



ANNUAL REVIEW 2016 - 2017



LARSEN & TOUBRO

It's all about Imagineering



VISION

L&T shall be a professionally-managed Indian multinational, committed to total customer satisfaction and enhancing shareholder value.

L&T-ites shall be an innovative, entrepreneurial and empowered team constantly creating value and attaining global benchmarks.

L&T shall foster a culture of caring, trust and continuous learning while meeting expectations of employees, stakeholders and society.



LARSEN & TOUBRO

Corporate Social Responsibility Policy

L&T fosters a culture of caring, trust and continuous learning while meeting the expectations of all stakeholders and society at large. As a responsible Corporate Citizen, the Company contributes towards inclusive growth by empowering communities and accelerating development.

We shall leverage our inherent strengths and capabilities to build India's social infrastructure.

Towards this, we shall:

- Implement sustainable CSR Programmes towards 'Building India's Social Infrastructure'
- Partner with Communities, NGOs and Institutions to create positive impact in areas of water & sanitation, education, health and skill development
- Harness innovation and technology driven solutions to address social needs
- Strengthen systems and processes to achieve measurable results

Our aim and effort is to contribute to a better quality of life, mitigate social inequities, and help individuals in identified communities to achieve their true potential.

A. M. NAIK
Group Executive Chairman

20th November, 2014



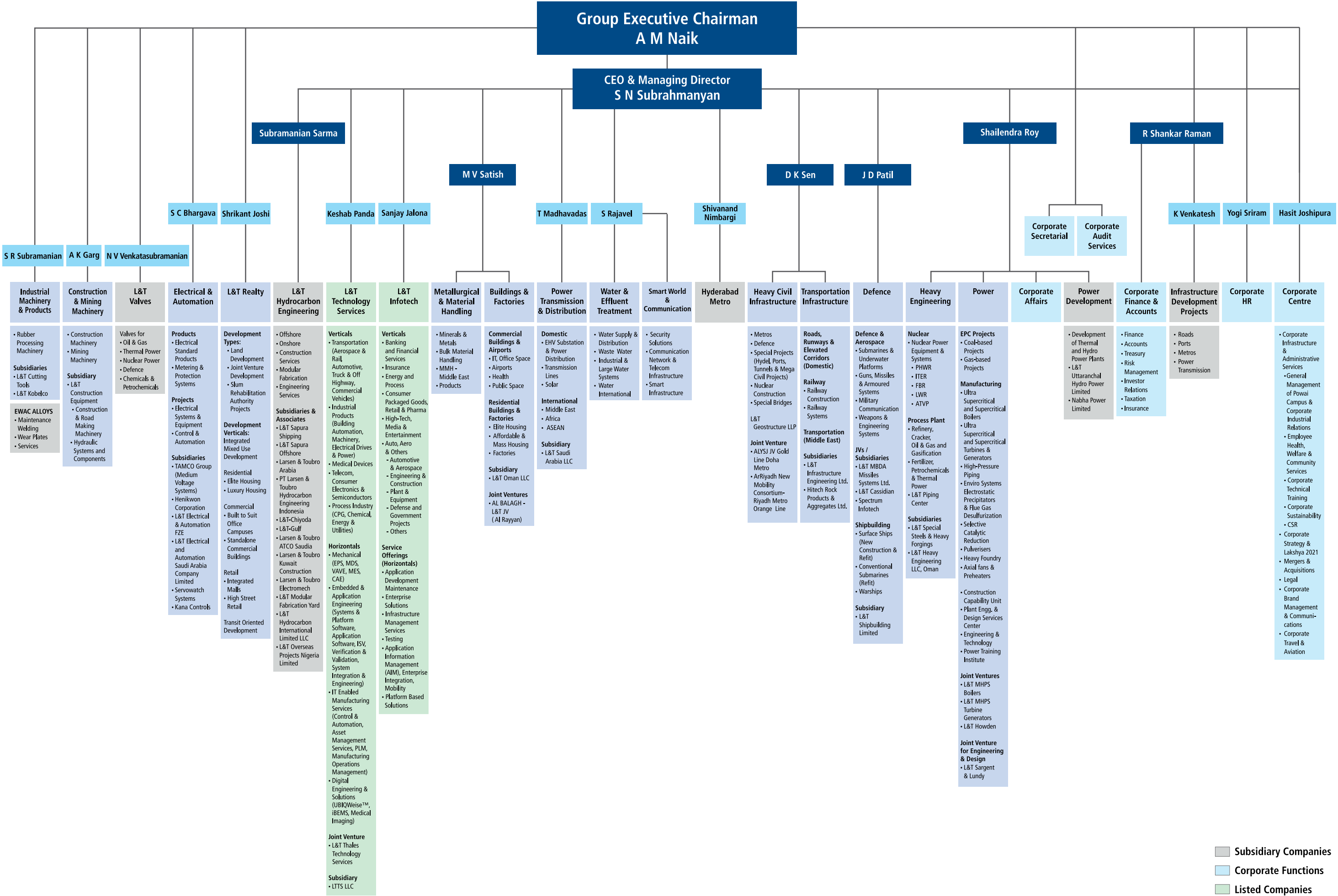
LARSEN & TOUBRO



IMA Lifetime Outstanding Achievement Award presented to Mr. A. M. Naik for his contribution to Indian industry and to society by the Indore Management Association (IMA)

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Leadership Team



A. M. Naik
Group Executive Chairman



S. N. Subrahmanyam
CEO & Managing Director



R. Shankar Raman
Chief Financial Officer



S. N. Roy
Sr. Executive Vice President
(Power, Heavy Engineering
& Nuclear)



Subramanian Sarma
CEO & Managing Director
(L&T Hydrocarbon Engineering)



D. K. Sen
Sr. Executive Vice President
(Infrastructure)



M. V. Satish
Sr. Executive Vice President
(Buildings, Minerals & Metals)



J. D. Patil
Sr. Executive Vice President
(Defence)



S. C. Bhargava
Sr. Vice President
(Electrical & Automation)



Hasit Joshipura
Head - Corporate Centre

As on 1st July, 2017

Larsen & Toubro Limited (‘Larsen & Toubro’ or ‘L&T’) is a USD 17 billion technology, engineering, construction, projects, manufacturing and financial services conglomerate, with global operations. It addresses critical needs in key sectors – infrastructure, construction, defence, hydrocarbon, heavy engineering, power, shipbuilding, aerospace, electrical & automation, mining and metallurgy.

L&T’s integrated capabilities span the spectrum of ‘design to deliver’ solutions. Over seven decades of a strong, customer-focused approach and a sharp focus on world-class quality have enabled it to maintain a leadership position in its major lines of business.

The Company has manufacturing facilities and offices in several countries, and a global supply chain. It delivers landmark projects and products, helping clients in 30 countries to create long-term progress and economic growth.

Characterised by professionalism, high standards of corporate governance and sustainability, L&T continues to evolve, seeking better ways of engineering to meet emerging challenges.

Highlights

- Currently executing metro projects across 10 cities in India – as well as major portions of the Riyadh and Doha Metros
- Development of India’s largest Transit Oriented Development project in Hyderabad
- Commissioned India’s largest city surveillance project (5000 cameras at 1500 locations) in Mumbai
- Implementation of modules of Smart Cities Programme in Mumbai, Jaipur, Nagpur, Pune, Hyderabad and more...
- Currently building the world’s longest extra-dosed bridge over the Ganges at Patna, Bihar
- Executing the largest private sector defence order for Artillery Systems – for the manufacture of 155 mm / 52 Cal Self Propelled Tracked Guns
- Played a role in building 19 of India’s 22 nuclear reactors and is involved in all 9 reactors under construction
- Currently building the world’s largest high-vacuum pressure chamber, the Cryostat, for ITER
- Delivered 8 reactors for the Refinery and Petrochemical Integrated Development (RAPID) project for Petronas, Malayisa
- After the successful moon and Mars missions, L&T also partnered ISRO in the launch of 104 satellites in a single mission
- Played a vital role in the execution of ONGC’s first Deepwater project - the Vashishta & S1 subsea project
- Launched L&T Infotech’s proprietary platform and Experience Centre (MOSAIC), demonstrating how new-age technologies impact real business scenarios

The following pages highlight the capabilities and review the operations (2016-17) of the Company’s multiple businesses. Sections of the text are an abstract of L&T’s Annual Report. For complete information, please refer to the Annual Report.

Year 2016-17 at a Glance

L&T Group

- Order book as at March 31, 2017: ₹ 2613408 million as against ₹ 2490168 million as at March 31, 2016: 4.9% growth Y-o-Y
- Revenue from Operations at ₹ 1100110 million in CY as against ₹ 1019753 million in PY: 7.9% growth over 15-16
- Segment-wise composition of revenue:
 - Infrastructure Segment: 48.1% in CY as against 48.0% in PY
 - Power Segment: 6.3% in CY as against 6.3% in PY
 - Heavy Engineering Segment: 2.9% in CY as against 3.0% in PY
 - Electrical and Automation Segment: 4.5% in CY as against 4.8% in PY
 - Hydrocarbon Segment: 8.7% in CY as against 8.4% in PY



- IT & Technology Services Segment: 8.8% in CY as against 8.7% in PY
- Financial Services Segment: 7.8% in CY as against 7.5% in PY
- Developmental Projects Segment: 3.7% in CY as against 4.3% in PY
- Others Segment: 9.2% in CY as against 8.9% in PY
- PBDIT before other income and exceptional items at ₹ 110747 million in CY as against ₹ 104628 million – Increased by 5.8%
- PAT including exceptional items ₹ 60412 million in CY as against ₹ 42329 million – Increased by 42.7%
- Gross debt: Equity ratio of 1.75:1 (Previous year: 1.87:1)

CONSOLIDATED BALANCE SHEET AS AT MARCH 31, 2017

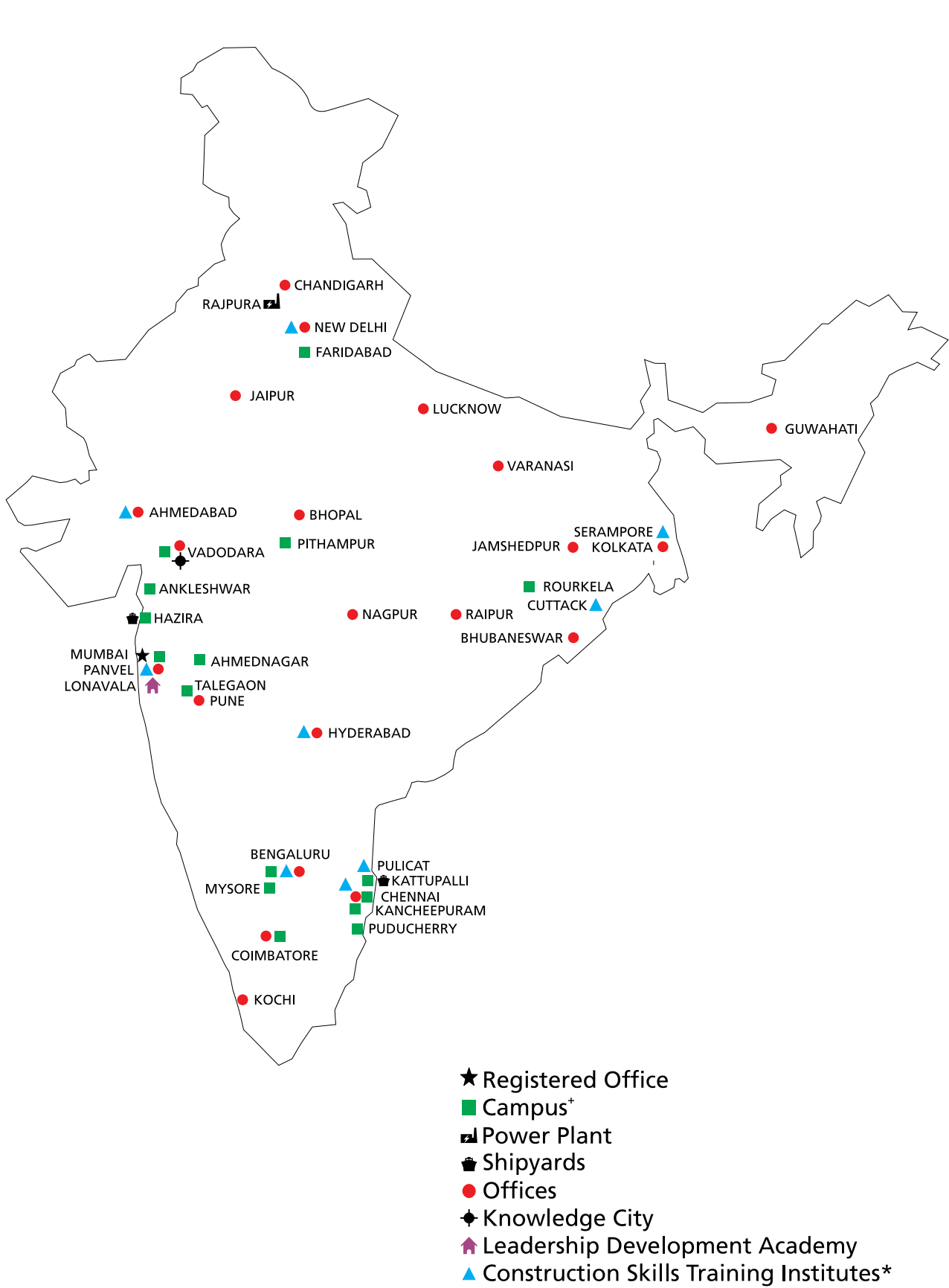
	₹ MILLION	
	As at 31-3-2017	As at 31-3-2016
ASSETS:		
Non-current assets		
Property, plant & equipment, investment property and intangible assets.	299751	295362
Non-current investments	59536	35849
Other non-current assets	545225	541526
	904512	872737
Current assets	1216085	1074525
TOTAL	2120597	1947262
EQUITY AND LIABILITIES:		
Equity attributable to owners of the company	502165	441804
Non-controlling interests	35636	28928
Non-current liabilities	688416	626065
Current liabilities	894380	850465
TOTAL	2120597	1947262

