensuring robust QHSE and timely delivery.

Key Offerings:

Offshore Structures and Modules for Oil & Gas Projects

Onshore Structures and Modules including Pre-assembled Units, Pipe Racks and Manifold Modules.

Modular Speciality Furnaces

Refinery and Petrochemical Plant Equipment

Foundations and Structures for Offshore Wind Farm Projects

Construction Services

LTHE offers turnkey construction of refinery, petrochemical, chemical and fertilizer projects, gas-gathering stations, oil & gas terminals and field development, including storage tanks and underground cavern storage systems for LPG, and cross-country hydrocarbon pipelines.

The Company offers innovative construction solutions with cutting-edge technology. It has a large asset base of construction equipment and has an impressive track record in providing customized solutions in heavy lifting.

Most projects executed are in excess of 10 million construction man-hours, with two projects in excess of 100 million construction man-hours.



Six Gas Production Modules and two mega Tie-in Platforms (7000 MT each) for Hasbah II fabricated at LTHE's Oman Facility



Construction of the world's largest Pet Coke Gasification Complex and Refinery Off Gas Cracker for Reliance Industries at Jamnagar, India

Key Offerings:

Site Development and Pile Foundation Complete Civil and Structural Work

Plant and Non-plant Buildings

Piping and Mechanical Erection

Electrical & Instrumentation

Tankages including Firefighting Systems

Laying of Cross-country and In-field Pipelines



48" x 118 km-long Crude Transit Line from North Kuwait to Central Mixing Manifold for KOC

Advent (Advanced Value Engineering & Technology)

The erstwhile Engineering Services vertical has been restructured into a specialized vertical - 'AdVENT' to offer customer-centric solutions for the entire value chain of the Hydrocarbon industry and emerging industries, while addressing the specific needs of the changing energy sector.

Leveraging LTHE's expertise in high-end engineering and execution of large-scale, technologically complex EPC projects over several decades, AdVENT delivers comprehensive solutions encompassing Design & Engineering, end-to-end Project Management, Strategic Projects delivery, Modularization, Asset Management and Turnaround Services to clients. AdVENT's technical capabilities and agility enable it to offer tailored solutions through appropriate business models.

AdVENT is involved in implementation of indigenous 2G (Second Generation) Ethanol Technology through upcoming plants based on agro waste under the National Biofuel Policy.

Key Offerings:

Design & Engineering Services - Basic, FEED & Detailed Engineering

Project Management Services - EPCM / E&P / PMC

Strategic EPC Projects

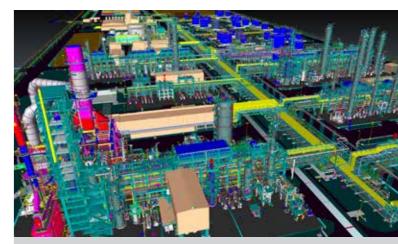
Modularization Solutions - Refinery Process Units, Gas Treatment Units, Thermal Systems such as Furnaces, Reformers, etc.

Asset Integrity Solutions

Smart Solutions for Asset Management

Shutdown & Turnaround

Emerging Technology Driven Solutions and Innovative Business Models



3-D model of Normal Paraffin & Derivative Complex under execution for Farabi Petrochemicals at Yanbu, Saudi Arabia

Power Plants & Equipment

A proven, complete-solutions provider for thermal power plants, L&T's power business vertical executes coal and gas-based power projects on a lumpsum turnkey basis. At its state-of-the-art facilities at Hazira in Gujarat, L&T and its joint venture companies manufacture ultra-supercritical/ supercritical boilers, turbines and generators, pulverisers, axial fans, air-preheaters and air-pollution-control equipment. L&T also supplies and supervises standalone HRSG packages. International standards of safety and quality and on-time delivery are ensured by design and project management centres at Vadodara, Faridabad and Chennai.

Key Offerings:

Complet	e and package-wise EPC solutions er plants:
	Coal-fired
	Gas-based
Air pollu	tion control:
	Flue Gas Desulphurisation (FGD)
	Selective Catalytic Reduction (SCR)
	Electrostatic Precipitators





Boiler internals being manufactured at Hazira, Gujarat





Track Record

14,000 + MW EPC of Power Plants

Partners

L&T-MHPS Boilers Private Limited

– a JV with Mitsubishi Hitachi Power Systems, Japan – engineers, designs, manufactures, erects and commissions ultra-supercritical and supercritical boilers.

L&T-MHPS Turbine Generators Private Limited

- a JV with Mitsubishi Hitachi Power Systems and Mitsubishi Electric Corp. - engineers, designs, and manufactures ultrasupercritical and supercritical turbines and generators.

