



**Sustainable progress
for a better world**

Sustainable progress for a better world

Making meaningful choices today is pivotal to building a better world. At L&T, we have been a partner in India's progress through events of historic significance and hues – black or green – and have used them as an inflection point to strengthen our own resilience and drive the global sustainable development agenda.

As we pass through another period of tectonic shifts triggered by a global pandemic, we have sharpened our focus on improving performance across environmental, social and governance (ESG) parameters. We are undertaking synchronised efforts to reduce our carbon footprint and enhance resource efficiency while strengthening our green portfolio.

As 'the builder of 21st century India', we are revisiting our vision, policies, frameworks, roadmaps and action plans to deliver 21st century solutions towards building a better future.

FY21 GROUP HIGHLIGHTS

ORDER INFLOW

₹ 1,754.97 Billion

▼ 6%

ORDER BOOK

₹ 3,273.54 Billion

▲ 8%

REVENUE

₹ 1,359.79 Billion

▼ 7%

PROFIT AFTER TAX (PAT)*

₹ 115.83 Billion

▲ 21%

▲ ▼ y-o-y



* Includes profit on discontinued operations net of exceptional items ₹ 46.18 Billion

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About the report

Reporting scope

Shareholders today are more cognisant of an organisation's sustainability and overall value-creation ability rather than just financial performance. This paradigm shift in shareholders' evaluation process has led to the publishing of this Integrated Report (IR), a cohesive document that communicates about our organisation's strategy, governance, performance and prospects, in the context of our external environment and value creation for our stakeholders. The Report expands the target audience from the primary provider of financial capital to include employees, customers, suppliers, local communities, regulators, and policy-makers.

As one of the forerunners in sustainability reporting, we continue to retain all relevant disclosures of a Sustainability Report while enriching it with additional disclosures as prescribed in the International Integrated Reporting Framework. The report enables our stakeholders to analyse our efficiency across six capitals such as financial, manufactured, intellectual, human, natural, and social and relationship with a detailed business model, governance, risk management, outlook and strategy, focusing on value creation over the short, medium and long term.

An annual reporting cycle has been maintained for our Sustainability Reports since 2008, which is available on our website at

www.lntsustainability.com



Our third Integrated Report, **'Technology for Sustainable Growth'** was released across online platforms.

Integrated Report
| L&T Corporate
lntsustainability.com

This is our fourth IR and the 14th consecutive year of sustainability disclosures. We have a mature system for compiling and reporting our sustainability performance. A data-management software certified by GRI is used, along with techniques comprising actual measurement, computation and estimation (specified).

This Integrated Report of Larsen & Toubro Limited (L&T, 'the Company') is published in accordance with the Framework prescribed by the International Integrated Reporting Council (IIRC).

This Report has been prepared in accordance with the GRI Standards: Comprehensive option. It encompasses L&T's environmental, economic and social performance between April 1, 2020 and March 31, 2021.

The data presented in this Report is verified through systematic internal and external assurances. The data for economic performance has been extracted from L&T's Annual Report 2020-21.

Reporting boundary

This report is for Larsen & Toubro standalone and key subsidiary companies. The reporting scope encompasses our manufacturing locations, project sites, offices across India and overseas projects managed from India. L&T's companies within the scope of this report reflect the performance of EPC projects and hi-tech manufacturing and realty and others (refer page 299 of our Annual Report 2020-21). Listed subsidiaries and concession business comprising of Nabha Power Limited, Power Development Limited, L&T Infrastructure Development Projects Limited and Hyderabad metro, other non-material subsidiaries and Associate & Joint Venture (JV) companies whose performance is consolidated at Profit After Tax (PAT) level, have been excluded from this Report. L&T's electrical and automation business has been divested.

Restatement

The changes, if at all, are mentioned on the respective pages as notes.

Queries may be directed to

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Assurance

This Report is externally assured by Bureau Veritas. The limited assurance was conducted in accordance with International Standard on Assurance Engagements (ISAE) 3000 and Type 2 Moderate Level of the AA1000 Assurance Standard 2008, covering qualitative and quantitative information. The assurance statement is included in this Report.

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Our capitals



Natural
Capital



Manufactured
Capital



Intellectual
Capital



Human
Capital



Social and Relationship
Capital



Financial
Capital

STRATEGIC OBJECTIVES

SO1

Pursue value accretive growth of current businesses with faster growth of services business

SO2

Incubate new businesses to tap future growth opportunities

SO3

Enable business sustainability through high focus on Environment, Social and Governance (ESG) parameters such as climate stewardship, circular economy, green businesses, green supply chain, employee and social welfare, workforce health & safety etc.