CONSOLIDATED STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED MARCH 31, 2017

	₹ MILLION	
	2016-17	2015-16
Revenue from operations	1100110	1019753
Other income	14010	9044
Total income	1114120	1028797
Less: Expenses:		
Manufacturing, construction and operating expenses	780393	724089
Employee benefits expense	138531	133308
Sales, administration and other expenses	70440	57728
Finance costs	13398	16551
Depreciation, amortisation, impairment and obsolescence	23699	17867
	1026461	949543
Profit before exceptional items and tax	87659	79254
Exceptional items	1214	942
Profit before tax	88873	80196
Tax expenses	21485	24369
Profit after tax	67388	55827
Less: Additional provision/(reversal) of tax on dividend distributed by subsidiary companies	(1420)	478
	68808	55349
Add: Share in profit/(loss) of joint ventures/associate companies (net)	(3953)	(9902)
	64855	45447
Add/(less): Non-controlling interest in (income)/losses	(4443)	(3118)
Profit for the year attributable to the owners of the Company	60412	42329
Basic earnings per equity share (₹)	64.80	45.48
Diluted earnings per equity share (₹)	64.58	45.27
Face value per equity share (₹)	2.00	2.00

This publication does not purport to be the statutory Annual Report of the Company. It contains data excerpted from the Annual Report. It describes business prospects and makes forward-looking statements with regard to selected businesses. For an electronic version of the complete Annual Report, please visit investors.larsentoubro.com

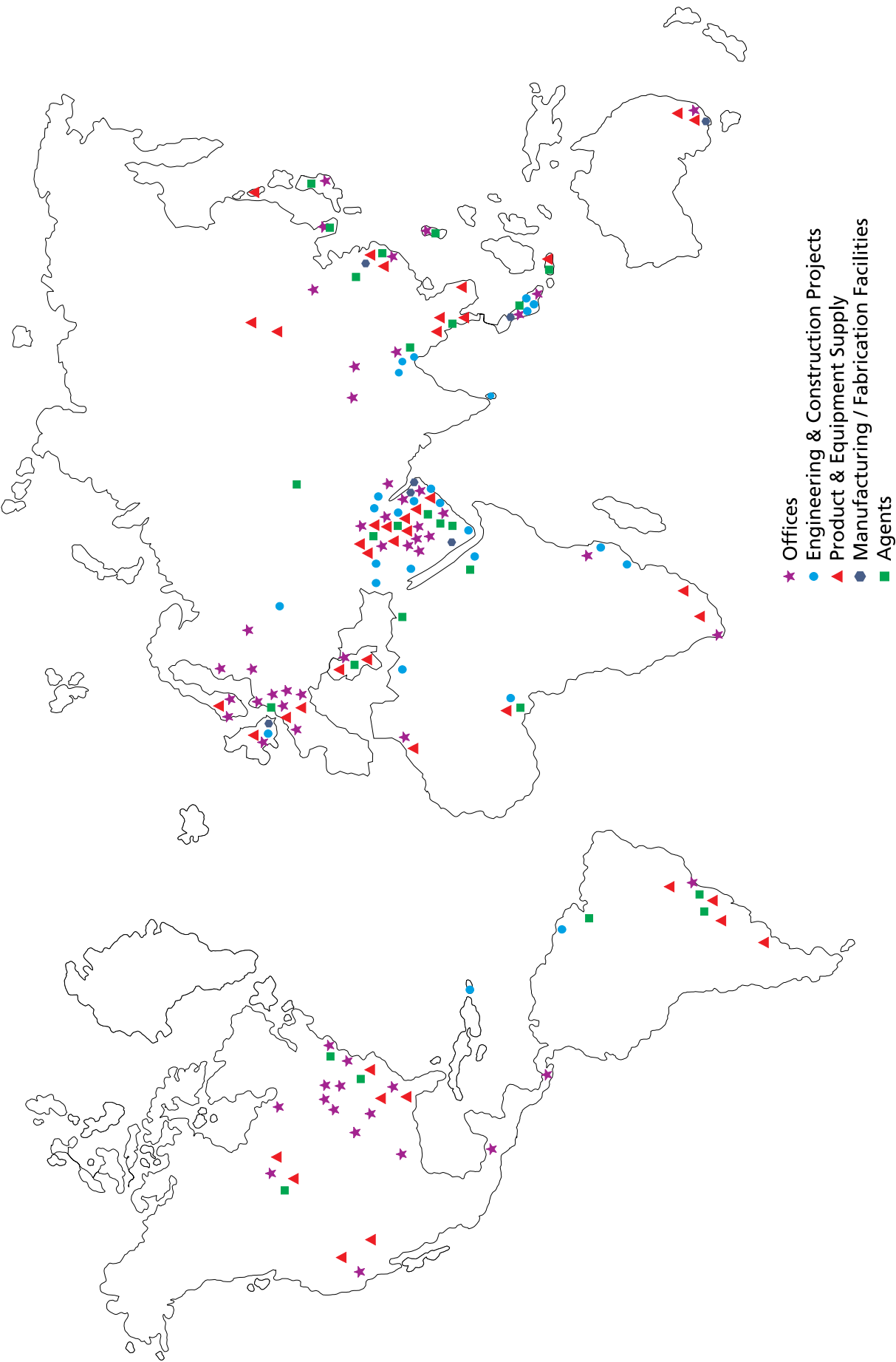
Nationwide Network



* 'Campus' denotes facilities for design and manufacture
* Part of L&T's Corporate Social Initiatives

This pictorial representation does not purport to be the political map of India.

Global Presence



Note: Map is broadly representative of L&T's presence in markets worldwide. For details of establishments within India, please refer to 'Nationwide Network'.



181 MLD Water Treatment Plant for Vellore Water Supply Scheme. L&T has extensive experience in the design and construction of structures for water, industrial and waste water treatment, transmission and distribution.

L&T CONSTRUCTION

Ranked among the world's top 30 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 seven 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. Mechanisation 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.

WATER & EFFLUENT TREATMENT

Water is life. Growing pressure on water resources – from population and economic growth to climate change, pollution, and other challenges – has significantly impacted our social, economic, and environmental well-being. Many of our most important aquifers are being over-pumped, causing widespread declines in groundwater levels.

To help bridge the gap between need and supply, L&T's Water and Effluent Treatment business segment enhanced its process know-how and detailed engineering capabilities across all areas of Water and Wastewater solutions in India, Sri Lanka, Middle East and Africa. Its formidable in-house engineering capabilities, coupled with impeccable project management skills have



Water Pre-treatment Plant for a power plant at Sagardighi, West Bengal.



Hanamapur Lift Irrigation project, Karnataka. L&T's expertise helps farmers who are far from natural water sources to reap bountiful harvests.

enabled the Company to achieve significant success in this area. L&T's range of offerings includes creating world-class water infrastructure, covering virtually every area: urban and rural water supply, water treatment plants, waste water treatment and collection network, industrial water and effluent treatment, desalination plants, lift irrigation projects, canal rehabilitation, unaccounted-for water (UFW) and water management contracts.

Orders Won in FY 2016-17

Domestic Projects

Water Supply Schemes

- NC-35, NC-36, NC-37 Water Supply Scheme, Gujarat
- Providing 24x7 water supply to Tumkur city, Karnataka
- Improvement of water supply to Greater Berhampur, Odisha

- Piped water supply projects pertaining to Balasore, Bhadrak, Puri, Bolangir and Keonjhar districts, Odisha
- Construction of water storage reservoir at VSP, Andhra Pradesh
- Comprehensive storm water drainage scheme at Vijayawada, Andhra Pradesh
- Dahod Water Supply Scheme, Gujarat
- Surface water supply system at Moga, Punjab

Wastewater Schemes

- Sikar, Alwar and Bhiwadi Wastewater Scheme, Rajasthan
- Integrated Wastewater Scheme at Sri Ganganagar, Rajasthan
- Integrated Wastewater Scheme at Jhunjhunu, Rajasthan
- Wastewater Scheme at Rourkela East & West, Odisha
- Wastewater Scheme at Patna, Bihar
- Gangapur, Bharatpur and Hindaun Wastewater Scheme, Rajasthan

- Sewerage integration work and sewage treatment at Barrackpore, West Bengal

Lift Irrigation Schemes

- Bansujara Madhya Pradesh
- Chhaigaonmakhan, Madhya Pradesh
- Cluster IX & XII, Odisha
- Nandawadagi, Karnataka
- Kakrapar - Gordha - Vad, Gujarat
- Kadana-Patadungri, Gujarat
- Alirajpur, Madhya Pradesh
- Sauni Yojana Link-2 Package-4, Gujarat

Treatment Plants

- 30 MLD CETP at Ahmedabad, Gujarat



Micro Filtration Unit in the Raichur Thermal Power station.



Perspective of 120 MLD Sewage Treatment Plant, Varanasi. Projects like these help improve quality of life.

International Projects

- Provision of new gravity sewers, force mains and pump stations for Kirulapone catchment area, Sri Lanka
- Extension of water transmission pipeline from the Lake Victoria Water Supply Scheme to Tabora, Nzega and Igunga towns, Tanzania

Major Projects Commissioned

- Bankura Water Supply Scheme, West Bengal
- 52 MGD Water Treatment Plant, South 24 Parganas, West Bengal
- Pudukottai Water Supply Package, Tamil Nadu

- Cuddalore Water Supply Package, Tamil Nadu
- Plant Water System at Raichur, Karnataka
- Hanamapur Lift Irrigation Scheme, Karnataka
- Sauni Yojana Link 3 Package 3, Gujarat
- Ganga River Front Development Project, Bihar

Significant Initiatives

- New Business Area: Water Management.
The business has won its first water management project, an area that has huge potential in the domestic market.
- The business's African foray has led to an order in Tanzania. Our footprint is well established in Sri Lanka.

Track Record

- Channelised water and wastewater network across 41,000 km
- Constructed and commissioned 3000 MLD of water and wastewater treatment plants
- Laid large water pipelines for irrigating over 1 lakh hectares chak
- Built Asia's largest microfiltration plant of 158 MLD capacity for a power plant



L&T constructed the Kharkhai Barrage, Jamshedpur, complete with gates and allied works, including civil, mechanical and electrical systems.



L&T creates smart cities by offering integrated capabilities from several of its businesses - L&T Construction, L&T Electrical & Automation, L&T Infotech and L&T Technology Services.

SMART WORLD & COMMUNICATION

L&T is positioned to be a key Master System Integrator for smart-city projects. Its Smart World & Communication Business Unit leads all initiatives in this realm and collaborates with other L&T businesses – L&T Infotech, L&T Electrical & Automation and L&T Technology Services – to provide end-to-end solutions.

Security Solutions: L&T offers a spectrum of sustainable and scalable systems for city surveillance systems, Intelligent Traffic Management Systems for critical infrastructure across ports, airports, metros, IT parks and public buildings and Homeland Security.

Communication Network & Telecom Infrastructure: L&T's end-to-end solutions include Fiber Optic Backbone, Microwave & Satellite Communication, Network Infrastructure, Early Warning

Dissemination Systems (EWDS), Emergency Response Systems and Metro Communication.

Smart Infrastructure: L&T's multi-pronged solutions on a turnkey basis include smart city solutions, integrated command & control centres, smart communication, smart mobility, smart energy, smart lighting, and citizen-centric apps.

Track Record

Security Solutions

- Sabarmati Jail surveillance
- Surveillance and intelligent traffic management systems for the Gujarat Government in Ahmedabad, Gandhinagar & Vadodara
- India's largest city surveillance project: 5000+ cameras at over 1500 locations in Mumbai
- Executed and commissioned a citywide wi-fi project for Mumbai using the existing surveillance infrastructure

Smart infrastructure

- Jaipur Smart City Project – India's first smart city

On-going Projects

Security Solutions

- Hyderabad's largest city surveillance & traffic management network
- Command & Control centres for several cities in Rajasthan

Communication Network & Telecom Infrastructure

- Comprehensive communication package for Lucknow Metro
- TETRA communication network for Delhi Metro
- EWDS for the coastal districts – a first in India
- Communication backbone (GPON) and wi-fi across India

Smart Infrastructure

- India's first integrated smart city in Nagpur. Highlight: 6-km smart strip with systems powered with smart ICT interventions
- Smart city solutions for Pune and Vishakhapatnam



Hi-tech surveillance systems ensure 24x7 security in some major cities in India.



230 kV Double-circuit Transmission line at Abu Ali, Saudi Arabia. L&T is an industry leader in turnkey construction of power transmission and distribution systems in India and the Middle East.