L&T-Sargent & Lundy Limited

- a JV with Sargent & Lundy L.L.C, USA - provides a complete range of engineering and design solutions for power plants.

L&T-Howden Private Limited

– a JV with the Howden Group – manufactures axial fans and air pre-heaters.





2x700 MW Rajpura Thermal Power Plant, Punjab

Supercritical turbine being manufactured at Hazira, Gujarat

MANUFACTURING

Heavy Engineering Machinery & Industrial Products **Electrical & Automation**

Across the decades, L&T's state-of-the-art facilities have manufactured the tallest, largest, heaviest equipment, setting global benchmarks in scale and sophistication.

Larsen & Toubro has established a reputation for manufacture of a wide range of high-end technology engineered-to- order equipment and systems for core and industrial sectors. In-house R&D, collaborations with international majors, a dedicated talent pool, cutting-edge procurement systems and world-class manufacturing facilities have enabled L&T to acquire and sustain a leadership position in many of its lines of business. Global quality accreditation and certifications affirm L&T's manufacturing prowess.

Heavy Engineering

L&T Heavy Engineering is recognized as one of the world's top 3 heavy fabricators. Its strengths include in-house design & engineering, state-of-the-art fully-integrated fabrication facilities, R&D centres and experienced project teams. It custom-designs, fabricates and integrates engineered-to-order critical equipment and piping solutions for core sector process plant (refinery, fertilizer, petrochemicals) and nuclear power industries. Our plants have been awarded the Sword of Honour by the British Safety Council.

It manufactures equipment conforming to international standards of quality and safety, to meet stringent schedules.

Key Offerings:

Hydrocracker, Ethylene Oxide and Clean Fuel Reactors

FCC Reactor and Regenerator Package

Coke Drums

Molten Salt Bath Reactor

Ammonia and Methanol Converters

Urea Stripper & Reactor, Carbamate Condensor

Waste Heat Boiler Package

HP Heat Exchanger

Nuclear Equipment

- Steam Generator and Pressurizer
- End Shields
- Fusion Reactor (ITER)
- Spent Fuel Canisters & Casks

Modification, Revamp and Upgrades (MRU)

Critical Piping



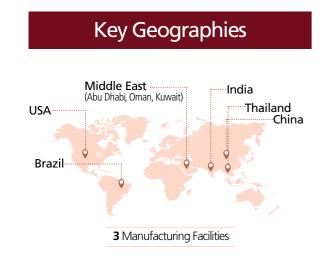




MRU - Critical Heat Exchanger Replacement at Kuwait

FCC Reactor & Regenerator

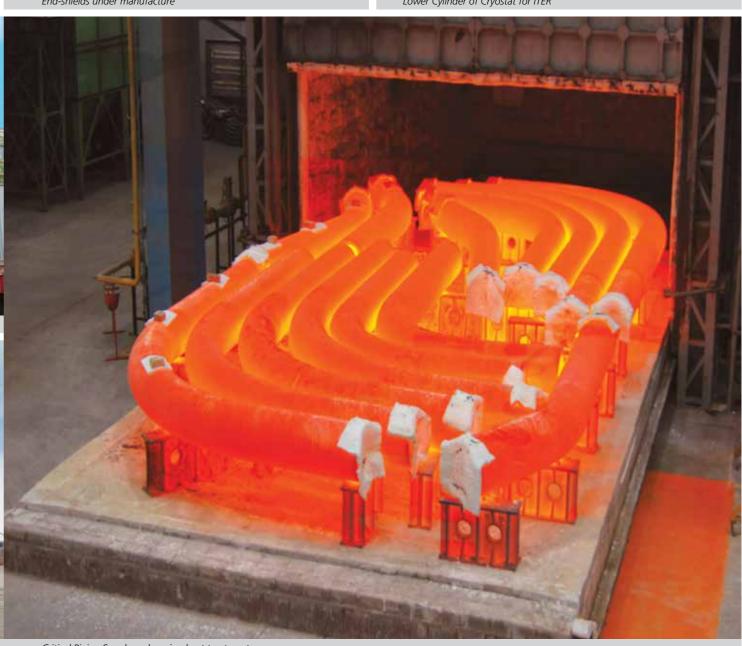
Coke Drums







End-shields under manufacture







Ammonia Converter



Lower Cylinder of Cryostat for ITER

Track Record

121_m World's Longest Column for Reliance Industries, India

^{USD} 421 Mn World's Single Largest Order of Reactors for KNPC, Kuwait

1858 мт Heaviest Hydrocracker Reactor in India

16.3 m Diameter World's Largest RFCC Package for Reliance Industries, India

645 мт Coke Drum 4 Coke Drums supplied to Marathon Petroleum Corporation, Garyville Refinery, USA