SO4

Optimise the mix of businesses (EPC, manufacturing, services) and geographies (India, international) to de-risk the portfolio

SO5

Identify sustainable solutions for non-core businesses and assets earning sub-par returns

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STRATEGIC ENABLERS

SE1

Operational excellence for leadership in cost-competitiveness and world class execution

SE2

Industry leading capabilities in digital technologies and analytics for productivity, ESG effectiveness and strengthening revenue streams

SE3

Financial resources to enable growth of the businesses and strong financial health to facilitate access to capital markets as and when required

SE4

Talent and leadership pipeline to enable growth and business continuity

SE5

Capability development through R&D, absorption of new technologies and partnerships

Message from the Group Chairman

// Our proactive approach to managing business with a primary focus on stakeholder wellbeing has enabled us to overcome challenges and imbued us with the spirit of resurgence.

Dear Stakeholders,

We are passing through a period of simultaneous challenges on multiple fronts – the impact of a global pandemic, compounded by heightened climate change concerns and a weakened business ecosystem. At L&T, we regard such critical occasions as the trigger point for our resilience and inherent reserves of strengths to come to fore. We also see this as an opportunity to reaffirm our unwavering commitment to our various stakeholders.

Battling the Pandemic

L&T has always responded swiftly and spontaneously to issues of national interest. In the face of the COVID-19 pandemic, we contributed in monetary and material terms to mitigate loss of life and suffering. In addition to a donation of ₹ 150 Crore to the PM CARES Fund at the onset of the crisis, the L&T Group has also allocated ₹ 39 Crore towards Covid care initiatives including supplying test, medical and PPE kits to locations around the country. When the second wave threw up the unexpected challenge of an acute shortage of oxygen, we responded by activating our global procurement arms, and commenced delivery of oxygen generators to various hospitals in India amounting to ₹ 35 Crore.

Our construction business has converted many hospitals to Covid Care Centres. We have installed smart technologies in over 20 major cities to help state governments and local authorities in their endeavour to contain the spread of the virus.

L&T Cares for its people

People are our prime movers and the Company has made every effort to support its employees in the fight against COVID-19. Apart from health safeguards and following Covid protocols at a corporate level,

we have taken a number of proactive steps like in-house vaccination drives, lumpsum insurance for employees, educational and vocational support for family members of deceased employees, and professional online counselling to help minimise the impact of the pandemic on the families of affected employees. Employee morale has been sustained in these trying times, enabling us to deliver on our business commitments.

A sustainable approach towards growth

At L&T, our enhanced focus on Environmental, Social and Governance (ESG) parameters has enabled us to engage with stakeholders in a more holistic manner. Our concerted efforts in various areas of sustainability, including mitigating climate change, are yielding results and we will continue to demonstrate leadership in this field. Afforestation and biodiversity are other fields where we continue to perform well. Our WET business has planted over 2.3 Million trees during the last two years and we have 150,000 fully grown trees in various campuses. Our focus on water, waste, supply chain, material recycling, and enhancing our green portfolio adds to our sustainability quotient.

Values make the Company

L&T has always prided itself on its strong value system, which has become the hallmark of the organisation among stakeholders. Our core values pivot around the principles and ideals based on independence, transparency, accountability, responsibility, compliance, ethics and trust. In recognition of our efforts, we received the 'Grant Thornton Bharat SABERA' award for Best Integrated Reporting in FY20.



Our Company takes a 360-degree view of sustainable development that encompasses the social, economic, governance and financial aspects of an organisation. Our approach covers a wide spectrum – ranging from progressive reduction of carbon emission intensity at our campuses and project sites, water conservation at the locations we operate in and the phased induction of alternative and recycled substitutes in our operations.

Our people occupy prime position in the organisation's hierarchy of stakeholders, and therefore continuous attention is given to development of talent and retention at all levels. Our sharp focus on employee engagement has resulted in a culture of continuous training and empowerment, adding value to the employees and organisation alike.

Performing amid uncertainty

The pandemic has disrupted global economies, industry and businesses. Despite these uncertainties, we have managed to stay on the growth path, thanks in part to our focus on 'nation building'. We have won a number of orders to execute mega-scale projects of national importance – each requiring an advanced level of technical and executional expertise that L&T is best known for.

I look forward to the coming years with cautious optimism. We will continue to take care of the health and safety of our people while aggressively pursuing opportunities for growth across key geographies.

This Integrated Report (IR) reflects our commitment to transparency and continuous dialogue with our stakeholders. As always, we welcome your inputs on our disclosures across multiple parameters.