POWER TRANSMISSION & DISTRIBUTION

L&T's Power Transmission and Distribution business vertical is a leading EPC player in the field of power transmission and distribution and solar energy. The business offers integrated solutions and end-to-end services ranging from design, manufacture, supply, installation and commissioning of transmission lines, substations, underground cable networks, distribution networks, power quality improvement projects, infrastructure electrification, solar PV plants, battery energy storage system and mini/micro grid projects. Besides being a dominant player in the Indian market, the business enjoys a significant share and a strong reputation in the Middle East, Africa and ASEAN markets.

Tower Manufacturing & Testing Facilities

The business is well integrated, having its own tower-manufacturing facilities of more than 1,25,000 mtpa capacity strategically located at Puducherry, Pithampur and Kancheepuram. L&T's Transmission Line Testing & Research Station is one of the largest tower-testing stations in the world.

New Orders

Domestic Projects

- Several urban and rural electrification orders from West Bengal, Odisha, Bihar, Uttar Pradesh and Karnataka under DDUGJY and IPDS schemes

- GIS (Gas-insulated Substation) and AIS (Air-insulated Substation) orders from POWERGRID, KSPDCL & TANTRANSCO
- Transmission line packages associated with 765 kV system strengthening of the Eastern Region for Medinipur-Jeerat Transmission Limited
- A portion of ± 800 kV HVDC Bipole link between Raigarh and Pugalur for PGCIL
- EHV Transmission line orders from PGCIL and the state transmission utilities of Jharkhand, West Bengal and Gujarat
- The Kancheepuram testing centre has been booking repeat orders from reputed global customers and gained new customers from China, USA and Afghanistan



L&T's capability in executing projects for power distribution includes switchyards.



India's first 1200 kV Air-insulated Substation at Bina in Madhya Pradesh. L&T offers complete solutions in high-voltage substations and power transmission lines.

New Orders

International Projects

- A major order from KAHRAMAA involving 30 substations and 560 km of EHV (Extra High Voltage) cabling for the expansion of Qatar's electricity transmission network.
- A 400 kV grid station in Oman
- 132 kV overhead transmission lines and substations in the Kingdom of Saudi Arabia
- An HT transmission line order for enhancing power reliability for a Saudi Arabian customer
- Orders for building a number of 132 kV GIS from DEWA and reputed private customers in the UAE
- 400 kV substation and transmission line orders from utilities in East Africa

Marquee Projects Commissioned

Domestic Projects

- 765 kV D/C Narendra-Madhugiri Transmission Line – the single longest 765 kV package
- 800 kV HVDC Champa-Kurukshetra Transmission Line for PGCIL
- 765 kV Varanasi-Kanpur Transmission Line for PGCIL
- 765 kV Lalitpur-Agra Transmission Line for PGCIL
- 400 kV Biharsherif-Sasaram Transmission Line for PGCIL
- 400 kV Khandwa-Indore Transmission Line for PGCIL
- 400 kV Transmission Lines in Andhra Pradesh and Telengana
- 400 kV Kamudhi-Karaikudi Transmission Line and a multi-circuit stretch for TANTRANSCO
- 400 kV GIS at Baripada for PGCIL

- 220 kV GIS serving as the receiving substation for Lucknow Metro
- Illuminated 3,20,000 rural households and improved power quality of 350 urban feeders
- The Transmission Line Tower Research Station at Kancheepuram successfully tested several tall, multi-circuit, monopole towers for its global clientele
- Three major solar plants in Uttarakhand and Rajasthan

International Projects

- 36 substations commissioned in the Middle East including two 400 kV grid stations in Oman
- 400 kV substation in Algeria has been completed



765 kV Gas-insulated Substation, Varanasi. L&T is a leading EPC player in the field of power transmission and distribution.



One of the many 400 kV Gas-insulated Substations installed by L&T. The Company has a track record in the power transmission and distribution sector extending across UAE, Qatar, Kuwait, Saudi Arabia, the ASEAN region and Africa.

Renewable Energy

With a track record that includes some of the largest solar plants in the country, L&T has proven EPC capabilities in offering economically viable and technically superior solutions for utility-scale/captive solar power plants, mini/micro-grids and battery energy storage system solutions. A tracker mechanism developed in-house, offers greater benefits for developers. The solar business secured orders amounting to more than 250 MW, procuring repeat orders from its key clientele.

Subsidiary Companies

Through L&T Oman LLC and L&T Saudi Arabia LLC, extra-high voltage substations and overhead transmission lines have been built on EPC basis across the Sultanate of Oman and Kingdom of Saudi Arabia.

Track Record

- 29,000 ckm of transmission lines of various voltage levels up to 765 kV
- 720 AIS/GIS including India's first 1200 kV AIS and 765 kV GIS
- 32,150 MW of E-BoP for thermal power plants
- 67,000 habitations electrified
- 650 MWp of solar plants



60 MWp Solar Tracker Plant, Tamil Nadu



Across River Mandovi in Goa, L&T is building one of India's longest cable-stayed bridges. L&T's track record of bridging rivers includes India's longest extradosed cable-stayed bridge (over the Narmada), the second Vivekananda bridge over Kolkata's Hooghly, the two-lane bridge across Gujarat's Watrak, and several bridges over Malaysian rivers. A six-lane bridge is being built over the Ganga at Patna.

HEAVY CIVIL INFRASTRUCTURE

L&T's Heavy Civil Infrastructure business vertical designs, engineers and constructs projects in crucial segments: metros, nuclear, hydel, ports, special bridges, tunnels and defence.

The business is a total infrastructure solutions provider, not just in India, but overseas as well. Its in-house design strengths and unique construction methodology cells enable it to provide concept-to-commissioning solutions.

Metros

L&T has expertise in end-to-end engineering and construction of elevated and underground metros, specialising in delivering metro projects on a turnkey basis using sophisticated tunnelling techniques. Having ventured into metro rail construction in 2001

with the prestigious Delhi Metro project, L&T has emerged as the leading builder of metro systems in India, executing 19 projects across 10 cities – including the Hyderabad Metro – the world's largest in the PPP mode. L&T is executing major portions of the Riyadh and Doha Metros.

Areas of Expertise

- Elevated viaduct construction using segmental, U-trough and I-girder methods
- Underground tunnel construction (NATM, cut-&-cover, TBM)
- Underground station construction using top-down and bottom-up approaches
- Elevated metro station and balanced cantilever constructions

Defence

L&T's comprehensive range of engineering and construction services meets the specialised needs of the Defence sector. With massive

investments planned by the Ministry of Defence for developing world-class systems and equipment, opportunities are aplenty in the areas of infrastructure facilities for defence bases, storage structures, underground facilities, niche technologies, security and surveillance and training facilities. L&T's specialty is offering EPC (Engineering Procurement Construction) solutions with single-source responsibility for the execution of mega projects, from concept to commissioning.

Nuclear Power

L&T has played a crucial role in the nuclear sector by constructing most of the country's nuclear power plants. It has developed expertise in both Pressurised Heavy Water (PHWR) and Light Water (LWR) reactor technologies, capturing the lion's share of the market. L&T is attracting global companies in the field of LWR as partners to set up new plants in India. L&T should emerge as a front-runner in supporting India's plan of supplying 25% of its electricity needs from nuclear power by 2050.



An underground section of the Chennai Metro.



Dome erection at the Kakrapar Atomic Power project, Gujarat – the latest in L&T's five-decade association with the Nuclear Power Corporation of India. L&T has been associated with almost all of India's nuclear plants, and has expertise in both technologies – pressurised heavy water and light water.

Areas of Expertise:

- Successfully executing EPC contracts in civil, mechanical, electrical and instrumentation segments of PHWR projects
- Expanding our Engineering, Procurement and Construction capability by venturing into EPC contracts in LWR
- Design, consultancy including seismic qualification, procurement and construction services for pump houses, cooling towers and other auxiliary facilities
- Adoption of modular construction methodology for fast-tracking projects
- Construction of Kudankulam Nuclear Power Project (LWR) – one of the largest projects in India's nuclear industry

Special Bridges

L&T has built some of the finest bridges across challenging terrains, incorporating design features that are among the most complex

of their kind. The Company has pioneered new technologies such as incremental launching, segmental construction, cable stayed, precast, prestressed concrete, steel and concrete composite construction. Apart from a pan-India project-scape, L&T has executed several projects in Malaysia, Dubai, Oman and Jordan.

L&T built India's longest extradosed bridge across the Narmada river at Bharuch, Gujarat. L&T is building the world's longest extradosed bridge at Patna, in a Joint Venture with Daewoo. It is executing three other iconic bridges across India and a major railway bridge project at Khulna, Bangladesh.

Hydroelectric Power Plants

L&T is a significant player in the development of hydroelectric power plants, and offers a comprehensive 'water to wire' range of services that facilitates the execution of hydroelectric power projects on an Engineer-Procure-Construct basis in tough mountainous terrains.

Areas of Expertise:

- Diversion weirs, barrages, concrete / earthen / rockfill dams, including RCC (Roller-Compacted Concrete) dams
- Underground tunnels of various geometries and diameters (both concrete-lined and steel-lined)
- Open and underground de-silting chambers
- Large underground and surface power-houses
- Pressure shafts, drop shafts and surge shafts / surge chambers
- Hydro-mechanical components
- Specialised underground structures

Ports

Having pioneered EPC port construction in India, L&T has designed and executed 7000 m berthing structures including liquid jetties, container terminals, multipurpose berths and ferry terminals. It has built 14000 m breakwaters, handled 20 t armoured rock, accropods (max: 6.3 cu.m) and an 18 m-deep breakwater.



Huge desilting chambers – part of Bhutan's largest hydel project, at Punatsangchhu.



Lucknow Metro, one of the fastest-completed metro rail projects in India. L&T is building several major metro systems in India and overseas including the Doha and Riyadh metros.

L&T has executed shipyards, caissons, long-span approach trestles, unique intake structures; and giant greenfield port projects like Kattupalli, Dhamra, Mundra and Karwar.

L&T GeoStructure

Focusing on deep foundations and ground engineering business, L&T GeoStructure has a fleet of sophisticated foundation equipment. It has expertise in the areas of river linking, marine structures and deep foundation-supported bridges, basement and underground structures, and deep shafts. It executes large-diameter deep piles, marine piles, deep diaphragm walls, secant pile walls, plastic concrete cut-off walls, sheet piling, ground improvement, foundation testing and geotechnical investigation.

Marquee Projects Commissioned

- CC17-Metros

New Orders

- KKNPP-HTS & Seabird MWC-01
- 2 X 1,000 MW Kudankulam Nuclear Power Project 3&4
- Cable-stayed bridge across Durgam Cheruvu Lake at Madhapur in Hyderabad – an EPC project
- Ahmedabad Metro – UG PKG 2

Track Record

- 2.65 km of cable-stayed bridges completed, 11.82 km of cable-stayed bridges under construction
- 2.16 km of railway bridges completed, 13.89 km of railway bridges under construction
- Commissioned India's first 1,000 MWe nuclear power plant

- 8,080 MW of reactor containment structures
- 306 km of metro (including ongoing projects)
- 8,315 MW of clean and green power
- 90 km of tunnelling in difficult Himalayan terrain
- 12 dams / barrages / weirs
- 7 Powerhouses including both underground and surface structures
- LPG underground storage cavern, 200 m below ground level – one of the largest of its kind, and the first of its kind in South Asia



The Riyadh Metro – parts of which are being built by L&T.



Technology Centre for a global oil major in Bengaluru. L&T has built over 150 IT parks and commercial complexes in India and neighbouring countries.

BUILDINGS & FACTORIES

L&T's Buildings & Factories business vertical has the domain knowledge, expertise and experience to design and build a range of structures in India and abroad.

The business has executed airports, IT parks, office buildings, institutional spaces, hospitals, stadiums, hotels, elite residential buildings, high-rise structures, mass-housing complexes, factory structures, cement plants and industrial warehouses.

These projects are executed on an Engineering, Procurement and Construction (EPC) basis.

Pioneers in offering 'total engineering solutions', right from concept to commissioning across all its business lines, the business has several competitive advantages, including dedicated engineering design centres, competency cells, advanced formwork systems, mechanised project execution, digitised project control and a pool of talented employees.

These strengths have enabled the business to establish itself as one of the premier EPC contractors – both in the Indian industry, as well as in targeted markets overseas.

New Orders

The business has secured prestigious projects across business lines. It has maintained its leadership position in the construction of IT parks and office spaces by winning a slew of orders.

Reinforcing its credentials in the residential space, the business has secured orders for several projects from esteemed customers – specifically in the western and southern parts of India.



A mall in Kolkata.



L&T builds a wide range of residential projects across the country – from elite towers to mass-housing complexes.

Key Projects Commissioned

- Plug-and-play campuses for IT giants for like TCS, HCL and iGate
- International airports at Chandigarh and Kochi
- Hospitals and medical colleges for ESIC, NMC and the Government of West Bengal
- High-rise residential towers for DLF, Godrej, Prestige and BNRI
- Cement plants for Orient and Wonder Cement
- Factory establishment for Hero Motor Corp Ltd.

Significant Initiatives

The business has implemented operational excellence initiatives across all levels to enhance profitability. These initiatives include the introduction of value engineering techniques to cut down costs and improve productivity.

Project cycle times have been reduced by embracing technology and mechanised execution. 3D studios set up at the Engineering Design and Research Centres in Chennai and Mumbai are the first of their kind, offering clients an immersive walkthrough of projects. A team of experts has been formed to study futuristic businesses and formulate suitable strategies to help the business retain its competitive edge. Key strategic initiatives have been taken to strengthen overseas operations, and follow a focused approach towards projects.