1500 мт World's Largest Tubular Reactor for Equate, Kuwait



Urea Reactor



High Pressure Heat Exchangers

L&T Special Steels & Heavy Forgings

L&T Special Steels and Heavy Forgings is a JV with NPCIL, and manufactures forgings for several sectors: nuclear, defence, hydrocarbon and power. With an annual capacity of 40,000 MT of finished forgings, it is a major strategic step towards a sustainable alternative to the import of heavy forgings.

Snapshot



1200 MT Low Cobalt Stainless Steel Plates for **End-Shields for Nuclear Fleet Order**

Development of High-strength Plates for Defence Sector





L&T's nuclear-grade forge shop at Hazira (near Surat) is one of Asia's largest. It offers a wide range of finished forgings for the nuclear, hydrocarbon and power sectors, and can manufacture single-piece forgings of up to 120 MT

Key Offerings:

Custom-built Forgings and Thick Plates

Track Record

Critical Heavy Forgings for Steam Generators

> 700 MW Nuclear Plant

Facility Approval and Development of

Strategic Grade Forgings

Reference List of 350+ Shells and Tube-Sheets for Nuclear and Hydrocarbon Sectors

India's Largest

Single Piece Dish-end

Heaviest ingot made in India

> 200 мт for Nuclear Sector



Machinery & Industrial Products

Valves

L&T Valves Limited, a wholly owned subsidiary of L&T, is a leader in flow-control solutions. Leveraging its heritage of over five decades, the Company offers innovative solutions and services that establish new benchmarks in plant performance and customer satisfaction. The portfolio includes products monogrammed API 600, API 6D and API 609, valves with CE, ATEX and SIL certifications, as well as IIoT-ready digital solutions. Its marketing network spans the globe, reinforced by strategic alliances with key distributors.

Snapshot

Sectors Served		
Oil & Gas	Power	
Refining	Defence	
Pipelines	Aerospace	
Petrochemicals	Water	
Chemicals	Pharmaceuticals	

Track Record 57 Years of Excellence Approved and accepted by global majors in the oil & gas and power sectors

Valves in operation in 50 leading economies

Key Offerings:

Gate, Globe and Check Valves
Ball, Butterfly and Plug Valves
Choke Valves
Control Valves
Safety Relief Valves
SIL3-capable Automation Solutions including HIPPS
Digital Products & Solutions
Aftermarket Solutions



SIL3-capable Automation Solutions



72" Gate Valve. Largest Cast Steel Gate Valve manufactured in India



56" Ball Valve. Largest Trunnion-mounted Ball Valve manufactured in India



Smart Valve with Integrated Diagnostic and Communication Modules



Cryogenic Butterfly Valve



Construction & Mining Machinery

A pioneer in the Indian Construction & Mining Machinery industry, L&T supplies equipment to the infrastructure, irrigation and mining sectors. Its comprehensive range of world-class equipment matches global performance standards.

Key Offerings:

Hydraulic Excavators
Rear Dump Trucks
Crawler Dozers
Wheel Loaders
Wheel Dozers
Motor Graders
Tipper Trucks
Vibratory Compactors – Soil & Asphalt
Pneumatic Tyred Rollers
Asphalt Paver Finishers
Skid Steer Loaders



omatsu PC350LC-8M0 Hydraulic Excavato

L&T 5590H Asphalt Paver Finisher



Scania G440 Tipper Truck

Komatsu GD535 Motor Grader



L&T S315R Skid Steer Loader



Snapshot

New Products

Pneumatic Tyred Rollers

Asphalt Paver Finishers

Skid Steer Loaders

Products marketed for

Komatsu – India & Global

Scania Commercial Vehicles India Pvt. Ltd.

L&T Construction Equipment Limited (LTCEL)

Track Record





80,000 sq.ft. Warehouse

6 Service Centres at strategic locations in India

Product Development Centre: This in-house Centre, located at Coimbatore, has highly-skilled and experienced design engineers. The Centre is involved in the design and development of a range of products with innovative technology.

Subsidiary

L&T Construction Equipment Limited, a whollyowned subsidiary of L&T, manufactures indigenously designed road construction equipment and highprecision hydraulic systems and components at its factory on the outskirts of Bengaluru.

Rubber Processing Machinery

L&T is a global major, providing end-to-end, comprehensive rubber processing machinery solutions to the tyre and rubber industry. It markets its own products, manufactured at its plant in Kancheepuram, as well as certain products manufactured by Kobelco Industrial Machinery India Pvt. Ltd.

Key Offerings:

Mechanical Tyre Curing Presses	
Hydraulic Tyre Curing Presses	
Tyre Building Machines	
Tyre Plant Solutions	
Internal Mixers	
Twin Screw Roller-head Extruders	



47

6 Distinct Product Segments

Years of Experience



Track Record		
45 Countries	4,000+ Machines	Global Tyre Manufacturers as Clients



OTR Mechanical Tyre Curing Press

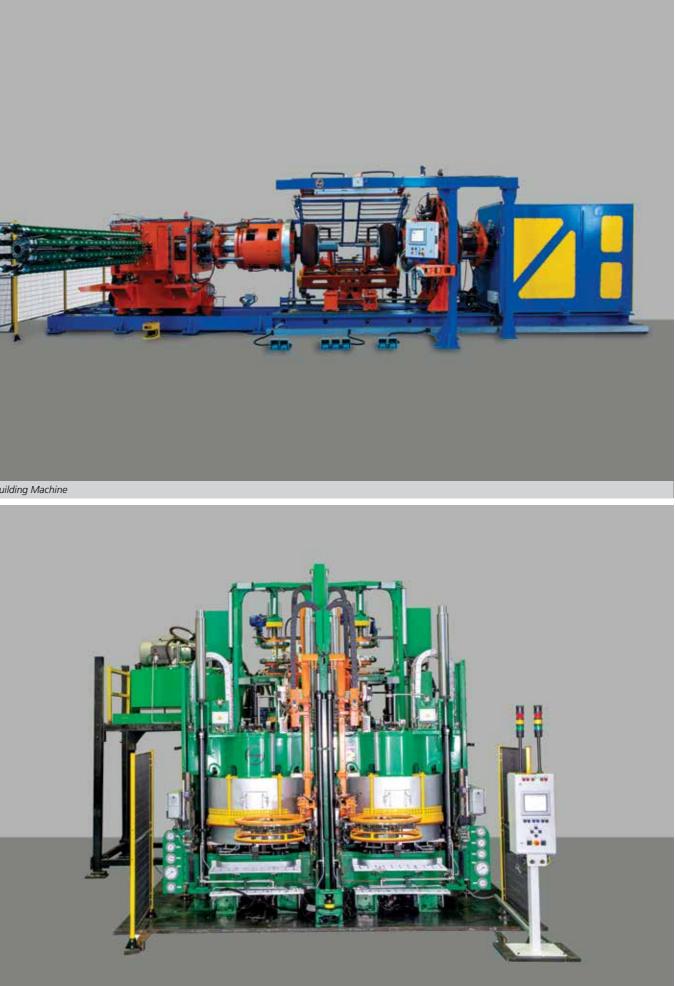
Tyre Building Machine

Key Achievements

Top OTR Tyre Curing Machinery Manufacturer in the world

Latest Tyre Curing Presses – fully compliant to CE norms - EN 16474

New-generation Floor Mounted Hydraulic Tyre Curing Press with panel-less options



PCR Floor Mounted Hydraulic Tyre Curing Press

Electrical & Automation

L&T's Electrical & Automation business offers a wide range of products and systems for the distribution, regulation and control of electricity, along with metering products, and is an industry major in system integration. Sectors served include industry, utility, building, infrastructure and agriculture.

Key Offerings:

LV Switchgear Products LV and MV Electrical systems Industrial & Building Automation Solutions Metering Solutions

Snapshot



New Applications for IPR (FY 18-19) Trademarks Designs





L&T offers India's widest range of switchgear





Air-insulated Switchgear



U-Power OMEGA Breakers Range

Major Projects

(FY 18-19)

Tenaga Nasional Berhad GIS with 1 year contract & AIS bulk contract for 2 years

> Dangote Oil Refinery Co. Ltd. LV & MV switchgear assemblies

> Medium Voltage Switchgear Supply to 3 UK and 3 Australian Utilities

Building Management Systems for Rivadh Metro Close to 600 cubicles, 22 stations and 2 depots

Track Record		
	(FY 18-19)	
Number of Units Manufactured		
115 lakh 1-phase and 3-phase meters	219 lakh MCBs	
Number of Projects		
350 Industrial Projects	109 Utility Projects	