Track Record

- 11 International airports
- 150+ Office complexes
- 45+ Hospitals
- 30+ Educational institutions and 5 Indian Institutes of Technology (IITs)
- 400 High-rise towers
- 50+ Manufacturing facilities



Terminal 2, Mumbai International Airport. L&T has built several airports in India and the Middle East.



For FIFA 2022, L&T is building the Al Rayyan Stadium in Qatar, using environmentally-friendly building materials and practices. L&T has been associated with several prominent stadiums in India and abroad.

Subsidiary

Larsen & Toubro Oman LLC

A joint venture with Zubair Corporation LLC, Larsen & Toubro Oman LLC (LTO) has been providing engineering, construction and contracting services for nearly a decade in the Sultanate of Oman. The Company has an excellent track record in civil projects, and continues to enjoy customer preference in Oman. Against stiff competition from major international players, the Company successfully secured a major airport project. Upcoming prospects in segments such as hospitals, institutional spaces and commercial buildings augur well for the Company.



The 1600-bed multi-specialty Safdarjung Hospital in Delhi. L&T is a leading provider of health-care infrastructure in India and the Middle East.



Capable of laying 2 km of tracks per day, the new track construction machine, owned by L&T, sets a benchmark in high-speed rail construction on the Western Dedicated Freight Corridor project. L&T is currently executing a number of prestigious railway projects in India and the GCC region.

TRANSPORTATION INFRASTRUCTURE

Infrastructure – especially transport infrastructure – meets a critical economic need as a value multiplier. It also fulfils the social need for facilitating transport, bridging distances and connecting people. The Transportation Infrastructure business vertical of L&T Construction offers EPC solutions for Roads, Runways (Airside Infrastructure) & Elevated Corridors (RREC), Railways Construction, Railway Systems & International Infrastructure, delivering results through expertise in project management, engineering design and construction management. It is supported by Engineering Design Centres in Mumbai, Faridabad and Chennai, an Offshore Engineering Centre in Mumbai which caters to international projects, and a Competency Development Centre at Kancheepuram, near Chennai.

New Orders:

Major orders received by the business are:

- CP 204 - EDFC, Mughal Sarai-New Bhaupur Electrical package-204 (417 RKM)
- CTP -14 - WDFC, CTP -14: Dadri-Rewari Civil & Systems (OHE + S&T) works (128 rkm) – the largest composite package ever awarded by the Indian Railways
- Extension of the Tripoli Road and improvements to the Algeria Road (83 km)
- Four-laning of the Wadpale-Bhogaon sector (40 km)
- Two-laning of the Helwak-Karad sector (48 km)

Marquee Projects Commissioned

- 6 - lane Unnao-Lucknow Expressway (63 km)
- 4 - lane Sambalpur-Rourkela Road Project (163 km)

- 4 - lane Sangareddy Road Project (143 km)
- Vriddhachalam-Ariyalur doubling project (52 rkm)
- Gr.149 Barauni-Katihar railway electrification project (437 tkm)
- Bina-Ganjbasoda 3rd line project (52 tkm)
- Villupuram-Vriddhachalam doubling project (62 tkm)
- Two Kanaktora-Jharsuguda Road Projects (68 km)

Special Initiatives

In this fast-paced market, technology is the key to achieving operational excellence. Much focus has been laid on developing and implementing digital solutions to achieve better visibility for quicker and better decision-making. A host of solutions – such as GPS-based P&M (Plant & Machinery) monitoring, mobile-based daily work progress monitoring and geospatial services like photogrammetry and LiDAR (Light Detection & Ranging) – are being used for better asset management, project monitoring,



Airfield ground lighting. Runways built by L&T include those incorporating CAT III/B Instrument Landing Systems.



Artist's impression of the Al Wakrah Bypass Road in Qatar, consisting of five major interchanges including 20 bridges, three bicycle overpasses, eight vehicular underpasses, three pedestrian bridges and vehicular tunnels. This is one of L&T's many complex transport infrastructure projects in India and the GCC.

material & resource management. Sensors automate functions in order to improve productivity, and the addition of specialised P&M to the fleet improve execution processes and quality. On the international front, the business is exploring new markets, such as Bangladesh and Mauritius through business tie-ups with international consortium partners to pre-qualify for mega projects in these countries. Various other strategic initiatives have been undertaken to strengthen procurement, asset management and cost control teams and enable them to provide immediate onshore support to projects.

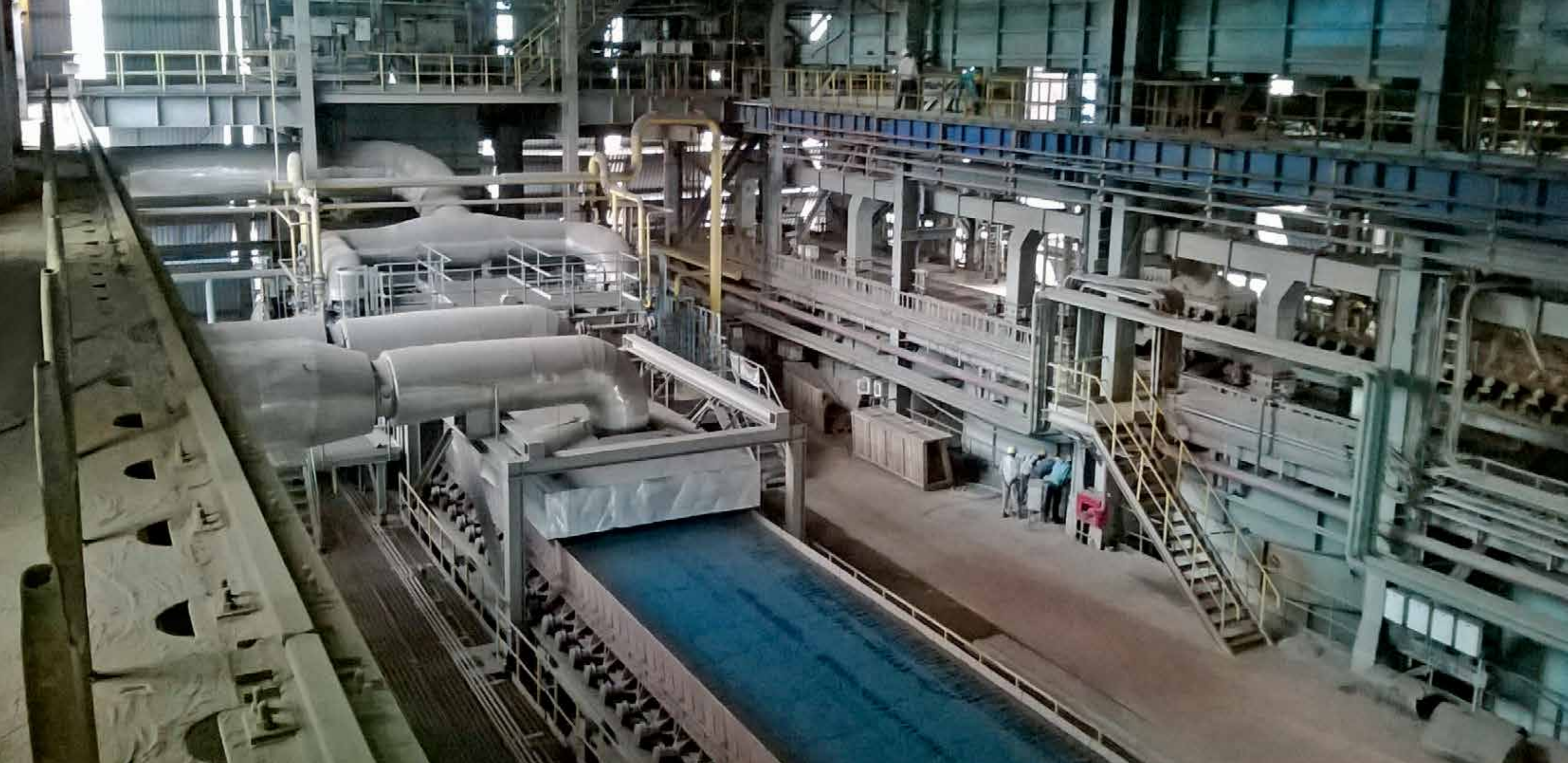
Track Record

- 10363 lkm of roads completed in India and the Gulf and 8485 lkm of ongoing projects

- 40 lkm of elevated corridors completed and 87 lkm of ongoing projects in both domestic and international markets
- 3.76 mn sq.m of completed airport runways and 3.73 mn sq.m runway projects in progress
- 1097 tkm of tracks completed and 3826 tkm track works in progress
- 9287 tkm of railway electrification completed and 4755 tkm in progress
- 2433 tkm of track works, 4254 tkm of electrification, 1433 tkm of S&T works are in progress in DFCC



Flyover for Kolkata Metropolitan Development Authority.



Sinter plant at Bhilai for Steel Authority of India. L&T undertakes detailed engineering, procurement, manufacture, supply, construction, erection and commissioning of projects in the areas of ferrous and non-ferrous metals and mineral beneficiation.

METALLURGICAL & MATERIAL HANDLING

L&T provides EPC solutions for the Metals Sector (Beneficiation, Iron and Steel making, Aluminium, Copper, Lead and Zinc) and Bulk Material Handling systems in the power, port, steel and mining sectors. It also offers specialised conveying systems and ash-handling plant solutions in the material handling sector. The Company possesses in-house facilities to design, manufacture and supply a wide range of products, such as Surface Miners, Crushing Systems, Apron Feeders, Wagon Tippers, Paddle Feeders, Stacker Reclaimers and Sand Plants.

L&T undertakes customised manufacturing of critical machinery for steel, power, mining and other industrial sectors from its manufacturing facilities at Kansbahal (Odisha) and Kancheepuram (Tamil Nadu). The business has executed and commissioned complex greenfield and

brownfield projects in record time with the highest safety and quality standards, enhancing value to customers.

Major Orders Booked / Under Execution

- Pet Coke Handling System (PCHS), IOCL Haldia
- High-capacity EPC Eqpt. Package, JSW Paradip Port
- Coal Handling Plant (CHP), MCL Bhubaneshwari
- In-plant Water System, SAIL Bhilai
- Bucket Excavator Package, NLC
- Large Tankage Add-On Jobs, Emirates Global Aluminum (EGA)
- Sand Plants, Surface Miners, Steel Plant Eqpt. and Crushing Systems
- **Metallurgical Projects Under Execution**
 - 3 MTPA Hot Strip Mill, SAIL, Rourkela
 - Slab Caster & Basic Oxygen Furnace, SAIL, Bokaro
 - Coke Dry Quenching Unit, Tata Steel Jamshedpur
 - Coke Oven, Blast Furnace & Associated Systems, JSW Dolvi

Material Handling Packages Under Execution

- CHP & Ash Handling Plant for NTPC Khargone and NTPC Tanda
- CHPs: MPPGCL, Malwa Phase II, NCL Nighai, Khadia, MCL Lingaraj
- Material HS for Adani (Mundra & Dhamra)
- PCHS, IOCL, Paradip
- **Projects Under Execution in GCC Region**
 - LSAW Pipe Mill, SENAAT General Holding Corp.
 - Large Tankage Package, EGA

Marquee Projects Commissioned / Nearing Completion

- PCHS, ORPIC Oman
- CHP, RRVUNL Chhabra
- 0.67 MTPA Coke Oven Battery, SAIL Durgapur
- 1.5 MTPA Zinc Beneficiation Project, HZL Dariba
- Blast Furnace, SAIL Bhilai
- PCHS, HMEL Bhatinda & RIL Jamnagar



L&T's surface miner.



Seawoods Grand Central, Navi Mumbai – one of India's largest Transit-Oriented Development projects. Complexes like this add comfort and convenience to the urban lifestyle.

L&T REALTY

L&T Realty – L&T's real-estate development arm – has a presence in Mumbai, Bengaluru, Hyderabad, Chennai and Faridabad. Its international presence includes sales and marketing offices in Singapore, Dubai, UK and the USA.

Apart from developing L&T-owned land banks, L&T Realty has entered into joint ventures and development agreements for some of its projects. In partnership with Government authorities, it is developing Transit Oriented Developments (TODs) at Navi Mumbai and Hyderabad.

L&T Realty's current portfolio totals over 59 million sq. ft. across residential, commercial, mixed-use developments and TODs – one

of the largest and the most diversified product offerings amongst the real estate entities in the country.

Committed to creating landmarks of excellence, L&T Realty aims to enrich people's lives through sustainable mixed-use developments. Its vision is to become the most respected real estate developer in the country by building on its execution leadership, and by honouring the dual commitments of quality and delivery timelines – giving it the competitive edge. L&T Realty's commitment to sustainable design principles and optimum utilisation of natural resources also helps create a brighter, greener future for all.

Business Performance

In the short span of 5 years, L&T Realty has attained the position of market leader in the industry – and has a dominant share in the markets where it has a presence.

Marquee Projects Under Execution

Residential

- Emerald Isle – Powai, Mumbai
- Crescent Bay – Parel, Mumbai
- Raintree Boulevard – Hebbal, Bengaluru

Commercial / TOD

- Seawoods Grand Central – Navi Mumbai
- L&T Tech Park – Bengaluru
- L&T Business Park - Bengaluru
- HITEC city, Hyderabad
- Erramanzil, Hyderabad
- Punjagutta , Hyderabad



L&T Realty's upcoming mixed-use development at Powai.



Eight ARDS reactors line up for despatch to the Refinery and Petrochemical Integrated Development (RAPID) Project of Petronas, Malaysia. Weighing a total of 7000 MT, these Cr-Mo-V reactors will help Petronas meet Malaysia's objective of establishing new areas of growth aimed at improving the quality of life.

L&T HEAVY ENGINEERING

PROCESS PLANT & NUCLEAR EQUIPMENT AND PIPING

L&T's Heavy Engineering business custom-designs, fabricates and integrates engineered-to-order critical equipment and piping solutions for core sector process plant, power plant and nuclear industries. Its strengths include in-house design & engineering, state-of-the-art fabrication facilities, R&D centres, experienced project teams and a safe work culture.

The business has been at the forefront of introducing new processes, products and materials into the manufacturing sector. All of the equipment is manufactured under stringent schedules and conforms to international standards of safety and quality.

Manufacturing & Fabrication Facilities

Hazira Manufacturing Complex, Surat

This globally-benchmarked, state-of-the-art, fully-integrated manufacturing facility has mega construction capabilities and captive 'Load-on' and 'RO-RO' jetties. The facility has delivered some of the most complex equipment for global customers, and provided PHWR steam generators, end shields and fast breeder reactor vessels for Indian nuclear power plants. It has a track record of executing large, complex projects that have set global benchmarks such as the world's largest ethylene oxide reactor, the biggest coke drum, the largest coal gasifier and many more.

Powai, Mumbai

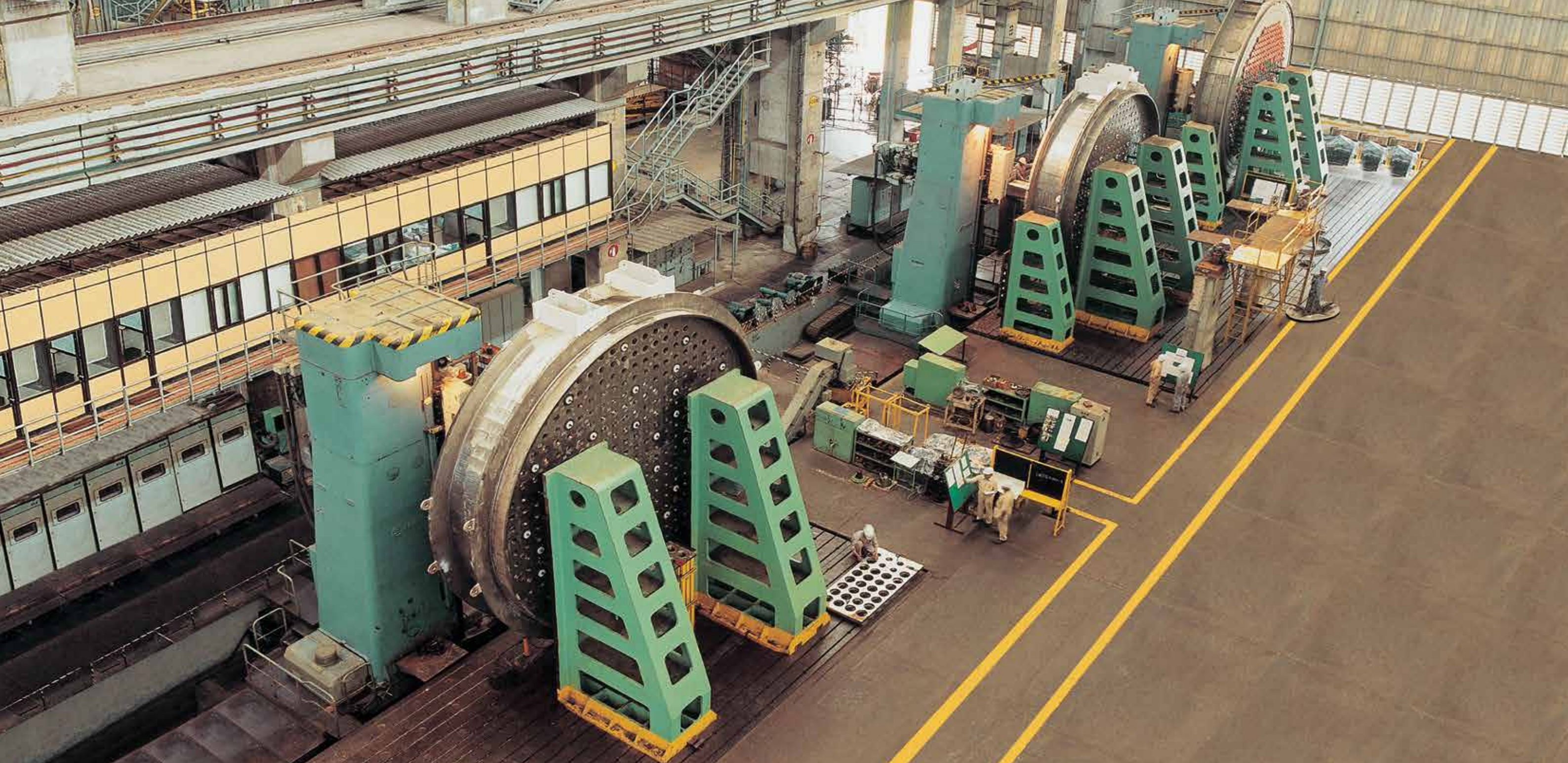
L&T's nodal complex was the first manufacturing plant of L&T Heavy Engineering, with the track record of manufacturing heat-transfer equipment and aerospace motor segments that have set industry benchmarks.

Vadodara Heavy Engineering Works

This specialised facility manufactures equipment and internal assemblies for process plant industries using exotic materials like titanium, stainless & high alloy steels, and composites.



1400 MT Ethylene oxide reactor for Sasol Chemicals, USA.



End shields for a nuclear power plant being fabricated at L&T's Hazira facility. L&T has the distinction of supplying critical equipment to almost all of India's nuclear power plants.

Track Record

Kuwait

- The world's heaviest tubular reactor - 1500 MT
- The world's single largest order for equipment worth USD 421 Mn

Indonesia:

The world's biggest multi-wall ammonia converter - 660 MT

China: The world's largest coal gasifier – 1750 MT

Abu Dhabi: A set of 23 solid Titanium heat exchangers, involving drilling of tube-sheets over 300 mm thick to extremely stringent tolerances and finish more stringent than TEMA's global standards

Saudi Arabia: A complex bi-metallic urea stripper

USA: First Company in India to export nuclear spent fuel equipment to USA

France: Delivered 50% of the total segments of ITER fusion reactor cryostat at Cadarache, France. The site work has also started.

India

- The world's largest coke drums – 3 x 630 MT each
- The world's largest FCC regenerators – 1320 MT x 16.3 m dia.
- First of its kind titanium-clad reactors – 3 deliveries
- Delivered the first 700 MWe nuclear steam generators in India

Major Orders Executed in 2016-17

- ARDS Reactors and FCC Reactor Regenerator Package for the RAPID project of Petronas, Malaysia
- K-COT Converter Unit for Lotte Chemicals, Malaysia
- HP Heat Exchanger package for KNPC, Kuwait
- Steam Generators for Nuclear Power Corporation of India Ltd
- High-pressure piping for Greenville Power Project, Virginia, USA

The business forayed into international markets in the power sector with orders from GE and MHPS for supercritical thermal power projects.

The outlook is optimistic, with major opportunities in South East Asia, MENA and domestic markets. The Govt. of India has approved Fleet procurement (10 x 700MWe PHWR) by NPCIL.

Significant Initiatives

The business has drawn up its Strategic Plan for 2017-2021, focusing on profitable growth. It continues to invest in organisational excellence and sustainability initiatives like RCA & CAPA, Six Sigma, Total Productive Maintenance, Knowledge Management, EHS and CSR. People-centric initiatives such as Career Planning & Mentoring, Competency Build-up, Talent and Leadership Development remain vital to the business. Digitalization is a focus area for quality and productivity improvement.



Steam generators for pressurised heavy water reactors. L&T is certified by ASME to use 'N' and 'NPT' stamps for the manufacture of equipment and systems.



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.

L&T SPECIAL STEELS & HEAVY FORGINGS

This JV of L&T and NPCIL has a fully-integrated manufacturing facility at Hazira, near Surat, to produce ingots and finished forgings for critical equipment in the nuclear power and hydrocarbon industries, rotors in the power industry, rolls in steel plants and other heavy forgings for general engineering applications. With an annual capacity of 40000 MT of finished forgings, the JV is a major strategic step towards an economical and sustainable alternative to the import of heavy forgings.

Track Record

Since its inception in 2012, this facility has produced most of the critical heavy forgings for steam generators, pressuriser and bleed condenser required for an Indian 700 MW PHWR nuclear power plant. It also produced the heavy and high thickness stainless steel forgings for the ITER project. It has supplied shells, tube sheets and

other heavy forgings for refineries, petrochemicals and fertiliser plants. Alloy steel and carbon steel ingots are supplied to Indian forge-masters.

LARSEN & TOUBRO HEAVY ENGINEERING LLC, OMAN

This joint venture of The Zubair Corporation and L&T, at Sohar in the Sultanate of Oman, manufactures critical high-technology equipment for refineries, petrochemicals, fertiliser projects and other process industries worldwide with a focus on the GCC countries. It supplements L&T's India-based fabrication facilities and assists L&T in revamping and upgrade of refinery projects in the region.



Dished ends forged at the Forging facility at Hazira, Gujarat.



The photograph is for representational purposes only.

L&T has been a partner to the Strategic Submarine Programme, contributing to design engineering; manufacture and construction of pressure hull, outer hull and structures; special equipment, outfitting – equipment, piping, cabling systems; integration and trials.

L&T DEFENCE

Defence & Aerospace

L&T has emerged as a leading Private Sector Company in the Defence sector in India. For over three decades, L&T has focussed on building indigenous products and technologies with DRDO, as well as with in-house R&D teams. The Company is today engaged in design-to-delivery of solutions across chosen Defence segments.

L&T develops and produces naval platforms, artillery systems, air-defence systems, land and naval weapon delivery systems, fire-control solutions, naval equipment and systems, engineering systems for land and marine forces, military bridging systems, communication systems, missile sub-systems,

and critical components and tracking systems for space-launch vehicles.

L&T has been committed to ‘Make in India’, and invested in multiple work-centres across the country, dedicated to providing Defence solutions. These include an Assembly & Integration Facility at Talegaon near Pune, Precision Manufacturing Facility at Coimbatore, and Strategic Electronics Centre at Bengaluru, for military communications. Besides these dedicated facilities, specific work-centres are set-up at Hazira (near Surat) for the strategic submarine program, Ranoli (near Vadodara) for Advanced Composites, Powai (Mumbai) for

prototype development & testing, and a site at Vishakhapatnam operated under GOCO model for a strategic program.

Business Environment

In line with its ‘Make in India’ and ‘Ease of doing business’ agendas, the Govt has brought about major improvements in policies in the Defence sector. A marked shift towards indigenous procurement is evident from the clearances granted (82% by share and over ₹ 3.2 Lakh Cr. by value) by the Defence Acquisition Council in the past two-and-a-half years for Indian companies to participate as the prime bidder. The policy is also



Deck-mounted multi-barrel Indigenous Rocket Launcher (IRL).



K9 Vajra-T 155mm/52 Cal Self-Propelled (SP) Tracked Gun is being built in collaboration with Hanwha Techwin. Designed for all terrains, it will give the Indian Armed Forces an advantage against border incursions.

progressing towards offering a level playing field for the Private sector through a variety of policy changes.

The MoD has recently released the Strategic Partnership Policy. It is believed that the acquisition of large, complex platforms wherein India would otherwise be import dependent, would follow this model. L&T is likely to be positioned to be selected as a Strategic Partner in one of the key segments.

The Govt. of India has also targeted to build Defence exports with a target of USD 2 billion by 2019. Defence exports are a part of Military diplomacy, and having announced the 'Look East' policy, our country's leadership is engaged in making India

an emerging regional superpower. The early signs of providing military aid / export credit financing to friendly nations is in the public domain.

In the Aerospace segment, the Indian Space Research Organization (ISRO) plans to involve Private Sector and Public Sector firms for Industrialising the production of PSLVs, and to this effect, a PSLV Consortium (JV likely in the future) is under consideration by the Govt of India.

While continuing to build indigenous products / systems using in-house capabilities, L&T has also engaged in the co-development mode with few global partners of choice. A dedicated Product & Technology Development Centre

develops niche technologies, solutions and systems for internal development projects and for the 'Make' and 'Buy & Make Indian' category programmes. L&T also collaborates with ISRO as technology partners for the development of special purpose test facilities for our space programs.

Outlook

With the simplified DPP 2016 coming into effect from 1st April, 2016, defence procurement is expected to gain traction, and programmes worth about ₹ 2 Lakh Cr. for Indian industry are expected to get converted into orders over the next two years. The preference for indigenously designed and developed products will result in opportunities in adjacent domains.



Air Defence Fire Control Radar (ADFCR).



Launch of India's PSLV from SDSC SHAR. Over the last 40 years, L&T has built motor casings, critical subsystems and tracking systems for all of ISRO's space launch missions – including India's first moon and Mars space probes (Chandrayaan and Mangalyaan).

Over the medium-term, significant opportunities are envisaged in programmes for new-build naval (surface as well as underwater) platforms, refit of conventional submarines, artillery and air defence guns, close-in weapons systems, military bridging systems, missile programmes (repeat orders), and sub-systems for space launch vehicles. L&T is prepared for a proactive role in ensuring self-reliance of our nation through a successful 'Make in India' initiative.