Subsidiaries and Associates

- Tamco Switchgear (Malaysia) Sdn Bhd, a wholly-owned L&T subsidiary, manufactures MV and LV switchgear.
- PT. Tamco Indonesia offers total solutions for electrical distribution and control.
- Tamco Australia is the marketing and service support centre for LV and MV solutions.
- Henikwon Corporation Sdn Bhd, manufactures LV and MV busducts in Malaysia.
- L&T Electrical & Automation FZE is the international competency centre of L&T's automation business.
- Kana Controls offers instrumentation and instrumentation control automation contracting services to clients in Kuwait.
- L&T Electrical & Automation Saudi Arabia Company Limited, a wholly-owned subsidiary, offers switchgear and automation solutions to industry majors in Saudi Arabia.
- Servowatch System Ltd., a UK-based company, is a leading supplier of advanced and innovative integrated ship control systems.

DEFENCE

Defence & Aerospace

Defence Shipbuilding

L&T provides indigenous design-to-delivery solutions – from surveillance to strike. Its aerospace offerings add thrust to India's space programme.

L&T partners the DRDO and Indian Armed Forces in the development of defence products, systems and platforms across land, sea and air operations, in line with its commitment to 'Make in India'. The Company has state-of-the-art facilities for manufacturing weapons systems, aerospace solutions and naval ships, helping the Armed Forces gain the decisive edge.

Defence & Aerospace

L&T's defence solutions encompass land-based weapon systems, air defence and artillery systems and upgrades, naval weapon launch systems with fire-control systems, bridging systems, communication, avionics, C4I and missile systems. L&T designs and builds critical aerospace components, tracking and launch systems for space missions as well as for the Armed Forces.

Key Offerings:

Guns and Armoured Systems Missiles and Aerospace Systems Military Communication Systems Submarines and Underwater Platforms Weapon and Engineering Systems Radar Systems

Key Geographies



7 Manufacturing Facilities



L&T has provided critical subsystems for most of India's space missions

Fly-away Kit





K9 Vajra-T 155 mm/ 52 Cal. Tracked Self-propelled Gun

Defence Shipbuilding

L&T offers a range of ocean-going vessels for defence including frontline warships, auxiliary vessels and special naval platforms. Its Warship Design Centre, equipped with state-of-the-art software and associated tools, undertakes high-end design – from concept to production drawings.

L&T also designs and manufactures critical ship systems. Through-life support and obsolescence management offered by L&T extend the operational life of platforms considerably.

Key Offerings:

Ocean-going vessels for defence, including:	
Frontline Warships	
Auxiliary Vessels	
Special Naval Platforms	



L&T executed critical portions of India's first nuclear-powered submarine



Floating Dock

Snapshot

Facilities		
	(FY 18-19)	
2	21,050 T	
Shipyards	Kattupalli Shipyard with Shiplift	

New, Major Orders

Major Refit Packages of Indian Navy Vessels



Delivered Orders	
(FY 18-1	
8	3
Interceptor Boats	Offshore Patrol Vessels



SERVICES

Realty

- Information Technology
- **Technology Services**
- **Financial Services**

L&T's service offerings are built on the core values of commitment and transparency, coupled with a customer-first approach, delivering customer delight across the globe.

Larsen & Toubro has over three decades of experience in the service sector. Our realty business has set the gold standard in the sector, delivering on its commitments, time after time. L&T's pioneering information technology business, delivers cutting edge solutions at the convergence of the physical and digital worlds. Global ER&D services are provided by L&T Technology Services (LTTS), recognised as one of the world's most innovative companies. L&T Financial Services ranks among India's most valued NBFCs and offers a wide range of lending and non-lending based financial products, touching the lives of almost 15 million customers.

Realty

L&T Realty has carved out a leadership position in the industry, specialising in the execution of large residential, mixed-use and transit-oriented developments. The business derives its competitive advantage from transparency, a strong consumer connect and efficient design – all being the need of the hour for the real estate industry.

The Company anchors its strengths on consumer insight-driven master planning and product development, delivering the desired blend of pricing and quality to its customers. Committed to a customer first approach, the business has built a reputation for delivering on its promises, while embracing the power of digitalisation and new technologies into its core strategy for growth.

Key Offerings:

Mixed-use Integrated Developments
Transit-oriented Developments
Residential Complexes
Commercial and Retail Spaces
Built-to-suit Projects

Key Clients:

JPMC, Colgate, Sanofi, WeWork, Ansell, Henkel, Teva Pharma, Koch Industries, Tibco, SBI Life, and many more...