SIGNIFICANT INITIATIVES

The Business has drawn up its Strategic Plan with sharp focus up to 2021, and aspires for profitable growth. It continues to invest in intra-organisational excellence initiatives like Six Sigma, Total

Productive Maintenance, Workplace Management Systems and Knowledge Management, to ensure superior quality products and services. People-centric initiatives, competency building, and talent and leadership development remain vital to the growth strategies of the business.

Always a CSR-frontrunner, the business undertakes developmental programmes in areas like global warming, conservation of electricity, fuel and water, and reuse and recycle of materials and resources. Health, Safety and Environment policies and programmes help increase awareness amongst employees, the community and our stakeholders.



Pinaka multi-barrel rocket-launcher. L&T works closely with defence research organisations to develop and manufacture weapon and missile systems.



L&T's shipyard at Kattupalli on India's east coast – equipped with a shiplift, designed and built in-house. L&T undertakes ship design, building, maintenance and repair services for a wide range of defence vessels.

Shipbuilding

L&T's shipbuilding arm offers total solutions – from design to construction to refit of warships.

L&T has a state-of-the-art shipyard at Kattupalli near Chennai in Tamil Nadu. Its shiplift – designed and manufactured in-house – ensures quick turnaround of vessels. The systems at the Yard conform to several standards: ISO 9001 QMS, EMS 14001 and OHSAS 18001.

Defence Vessels

In-house design capabilities, production of critical equipment and systems, experience and expertise in warship construction

and proven project management skills enable the business to leverage emerging opportunities.

L&T's Warship Design Centre has designed a range of defence vessels including corvettes, offshore patrol vessels, cadet training ships, survey training vessels, floating docks, fast patrol vessels and interceptor boats, among others.

Business Performance

The yard is executing the following prestigious contracts:

- Design and construction of seven offshore patrol vessels for the Indian Coast Guard

- Design and construction of 54 interceptor boats for the Indian Coast Guard, of which it has already delivered 30 of the 54 contracted – many well ahead of schedule.
- Design and construction of a floating dock for the Indian Navy

On a regular basis, L&T repairs and refits defence vessels of the Indian Navy and Indian Coast Guard.



Foray into defence exports – the first-ever for any private Indian shipyard – high-speed patrol ships for Vietnam.



First supercritical coal-fired power project (full EPC) by L&T - 2x700 MW Supercritical Thermal Power Plant for Nabha Power Ltd at Rajpura, Punjab. L&T has manufactured critical equipment like turbine-generators, boilers, ESPs and axial fans, among other systems, for supercritical power plants across India.

L&T POWER

A proven, complete-solutions provider for thermal power plants, L&T executes coal and gas-based power projects on a lumpsum turnkey (LSTK) basis. L&T is the first Indian company to have executed a supercritical thermal power plant – 2x700 MW at Rajpura, Punjab – on a complete EPC basis, with indigenously manufactured supercritical equipment.

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 electrostatic precipitators. International standards of safety and quality and on-time delivery are ensured by design and project management centres at Vadodara, Faridabad and Chennai.

Flue Gas Desulphurisation (FGD)

L&T has entered into a Technical Licence Agreement with Chiyoda Corporation, Japan, for FGD. The agreement grants L&T exclusive rights to undertake EPC of FGD Systems.

Major Projects

L&T's Joint Venture company secured a Steam Generator package order for 3x660 MW Ghatampur TPP from Neyveli Uttar Pradesh Power Limited.

In addition to this, L&T is executing the following power projects in India:

- EPC package for NTPC's 2x660 MW ultra-supercritical TPP at Khargone (Madhya Pradesh)

- EPC package for RRVUNL's 2x660 MW supercritical TPP at Chhabra (Rajasthan)
- EPC package for MPPGCL's 2x660 MW supercritical TPP at Khandwa (Madhya Pradesh)
- SG package for NTPC's 2x660 MW supercritical TPP at Tanda (Uttar Pradesh)
- BoTi package for NPCIL's 2x700 MW Rajasthan Atomic Power Project at Rawatbhata (Rajasthan)



Supercritical boiler engineered at L&T's state-of-the-art manufacturing facility at Hazira.



On EPC basis, L&T undertook the 375 MW single-shaft combined cycle power plant project for Gujarat State Electricity Corporation Limited at Dhuvaran.

Gas-based power projects being executed in Bangladesh:

- EPC package for NWPGL's 360 MW Bheramara CCPP
- EPC package for BPDB's 225 MW Sikalbaha CCPP
- EPC package for BPDB's 400 MW Bibiyana III CCPP

A cumulative capacity of over 12,000 MW built by L&T has attained commercial operation as of March 2017.

Joint Venture Companies

L&T-MHPS Boilers Private Limited (LMB) – a joint venture of L&T and Mitsubishi Hitachi Power Systems, Japan – engineers, designs, manufactures, erects and commissions ultra-supercritical / supercritical boilers up to 1000 MW, single unit. Its manufacturing facilities are at Hazira, with design and engineering centres at Faridabad and Chennai. With a total installed capacity of 5000 MW per annum, LMB has also executed major export orders.

In 2016-17, LMB has entered into a Technical Licence Agreement with MHPS, Japan, to offer Selective Catalytic Reduction (SCR) in the Indian market.

L&T-MHPS Turbine Generators Private Limited (LMTG) – a joint venture of L&T, Mitsubishi Hitachi Power Systems and Mitsubishi Electric Corp. – engineers, designs, and manufactures ultra-supercritical/supercritical turbines and generators at its world-class 5000 MW per annum facility at Hazira, and also supervises erection and commissioning. LMTG is India's first manufacturing company to receive all five ISO Standards (ISO 9001, ISO 14001, ISO 18001, ISO 27001 and ISO 50001) and the IMS certification from DNV. It also exports equipment through MHPS.

L&T-Howden Private Limited – a joint venture with the Howden Group, manufactures axial fans and air pre-heaters for power plants at Hazira. Its design and engineering centre is at Faridabad.

L&T-Sargent & Lundy Limited (LTSL) – a joint venture with Sargent & Lundy L.L.C, USA – is a premier engineering and consultancy firm, offering engineering services in the power sector for over two decades. It provides a complete range of engineering and design solutions for power plants, from concept-to-commissioning of open/simple cycle plants, combined cycle plants, cogeneration plants, coal-based plants – both subcritical and supercritical technology – and renewable energy. Its offerings include basic and detail engineering, owner's engineering, lender's engineering, substation engineering, RLA and special consulting assignments. LTSL has engineered numerous prestigious power projects in India and abroad, in USA, Saudi Arabia, Kuwait, Oman, UAE, Qatar, Jordan, China, Thailand, Malaysia, Indonesia, Sri Lanka, Bangladesh, Nigeria, Uzbekistan, Kenya, Central America and North Africa.



Fabrication of a turbine for a power plant.



L&T offers India's widest range of switchgear to a variety of sectors – agricultural, industrial, building and commercial. For over six decades, L&T has been an industry leader in power distribution systems.

L&T ELECTRICAL & AUTOMATION

L&T's Electrical & Automation business offers a wide range of low voltage (LV) and medium voltage (MV) products and solutions for distribution and control of electricity to several sectors: industrial, utilities, infrastructure, buildings and agriculture.

Its range includes LV and MV switchgear components, electrical systems, marine switchgear, industrial & building automation solutions, surveillance systems, energy meters and protection relays.

The business comprises two key verticals:

Products

- Electrical Standard Products
- Metering & Protection Systems

Projects

- Electrical Systems & Equipment
- Control & Automation
- Marine Controls

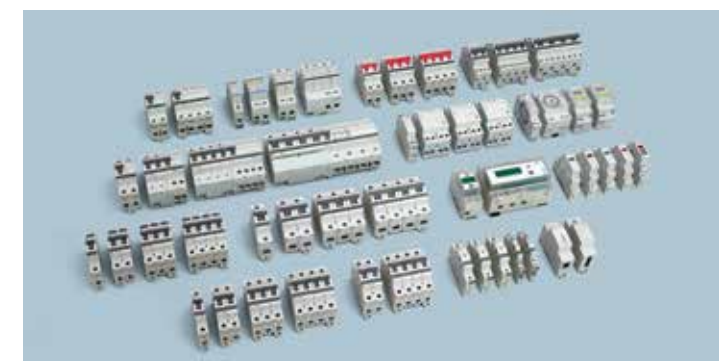
Facilities

The Company's manufacturing facilities incorporate a technology base on par with the industry's best. In India, the facilities are located in Navi Mumbai, Ahmednagar, Vadodara, Coimbatore and Mysore. Overseas factories are located in Saudi Arabia, Jebel Ali (Dubai), Kuwait, Malaysia, Indonesia and the UK. High-precision in-house tool manufacturing facilities ensure high-quality production, while Switchgear Training Centres impart training

in good electrical practices to industry professionals. The in-house design and development capabilities of the business are rated among the industry's best. Its facilities at Powai (Mumbai), Ahmednagar, Mysore and Coimbatore are approved by the Department of Scientific & Industrial Research, Ministry of Science & Technology.

Intellectual Property

During the year, the business filed 101 patent, 3 trademark and 4 design applications in India, along with 2 foreign patent applications (both in Malaysia) and 18 foreign trademark applications (6 trademark applications each in Indonesia, Vietnam and Malaysia). This was the 10th consecutive year of filing more



AU Solutions for final distribution – a comprehensive range for real world applications.



Switchboard installation at a power plant. L&T provides power distribution and control solutions – including LV and MV switchboards – across the value chain, from generation to end-user.

than 100 patent applications. Furthermore, 53 patent applications (49 in India, 1 in USA, 1 in Australia and 2 in the European Patent office) have been granted to the business.

Subsidiary Companies

TAMCO – a leading manufacturer of LV and MV switchgear – has manufacturing facilities in Malaysia and Indonesia. Its AIS, GIS, RMU and Mobile Compact Substation have been installed in several industries and utilities in Asia-Pacific and the Middle East.

L&T Electrical & Automation FZE, based in Jebel Ali, Dubai, provides system integration solutions for oil & gas, power, water and infrastructure majors. It offers process automation and telecommunication applications for the Middle East, Africa and CIS markets.

L&T Electrical & Automation Saudi Arabia Company has a state-of-the-art integrated manufacturing facility in Damam, offering the complete range of LV and MV electrical systems.

Henikwon Corporation Sdn. Bhd., Malaysia is a leading manufacturer of LV and MV busbar trunking systems.

Servowatch System Ltd., U.K., provides marine-specific alarms, control & monitoring software and system integration solutions. It has executed over 1000 installations in 25 years.

Kana Controls General Trading & Contracting Co., Kuwait offers systems for automation.

Product and Project Launches

Recent launches included:

- Omega Air Circuit Breakers 50kA – 2000A & 2500A
- Enriched range of Capacitor Duty Contactors Type MO-C and expanded to Power Quality Solutions
- Energy Management Solution through a new range of Digital Panel Meters and Energy Management software
- New Design Verified Power Distribution Solution – Ti – as per IEC 61439
- Compact Substation
- For QRail, implementation of network-wide Building Automation and Control Systems (BACS) for 37 stations



Mumbai International Airport's Network Operations Centre – powered by L&T's control and automation systems and expertise.



Bassein Development Project for ONGC. The scope included BCPA3 process platform, BLQ3 Living Quarters platform, BH wellhead platform, 12 km pipelines, bridges and modifications at BPA complex.

L&T HYDROCARBON ENGINEERING

L&T Hydrocarbon Engineering Limited, a wholly-owned subsidiary of Larsen & Toubro, provides integrated 'design-to-build' engineering and construction solutions for offshore and onshore hydrocarbon projects in India, the Middle East, Asia-Pacific, Africa, the Americas and Europe. Its track record includes simultaneous execution of multiple, complex, large-value projects, meeting exacting quality and safety norms, and stringent delivery schedules. In-house capabilities are complemented by partnerships with global leaders.

The Company has five business verticals:

- Offshore • Onshore • Construction Services
- Modular Fabrication • Engineering Services

HSE and Sustainability

The Company's HSE Management System is OHSAS 18001 and ISO 14001 certified. It is committed to the growth of the communities around its facilities and projects. Its safety focus has been acknowledged through national and international accolades.

Offshore

Lump-sum turnkey EPCIC services encompass the entire value chain. The Company's Offshore EPCIC product profile includes wellhead platforms, process platforms and modules, subsea systems and pipelines, FPSO topsides and living quarters. Its Offshore Engineering Centre's comprehensive engineering capabilities span the project life-cycle. In-house fabrication facilities at three strategic locations impart flexibility, project

control and cost-competitiveness. A captive 3000-tonne heavy-lift-cum-pipelay vessel has installed 78 offshore structures and laid 272 km of sub-sea pipelines.

Major orders were won in consortium under the LTA with Saudi Aramco. It offers deepwater solutions, collaborating with leading technology partners for projects on India's east coast.

Key Project Completed: ONGC's Additional Development of Vasai East Project

Clients include ONGC, Saudi Aramco, ADMA-OPCO, BGEPI, Bunduq, Dragon Oil, GSPC, KJO, Maersk Oil Qatar, PETRONAS Carigali, PTTEPI, Qatar Petroleum, Songas and ZADCO.



EPCIC for Additional Development of Vasai East Project for ONGC comprising 2 wellhead platforms, 35 km pipelines and modification, aided by a captive heavy lift-cum-pipelay vessel.



Gas processing facilities for Saudi Aramco near Tabuk in Saudi Arabia, with a capacity to treat 75 MMSCFD of gas and 4500 BPD of condensate, and the laying of over 90 km of gas and condensate product pipelines.

Major Orders

- EPCI contract in consortium for 2nd phase of Saudi Aramco's Hasbah Offshore Gas Field, supply & installation of 4 wellhead decks in the Safaniya Field and upgrade of 17 offshore platforms off Saudi Arabia
- EPCIC contract: ONGC's Neelam Re-development & B173AC

Onshore

End-to-end capabilities across the value chain cover upstream oil & gas processing and treatment, petroleum refining, fertiliser, petrochemicals, cross-country pipelines and terminals and cryogenic storage and terminals. Multiple, large-value projects cover FEED, process and detailed engineering, procurement, construction and commissioning. Process licensors include UOP,

Axens, Haldor Topsøe, CB&I Lummus, Black & Veatch, Ortloff, ExxonMobil, BOC Parsons, Invista and Davy Process Technologies. Design Engineering Centres – L&T Chiyoda and L&T-GULF – provide engineering services for onshore hydrocarbon plants and pipeline projects respectively.

Larsen Toubro Arabia LLC in KSA undertakes Saudi Aramco's IK EPC projects.

Key Projects Completed

- Ethane / LNG Storage Facility and BOP for RIL, Dahej, India
- Aviation Fuel Depot, New Abu Dhabi International Airport for TAKREER, UAE
- Yibal Third Stage Depletion Compression and Saih Rawl Depletion Compression for PDO, Oman
- Export Gas Compression Facilities Upgrade for Dolphin Energy, Qatar

Clients include PDO, Saudi Aramco, Kuwait Oil Company, SABIC, BAPCO, Banagas, CHEMANOL, Farabi Petrochemical Company, KNPC, TAKREER, PETRONAS, PERTAMINA, Sonatrach, ONGC, IOCL, MRPL, OMPL, HPCL, BPCL, RIL, HMEL, CPCL, NFL, GSFC, GNFC and RCF.

Major Orders

- Coke Drum System Package at Haldia Refinery of IOCL
- Depletion Compression project for PDO, Kauther, Oman
- Depletion Compression project for PDO, Saih Nihayadah, Oman
- Fluid Catalytic Cracking Unit including LPG Treatment Facility at Bongaigaon Refinery (Assam) of IOCL
- Normal Paraffin & Derivative Complex for Farabi Petrochemicals Company at Yanbu, Saudi Arabia



52"x 107 km Habshan-Ruwais-Shuweihat Gas Pipeline Project for GASCO, Abu Dhabi (UAE).



PAM and PAR modules for ExxonMobil / ZADCO's Upper Zakum Field development programme, ready for despatch at Sohar Yard in Oman. The scope includes engineering, fabrication and load-out of 33 modules weighing approx. 14,000 MT.

Construction Services

The Company undertakes turnkey construction of refinery, petrochemical, chemical and fertiliser projects, gas gathering stations, oil & gas terminals, including storage tanks and underground cavern storage systems for LPG, and cross-country hydrocarbon pipelines.

Key Projects Completed

- Solution Polyethylene and Speciality Elastomers package for Sadara Chemical Company at Al Jubail, Saudi Arabia
- Underground pipe-in-pipe system to transport cryogenic ethane – for the first time in India – for RIL, Dahej
- Installation of cross-country pipelines and construction of Gas Gathering Stations & Well-Site Facilities for Coal Bed Methane Development, Phase I, for RIL, Shadol

Clients include Saudi Aramco, PDO, GASCO, ADCO, TAKREER, ADGAS, Borouge, Al Hosn, ENOC, SADARA, SATORP, KNPC, KOC, KAFCO, QP, Dolphin Energy, OGC, Oiltanking Odfjell Terminals & Co., Cairn Energy, Reliance, HPCL Mittal Energy, IOCL, BPCL, HPCL, ONGC, MRPL, NFL, RCF, GNFC, GSFC, GSPL and GIGL.

Major Orders

- Three new pipelines in Palanpur-Pali and Barmer-Pali for GIGL and Anjar-Mundra for GSPL
- HMEL, Bathinda's composite mechanical works for low-cost expansion
- Additional work from an Indian client

Modular Fabrication

The Company offers comprehensive Modular Engineering, Procurement & Fabrication solutions for offshore and onshore projects, primarily in the Oil & Gas sector. It has extensive worldwide experience in fabrication engineering, procurement and fabrication, testing and pre-commissioning.

World-class Modular Fabrication Facilities at Hazira and Kattupalli (India) and Sohar (Oman), with an annual fabrication capacity exceeding 150,000 MT, offer competitive and year-round delivery with robust QHSE. Equipped for flexibility, project control and management, these waterfront facilities have load-out jetties for worldwide despatch of large, heavy modules, and are accredited with global certifications and pre-qualifications from oil & gas majors.



Load-out of offshore modules for ADMA-OPCO, Abu Dhabi from Sohar Yard in Oman – one of L&T Hydrocarbon Engineering's three Modular Fabrication Facilities.



Solution Polyethylene and Specialty Elastomers package for Sadara Chemical Company (JV of Saudi Aramco and Dow Chemicals) at Al Jubail in Saudi Arabia.

Key Projects Completed Recently

- PAR modules for Rabab Harweel Integrated Project of PDO through Petrofac
- PAR & PAM Modules for ExxonMobil/ZADCO through Petrofac
- Structures and Process Modules and Process Platform Jacket for ONGC's BDP Project
- Process skids for UOP's BORL project

Clients include Petrofac / ZADCO, Petrofac / PDO, Petrofac / KOC, Fluor / KNPC, Fluor / SASOL, Hyundai Saipem JV / KNPC, JNK Heaters, B&V/RIL, and UOP.

Major Orders

- Modularised Structures and Process Modules for ongoing refinery projects in the Middle East and Africa.

Engineering Services

Solutions span the value chain – from concept to commissioning, troubleshooting, EPCM, PMC, Engineering and Procurement services, field engineering services, asset integrity management and O&M services. World-class engineering expertise and resources are backed by rich experience of large-scale EPC projects.

The track record covers concept studies, basic and front-end engineering, detailed engineering, modular engineering, advanced analytical engineering, laser scanning, 3D modelling, special studies and brownfield engineering.

A multi-disciplinary team with over 4 million engineering man-hours, industry-standard software tools, robust IT infrastructure, R&D facilities and engineering work processes benchmarked through leading certification and accreditation systems ensure consistent quality and timely delivery.

Key clients include major international oil companies, Indian public sector undertakings in the hydrocarbon sector and leading owner-operator companies in the private sector. Long-term relationships have been established with major clients based on proven capabilities and track record.



FCC Reactor regenerator section (INDMAX) for IOCL at Paradip Refinery (Capacity: 4.17 MMTPA).



L&T Wheel Loader 9020SX, the premium-class material-handling machine, manufactured by L&T Construction Equipment Limited.

CONSTRUCTION & MINING MACHINERY

L&T offers a wide range of equipment sourced from Komatsu's plants globally (including India), Scania's tipper trucks as well as indigenously designed construction equipment manufactured by L&T Construction Equipment Limited (LTCEL).

L&T Construction Equipment Limited

A wholly-owned subsidiary of L&T, LTCEL manufactures hydraulic excavators, wheel loaders, asphalt compactors and soil compactors, and high-precision hydraulic systems and components for mobile and industrial applications.

Significant Initiatives

- Launched L&T 9020SX Wheel Loader and L&T 491 Mini Compactor, manufactured at LTCEL's new factory near Bengaluru

- Introduced Komatsu's Motor Grader GD535-5 and Hydraulic Excavator PC350LC for India

INDUSTRIAL MACHINERY & PRODUCTS

Rubber Processing Machinery

L&T offers rubber-processing machinery, including tyre-curing presses, tyre-building machines, tyre plant automation solutions and open mixing mills for the global tyre and rubber industry manufactured at Kancheepuram, Tamil Nadu. Its global customer base spans 45 countries.

Milestones

- Executed a ₹ 600 Mn greenfield project for an Indian tyre major for its 2-wheeler tyre manufacturing
- Launched 2 new models of hydraulic tyre-curing presses in the truck-bus segment

- Executed a comprehensive project involving engineering, supply, installation and commissioning for a tyre major in Portugal

L&T Kobelco Machinery Private Limited

This JV of L&T and Kobe Steel, Japan, manufactures internal mixers and twin screw roller-head extruders.

L&T Cutting Tools Limited

The business offers industrial cutting tools of ISCAR Limited, Israel, to several manufacturing sectors, such as aerospace and defence.

EWAC Alloys Limited

A market leader in maintenance and repair welding with a factory in Ankleshwar, Gujarat, EWAC's product range includes special welding electrodes, gas brazing rods and fluxes, atomised metal power alloys, flux-cored continuous wires, polymer compounds and wear-resistant plates.



L&T Tandem Compactor 990HF, manufactured by L&T Construction Equipment Limited, deployed for asphaltting roads.



L&T Valves manufactures a wide variety of engineered flow-control solutions – constantly setting new benchmarks for product innovation and customer satisfaction.

L&T VALVES

L&T Valves Limited, a wholly-owned subsidiary of L&T, is a leader in flow-control solutions for oil & gas, power and allied process industries. For over fifty years, the Company has leveraged technology and innovation to manufacture engineered valves for demanding services.

L&T Valves has a marketing network that spans the globe and is reinforced by strategic alliances with key international distributors. In India, it has a presence in major industrial centres through a network of offices, field engineers, distributors, automation and service centres and service franchisees.

The state-of-the-art manufacturing facilities of L&T Valves are located at Coimbatore, Kancheepuram and Sriperumbudur in Tamil Nadu. Its Quality Management System is certified to comply with ISO 9001 and API Spec Q1. The Environment Management System and Occupational Health and Safety Management System meet the requirements of ISO 14001 and OHSAS 18001, respectively.

L&T Valves is licensed to offer products monogrammed API 600, API 6D and API 609 as well as valves with CE Marking and ATEX certification. The Company also offers SIL3-capable ball and butterfly valves and safety integrated systems including HIPPS (High Integrity Pressure Protection System).



The first HIPPS (High Integrity Pressure Protection System) designed and manufactured in India. L&T Valves is a leader in safety instrumented systems for critical services in the energy sector.



L&T Infotech's global headquarters in Mumbai. The Company's solutions focus on the convergence of the physical and digital worlds, improving efficiencies for its clients.

L&T INFOTECH

Larsen & Toubro Infotech Ltd. (LTI) is a subsidiary of Larsen & Toubro Limited. LTI is a global consulting and digital solutions company, uniquely placed to pioneer solutions in a converging world. With a focus on real-world expertise and extreme client-centricity across 27 countries, LTI solves complex business challenges at the convergence of the digital and the physical worlds.

The Company enables its clients across diverse verticals to build innovative business models, enhance operational efficiencies and create enriching customer experiences. LTI provides a comprehensive portfolio of services to sectors such as Banking and Financial Services, Insurance, Consumer Products, Life

Sciences, Media & Entertainment, High-Tech, Oil & Gas and Manufacturing. These are further complemented by services such as Application Development Maintenance, Enterprise Solutions, Testing, Infrastructure Management, Digital & Automation and Business Consulting.

The Company has invested in building solutions and frameworks around Exponential Technologies, which are offered under the brand MOSAIC™. LTI's Mosaic Experience Centre (MEC) brings the collective power of Exponential Technologies like Analytics, Automation, IOT, Artificial Intelligence and User Experience together. With real-world examples, the MEC helps clients understand how LTI's solutions, based on these Exponential

Technologies, can be leveraged to accelerate their digital transformation. It also provides them with the confidence to make significant investments in new technologies.

LTI is based in Mumbai, India, and serves over 250 clients, including 52 Fortune 500 enterprises. The Company has over 20,000 employees spread across 43 Sales Offices and 23 Delivery Centers, worldwide.



Mosaic Experience Centre.



Headquartered at Knowledge City, Vadodara, L&T Technology Services helps clients gain the competitive edge by building smart products, enabling smart manufacturing and offering smart services. The Company has delivery centres in USA, Europe and India.

L&T TECHNOLOGY SERVICES

L&T Technology Services Limited (LTTS), a leading global pure-play ER&D services company, offers design and development throughout the product development chain – providing solutions in mechanical, manufacturing and process engineering, embedded systems and engineering analytics. LTTS delivers differentiated solutions to build Smart Products, Smart Manufacturing and enabling Smart Services. Its IP-led solutions have been launched in the global market. As part of its 5-year strategy, L&T Technology Services is focusing on four transformative areas – Digital Engineering, Perceptual Engineering, Smart Manufacturing & Operations and Pervasive Technology – all of which are expected to disrupt traditional ways of doing business.

Its key differentiators are, domain expertise and multi-vertical presence in industry segments like Industrial Products, Medical Devices, Transportation, Telecom, Consumer Electronics & Semiconductors and Process Engineering. LTTS is a recognised, expansive and established player in Zinnov Zones 2016 Product Engineering Services and in the Leadership Zone across 10 major industries.

LTTS serves over 50 Fortune 500 companies and over 40 of the world's top ER&D spenders. 10,000+ highly-skilled personnel across 12 delivery centres, 27 sales offices globally and 34 innovation labs India-wide give LTTS's clients the competitive advantage.