Snapshot



90 mn. sq.ft. 46 mn. sq.ft. 44 mn. sq.ft. Residential Commercial & Retail

33 Projects		
51,000	Apartments	
10,00,000	Office Desks	
1,05,00,000	Sq.ft Specialised Luxury Retail	







Seawoods Residences, Navi Mumba

Information Technology

LTI

LTI, a global technology consulting and digital solutions company, has accelerated its digital transformation journey with its Mosaic platform. The platform has significantly evolved, with a conscious design that embraces the convergence of data engineering, advanced analytics, knowledge-led automation, IoT connectivity, and AI, enveloped by an improved solution experience for different business and IT users.

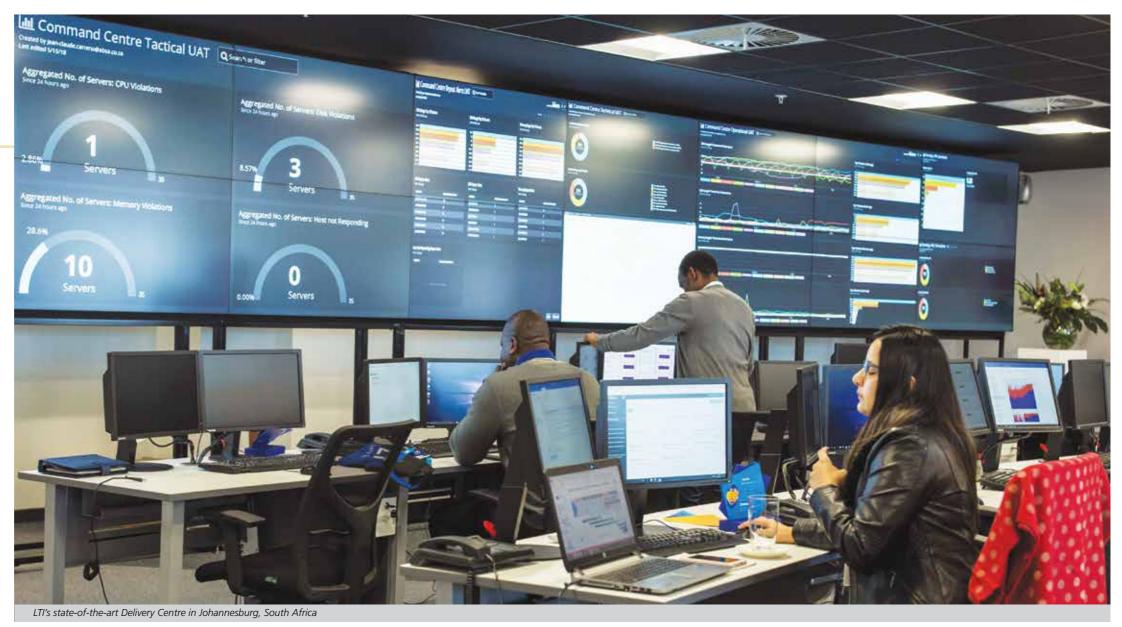
Key Recognitions:

Topped ITS Challengers List for the second consecutive year in Everest Group's PEAK Matrix IT Service Provider of the Year[™] 2019

Won the 2018 Microsoft Partner of the Year Award for App Innovation

Named 'Leader' in Avasant's 2018 Blockchain Services RadarView™

Recognized as 'Leading IT Service Providers' in Gartner's Competitive Landscape: Consulting and System Integration Service Providers for Robotic Process Automation 2018



Snapshot

Key Geographies UAE / GCC Europe USA UK-- India Canada Singapore Costa Rica China Japan Mexico Philippines South Africa Australia

49 Sales Offices across **30** Countries in the US, EMEA & APAC

Track Record

Among the Top 20 IT Services Companies

343 Clients, Including 66 Fortune 500 Companies

28,000+ Employees Working out of **25** Delivery Centres



LTI's global headquarters in Powai, Mumbai

Mindtree

Mindtree, a global technology consulting and services company, delivers digital transformation and technology services from ideation to execution, enabling Global 2000 clients to outperform the competition across 18 countries. 'Born digital,' Mindtree takes an agile, collaborative approach to creating customized solutions across the digital value chain. Its deep expertise in infrastructure and applications management turns IT into a strategic asset, helping customers run their business more efficiently and accelerate revenue growth. Industries that trust Mindtree include Banking, Financial Services and Insurance, CPG, Retail and Manufacturing, Travel, Transportation and Technology, Media and Services among others.

Snapshot



Track Record346
Active Clients674
BOTS DevelopedUSD 1 Bn
RevenueRanked Leader
in Overall Digital Services
- Zinnov 2019

On Best of **Global 100** Outsourcing List - IAOP

Key Offerings:

1.	Enterprise Services
	Application Development and Maintenance
	Test Engineering
	Infrastructure Management
	Managed Services
	Integrated Services and Solutions
	Product Engineering
	Agile Development
	Automation
2.	Digital
2.	Digital Customer Experience
2.	5
2.	Customer Experience
2.	Customer Experience Data and Analytics
2.	Customer Experience Data and Analytics Cloud
2.	Customer Experience Data and Analytics Cloud Magnet360 Salesforce Practice



The Mindtree office at Bengaluru, India



The Network Operations Centre, Bengaluru, India

Technology Services

LTTS

L&T Technology Services (LTTS) is a leading global ER&D services company, backed by the rich engineering expertise and experience of its parent company, Larsen & Toubro. LTTS offers design and development solutions to clients across the entire value chain of product development and caters to all major industries including Transportation, Industrial Products, Telecom & Hi-Tech, Medical devices and Process Industries. With its engineering design expertise, innovative solutions portfolio, smart manufacturing and digital capabilities, the Company is closely involved with its global customers in improving their product and solution development and accelerating their digital road-map.

Key Offerings:

LTTS' offerings span the product development chain and facilitate solutions in the areas of:

- **Digital Advisory Group:** The DAG architects the digital roadmap for global customers and focuses on creating smart products, services and digital manufacturing systems
- **Embedded Systems:** Delivering over 500 designs each year, we have extensive experience across multiple industries including telecom infrastructure, consumer electronics, compute & storage, transportation and industrial products
- **Software Engineering:** For machinery and devices in areas such as automated driver assistance systems, telematics and infotainment
- **Process Engineering:** With broad expertise in traditional EPCM and operational maintenance projects, LTTS is furthering its engineering footprint to include the digital sphere and working with customers across the globe on 'Smart Manufacturing' technologies such as automation, loT and analytics
- **Mechanical Engineering:** LTTS is a one-stop solutions provider in Mechanical Engineering Services, which include Integrated Design validation and Testing (IDvT), Product Engineering Sustenance and Aftermarket, Sourcing and Supply Chain Management and Technical Publications

Information Technology | Services



LTTS' Embedded Systems team designs complex software and electronics that helps accelerate time-to-market and ensures superior quality products.



LTTS' Healthcare practice helps OEMs develop sophisticated medical devices at affordable costs



Mixed Reality and VR technologies create delightful immersive experiences for indsutries ranging from transportation to smart homes



LTTS integrates leading edge technology for plant design and offers advanced modelling and simulation services for factories to help clients move quickly from design to production stage

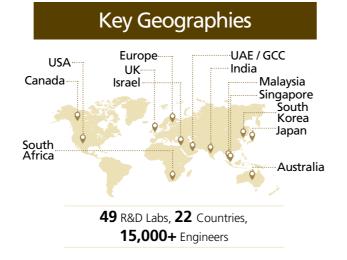


LTTS' end-to-end engineering expertise enables the Company to cover a wide spectrum of mechanical services that facilitate complex designs and prototyping, product development, PLM and manufacturing process automation



LTTS helps automotive firms harness the power of advanced telematics, intersecting security, implementation ROIs, and end-user satisfaction

Snapshot



New Orders		
20	Multi-million-dollar Orders	
USD 40 mn	Engineering Content Management (ECM) Deal in Europe	
Large Digitization Deal Win from ExxonMobil		

Track Record		
35.5%	YoY growt as of Marcl	h in Company Revenue (₹) h 31, 2019
58%	YoY Growth in Revenues from Digital & Leading-Edge Technologies	
51	Customers from the List of Top 100 ER&D Spenders	
251 Glob	oal clients	90% Repeat Business
399 Pate	nts Filed	69 Fortune 500 US Companies

Subsidiary: Bengaluru-based Graphene Esencia Semiconductor Services Pvt. Ltd, a provider of end to end semiconductor services. Graphene's strong offshore presence coupled with expertise in complete VLSI Chip Design & Embedded Software will enhance LTTS' capabilities in the Semiconductor & Product OEM space

California-based Esencia Technologies, a provider of design services from specification to final product in Digital Signal Processing for Communications, Video, Security and Networking.

L&T-NxT

L&T-NxT leverages the L&T Group's deep industry domain expertise across diverse industry verticals and experience of deploying new age digital technologies like Industrial IoT, machine learning, augmented and virtual reality, artificial intelligence and geospatial applications to deliver differentiated, disruptive business outcomes for global customers.