Business Performance

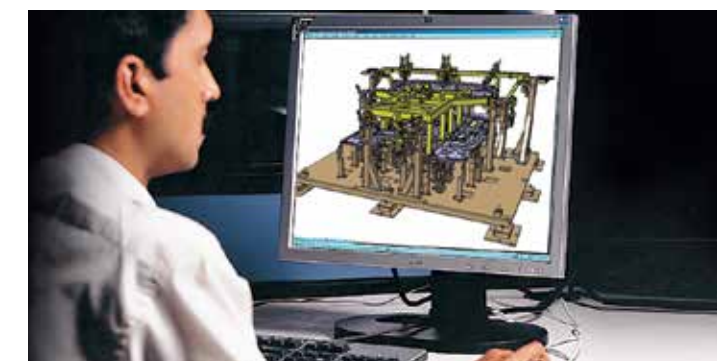
The business has achieved approx. 16% CAGR over FY13-FY16

– maintaining focus on innovation, with 57 of its own and 197 co-authored patents.

Certifications: LTTS's delivery centres are ISO 9001:2008-certified. Its Aerospace & Medical Devices practices are AS 9100C and ISO 13485:2003 certified. Its Embedded Systems & Software activities are assessed at Maturity Level 5 of SEI's CMMI® Development.

Awards: LTTS has won several awards - Indo American Chamber of Commerce's 'Company of the Year' and 'Best Green Office Space of the Year' awards, the Golden Peacock National Quality Award and Dataquest Vertical Warrior Award in IT/ITeS.

Alliances: LTTS has alliances and partnerships with global majors, including Microsoft, UTC Climate, Controls & Security and Otis (units of United Technologies Corp.), AUTOSAR, Cisco, Intel, Tele2, National Instruments, Sierra Wireless and ThingWorx.



Engineering services that enhance efficiency, while reducing time-to-market and costs.



Beyond the clear, realistic targets and the measurable progress achieved by our CSR team, is a less quantifiable but deeply fulfilling goal – spreading smiles.

CORPORATE SOCIAL RESPONSIBILITY

Creating a Better Tomorrow

L&T is an engineering and construction conglomerate with a heart. One that resonates with the philosophy that growth is the means to achieve the greater good of the greatest number.

At L&T, the imperative of balancing financial, environmental and social interests predates industrywide acceptance of concepts such as 'CSR' and 'Sustainability Reporting'. Building on over seven decades of social responsibility activities, the Company contributes to inclusive growth by empowering communities and accelerating development through interventions in water & sanitation, health, education and skill development. L&T-eeing, a structured volunteering programme, encourages and enables employee

volunteers or L&T-eers to contribute their spare time to community development programmes supported by the Company, thereby enhancing social impact even further.

Enhancing Impact

The Companies Act 2013 provided a unique opportunity for L&T to realign its CSR initiatives with the nation's developmental requirements and create more impactful community-development programmes. Weaving together the Company's business vision and its responsibility towards the social sector, the CSR theme of 'Building India's Social Infrastructure' was chosen.

Towards this end, L&T began working for the development of water-stressed rural communities. It undertakes community-based interventions to make water available for drinking, sanitation and agriculture. Using an integrated approach, interventions in

education, health and skill-building have been planned in the same rural communities in a phased manner for the next 5 years to improve the overall quality of life. This is closely linked with the UN's Global Sustainable Development Goals (SDGs). These areas of activity yield returns with cascading benefits that have a ripple effect on dependents and associates.

At the grassroot level, L&T's CSR activities are aligned to specific Governmental welfare programmes and projects, strengthening the execution of projects in progress and avoiding needless duplication of effort. This ensures the judicious allocation and use of resources such as money, time and talent. L&T executes CSR projects directly or partners with Non-Government Organisations (NGOs).

Water & Sanitation - The Bare Necessities

Launching its Integrated Community Development Programme in FY 2014-15, L&T identified locations as 'water-stressed' on the basis of availability, quality and uncertainty of supply to enable these locations to become water-sufficient for drinking, sanitation and agriculture. L&T envisages these communities leading better quality lives through an integrated and holistic approach, which will provide access to improved healthcare, education and higher income levels. To begin with, L&T, in consultation with external domain experts, identified water-stressed village clusters that were not beneficiaries of any previous interventions in four states – Rajasthan, Tamil Nadu, Maharashtra and Gujarat. This covers 11006 households across an area of 9337 hectares.



The social infrastructure we seek to build covers a wide spectrum – water, sanitation, education, health and skill-building. These initiatives have benefited over 1 million people in 2016 -17 alone.

Key deliverables

- Watershed interventions such as construction of check dams, anicuts, contour trenches, farm bunds, farm ponds, and well restoration to increase ground water levels and soil moisture content
- Drudgery-free access to clean drinking water, ensuring improved health and sanitation
- Availability of fodder for livestock
- Empowerment of communities and sustaining programme benefits through self-help groups with women's participation

Key highlights so far:

- Project formulation through extensive community participation using the Participatory Rural Appraisal System
- A strong feeling of ownership and involvement instilled within community members

- Increase in ground water level, conversion of land from fallow to cultivable, and checking of soil erosion through various watershed interventions
- Creation of community-level organisations like Village Development Committee (VDC), Self Help Groups (SHGs) and User groups for project sustainability. VDCs have been formed in all 30 villages under our coverage
- 30-50% of participants in all VDC and watershed interventions are women, ensuring their participation in project planning and execution.
- Sanitation Awareness Drives among the community members and community-based monitoring committees will ensure that these villages are well on their way to becoming free of open defecation.

Health - The Wellspring of Joy

Good health is the cornerstone of social well-being. L&T is helping create healthier communities by providing the underprivileged with affordable healthcare services in various areas – with a focus on mother-and-child care.

Health Centres: L&T has set up multi-specialty health centres which provide diagnostic, curative and preventive services in the areas of general medicine, gynaecology, paediatrics, pulmonology (including chest and TB), ophthalmology, orthopaedics, nephrology, psychiatry, ENT, dermatology and dentistry. Immunisation and dialysis services are also provided. Emerging lifestyle diseases, such as diabetes and cardiac problems are also addressed at these centres. The HIV/AIDS issue is addressed through diagnostic and counselling facilities, as well as distribution of the Government's free anti-retroviral therapy at L&T's Mumbai Health Centre.

Counselling services are offered in the areas of mother-and-child care, as well as problems faced by teenagers.

Mobile Clinics: The mobile clinics operated by L&T penetrate deep into rural and tribal areas, bringing the benefits of basic health facilities and modern health technology to these marginalised communities.

Health Camps: L&T organises diagnostic, clinical and awareness health camps. Diagnostic and clinical camps are held pertaining to general medicine as well as specialties such as ophthalmology, dentistry, gynaecology and TB detection. Diagnostic camps are also held for specific groups, such as women and school children. Awareness camps disseminate information on critical issues such as hygienic practices and HIV/ AIDS prevention. Blood donation camps are held, usually at L&T's establishments, in partnership with hospitals or blood banks.



We nurture dreams, and build marketable skills that help the underprivileged stand tall.

Dialysis Centres: L&T has set up Artificial Kidney Dialysis Centres at its health centres for the benefit of the underprivileged.

Education – The Mainstay of Progress

L&T's social interventions covering educational initiatives are focused on providing primary education, infrastructure development, and enhancing the learning experience for children in several schools in the vicinity of its facilities across India.

Education infrastructure: L&T provides infrastructure support to Government schools. It provides furniture, sets up and equips laboratories, libraries and playgrounds, refurbishes and digitises classrooms and builds toilet blocks for rural schools. All these lay the foundation for good education.

Learning enrichment: Learning enrichment programmes are conducted in schools through NGO partners, with a focus on science, language and maths. 'Science on Wheels' vans visit schools to provide young, enquiring minds with exciting opportunities to perform hands-on science experiments and fire their imagination.

A toy van for children – 'Nanha Munna Express' – makes learning fun for children, and helps develop motor, cognitive and social skills. After-school support is provided to children in community learning centres by trained community teachers. These centres help children to cope with their school curriculum, thereby reducing school drop-out rates, and enhancing their academic performance as they progress from one standard to the next. Preschools or Balwadis are run in low-income communities to lay a strong foundation for many vulnerable children and facilitate enrolment in neighbourhood schools.

Children from underprivileged backgrounds are also provided with basic computer education, to prepare them for a digitalised world.

Skill-building – Creating a World of Possibilities

Construction skills: India's infrastructural demands call for quality workmanship and deployment of the latest techniques in construction methodology. L&T has set up and runs eight Construction Skills Training Institutes (CSTIs) across the country. These Institutes provide formal, free vocational training in construction skills for the largely unorganised workforce in this sector. School dropouts and illiterate village youth are taught skills like bar-bending, formwork carpentry, masonry, scaffolding and welding. A stipend, hostel facility and Certificate of Proficiency on completion, give participants an added incentive to complete the course. These short courses – ranging from three to six months – transform these once unemployable youth into certified, skilled,

self-reliant young men, ready to join the workforce and support themselves and their families.

Industry-oriented training:

L&T has collaborated with 27 Industrial Training Institutes (ITIs) across the country to impart industry-oriented training.

Empowering the differently-abled:

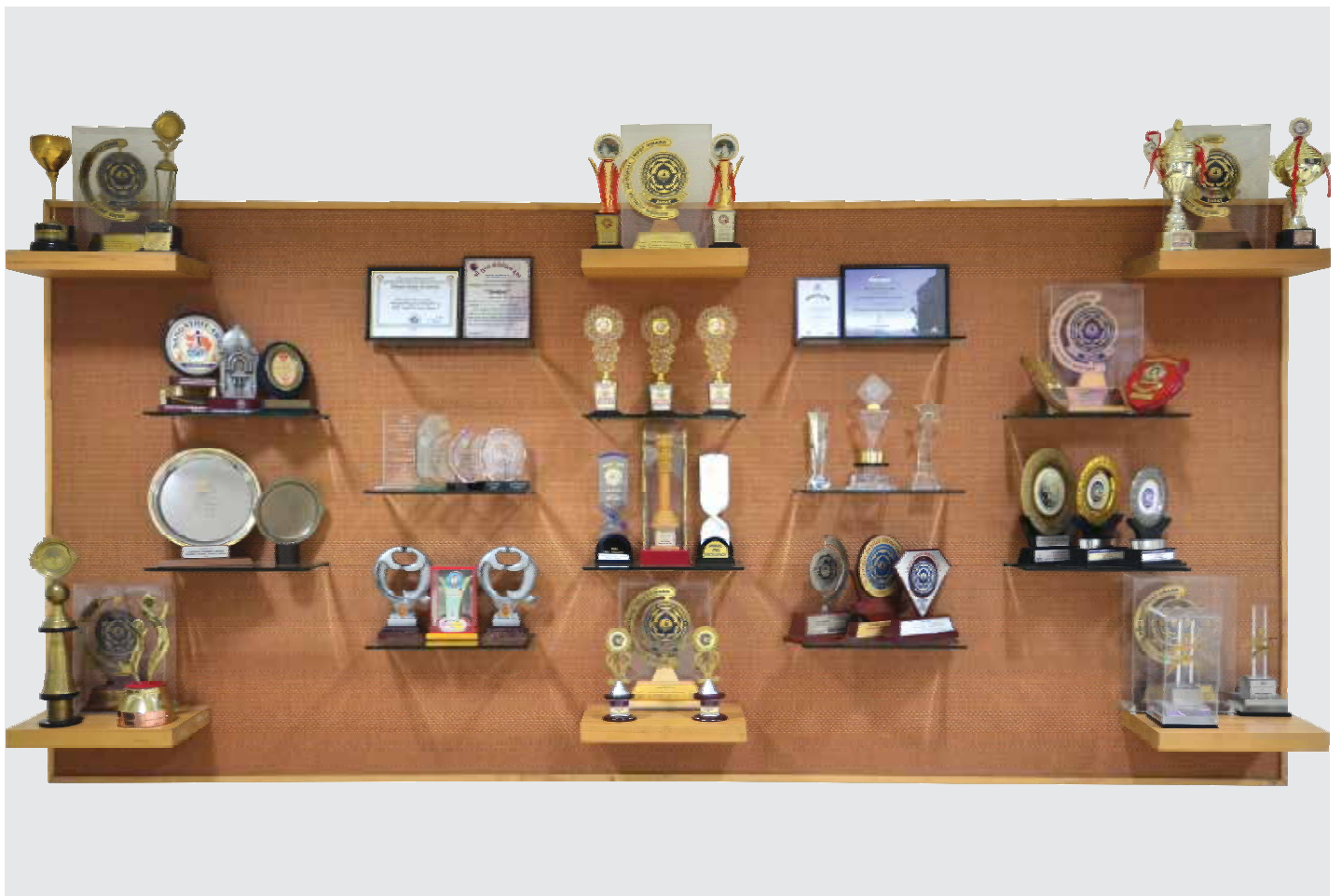
L&T's 'Project Neev' initiative enriches the lives of the differently-abled by offering specially-designed training programmes that enable them to obtain gainful employment and enhance their sense of self-worth.

Vocational training for women:

To make underprivileged women self-reliant, L&T has introduced vocational training programmes in the areas of tailoring, beautician skills, home-nursing and food processing.

Awards & Recognition

Every year, L&T and its people receive a number of national and international awards that acknowledge its varied accomplishments. Presented by the media, industry associations, independent bodies and academia, they honour the Company's contribution in various spheres of business, technology, financial performance, growth and environmental protection. For details of recent awards, please visit www.Larsentoubro.com





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Registered Office: Larsen & Toubro Limited, L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001, INDIA
www.Larsentoubro.com CIN: L99999MH1946PLC004768

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