L&T-NxT works with cutting edge digital technologies to solve complex business challenges in the areas of IT-OT convergence. We deliver proven and scalable solutions that are designed to deliver measurable business benefits. We provide services for Energy & Utilities, Transportation, Construction & Engineering, Process and Discrete Manufacturing and the Government.

Key Offerings:

Industrial	IoT
GeoSpati	al Engineering and GIS Solutions
AI / ML	
Data Lake	e and Big Data Analytics
Smart Ma	anufacturing
AR/VR/	MR
Workmer	n Productivity and Safety
Robotic P	Process Automation
Robotics	
Commun	ications Technology

Track Record			
25,000 Workmen Connected	10,800+ Plant & Machinery Connected		
1,897	740+		
GPS Enabled	Connected		
Vehicles Tagged	Geospatial Projects		
224	230		
Projects using Geospatial	Projects Surveyed and		
Technologies	Mapped		
350+	15		
Projects Monitored	BIM GIS Integration and		
Remotely	Scan to BIM solutions		



Smart Assets - Monitoring to Insights



Smart Material - Issue to Consumption



Smart Worker - Safety to Productivity



Smart Manufacturing - Overall Equipment and Plant Efficiency

Financial Services

L&T Financial Services is a leading, diversified Non-Banking Financial Company (NBFC). It offers a diverse range of financial products and services in rural, housing and infrastructure-finance sectors. The Company also offers mutual fund products. L&T Finance Holdings is registered with the Reserve Bank of India as a non-deposit-taking Core Investment Company (CIC).

Built on the foundation of 'Assurance', the Company is geared towards generating perpetual value for all stakeholders. Being a responsible corporate, L&T Financial Services believes in making the world stronger, more empowered and sustainable.

Key Offerings:

Rural Finance: Farm Equipment Finance Two-Wheeler Finance Micro Loans

Housing Finance: Home Loans LAP Real Estate Finance Infrastructure Finance Investment Management



Micro Loans

Farm Equipment Finance



Infrastructure Finance

Two-Wheeler Finance

Snapshot

Branches

230 Branches

1,224 Micro-loan Meeting Centres

Track Record

[₹]99,1210mm Loan Book

Market Leader in Renewable Sector Financing

Funding purchase of 1 in every 7 Tractors

11+mn Customers Served

3rd Largest Micro Loans Financier in India

Amongst Leading Developer Financiers

4th Largest Two-Wheeler Financier

6th in Net SIP Inflows in MFs (Source: AMFI)

Bloomberg League Table for CY18

ranked 2nd in Mandated Lead Arranger in APAC (ex-Japan) for Green Loans

Excellence In Corporate Governance - Golden Peacock Awards

Best Audit Committee - Asian Centre for Corporate Governance & Sustainability

SUSTAINABILITY

L&T is one of the first few organisations in India to voluntarily set Sustainability Targets aligned with the Company's Business Plan -LAKSHYA 2021. In FY 2018, we published our first Integrated Report, which was based on the International Integrated Reporting Framework. L&T's first Integrated Report demonstrated the relationship between the organization's strategy, governance and the social, environmental and economic context within which the Company operates.

We believe that Sustainability is all about imbibing informed, responsible and inclusive business practices. L&T views sustainability through the lens of its core values – consciously and continuously aligning its activities for the benefit of its stakeholders.

L&T is investing in reducing its carbon footprint and enabling its customers to follow a low carbon economy path with its Green Portfolio. In the year 2018-19, the revenue from our

Thrust Areas



Accolades

ICC Corporate Governance & Sustainability Vision Award'

L&T received the highest rating 'ET 4Good' in the annual 'ET 2Good 4Good CSR ratings' powered by The Economic Times. The rating is based on the Company's performance and impact created in CSR in the period 2016-18.



HSE Sensitization Campaign by LTHE Vadodara

Green Building at L&T's Talegaon campus



Cleaning of 105 Water Bodies by 5000+ L&T Employee Volunteers on World Water Day

Green Portfolio was 22% of the overall sales at consolidated revenue. We also have a strong order book of the Green Portfolio to ensure sustained revenue from the portfolio in future.

By embracing a digital future, robust risk management process, strong stakeholder dialogues, and connectivity of information, we continue to deliver products and services designed to create a better world for everyone.

Micro-grid Project for Rural Electrification in Bihar

Track Record

2,400+ Million Litres

of rain water harvested annually through the water harvesting structures we have created for society

24 water positive campus and 2 carbon neutral campuses 22% of revenue from Green products and services

6700

Tons of metal recycled and reused in various operations

367,923 Tons of flyash used

22000+ suppliers have signed our combined code of conduct



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