Mr. A. M. Naik
Group Chairman
LARSEN & TOUBRO

L&T Overview

Larsen & Toubro Limited is an Indian multinational conglomerate with diversified interests across core high-impact sectors. We are India's largest technology-driven engineering and construction organisation and rank among the world's top Engineering & Construction companies.

For over eight decades, we have gradually enhanced our integrated capability creating sustainable value for our stakeholders. Our cutting-edge quality-driven offerings are designed with our large cross-section of global customers at the core. For decades, we have been actively contributing in building the country's image and stature across the world. We are respected for our high standards of professionalism and corporate governance.



**Presence in 31 countries
across the globe**

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.



Creating a Mark – first, largest, tallest, and longest in the world

- World's largest coal gasifier made in India and exported to China
- India's first indigenous hydrocracker reactor
- Oil and gas platform projects executed to global benchmarks
- World's largest Continuous Catalyst Regeneration reactor
- Simultaneous execution of clean fuel projects at eight refineries around India
- World's biggest Fluid Catalytic Cracking regenerator
- World's longest product splitter
- Asia's highest viaduct – built for the Konkan Railway
- World's longest gas pipeline
- World's longest coal conveyor
- Building an international class football stadium in 260 days



Business Segments

Our ventures spanning critical industries aid in not only meeting crucial economic requirements but also improve the quality of life of people in multiple ways and create long-term value for our stakeholders.

Buildings & Factories

(B&F)

Our Product/Projects

Design and Engineering, Procurement and Construction (EPC) of projects ranging from airports, hospitals, stadiums, retail spaces, educational institutions, IT parks, office buildings, data centres to high-rise structures, mass housing complexes, cement plants, industrial warehouses, test tracks and other factory structures

Setting us Apart

- 'Turnkey solutions' from 'concept to commissioning' across the entire spectrum of urban infrastructure, including in-house design expertise using advanced systems like BIM 4D, 5D and BIM 360 field and project management expertise
- Track record of building tall, large, complex and iconic structures across India and overseas. The Lotus temple, Statue of Unity – the world's tallest statue, Motera Cricket Stadium - world's largest cricket stadium, 11 national and international airports apart from many other institutions have been built by B&F
- Forerunner in offering modular, mechanised processes for advanced construction technologies such as Prefabricated Prefinished Volumetric Construction, Offsite Manufacturing, Structural Steel Construction, and 3D printing to fast track projects
- 'Plug-and-play' capability to design-and-build world-class IT infrastructure, software parks and data centre



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Heavy Civil Infrastructure

(HCI)

Our Product/Projects

Metros, nuclear plants, hydel projects, ports, special bridges, tunnels, defence infrastructure

Setting us Apart

- Capability and expertise to construct critical and complex structures covering civil, structural, mechanical and electrical works with international quality standards
- Rich expertise to build underground structures adopting various tunnelling technologies e.g., New Austrian Tunnelling Method (NATM), Tunnel Boring Machines (TBM) and to erect super structures using innovative methods including incremental launching and full span 'U' girders to speed up execution
- End-to-end design and engineering capabilities for all offerings including feasibility and detailed project report, seismic qualification, geotech engineering, blast resistance etc.
- Owner and operating of one of largest fleet of critical plant and machinery e.g. Tunnel Boring Machines, heavy lift cranes, tower cranes, shotcrete machines etc.
- Global supply chain management cell to undertake competitive sourcing of materials



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Transportation Infrastructure (TI)

Our Product/Projects

Roads, elevated corridors, runways (airside infrastructure), railway construction, railway electrification and systems, light rail transport

Setting us Apart

- Only Indian firm qualified to undertake integrated rail construction projects of Indian Railways
- Pioneer in introducing new techniques for the execution of rail projects with innovation, quality and speed e.g. mechanised construction
- First of its kind training centre for rail construction in the country
- Well-equipped engineering centres which offer end-to-end design capabilities including consultancy and construction engineering for all our offerings
- Expertise to design and build full spectrum of highways including complex interchanges, elevated corridors and even race tracks



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Power Transmission & Distribution (PT&D)

Our Product/Projects

Design, manufacture, supply, installation and commissioning of Transmission lines, substations, underground cable networks, distribution networks, power quality improvement projects, infrastructure electrification, fibre optic backbone infrastructure, solar PV plants including floating solar, battery energy storage systems, mini/micro grid projects and related digital solutions

Setting us Apart

- Providing integrated solutions with inhouse design, global sourcing and digitally enabled delivery excellence
- Digitally driven, green tower manufacturing units with a capacity of more than 1.5 Lakh tonnes of tower components per annum
- One of the renowned Tower Testing and Research station in the world
- In-house Battery Energy Storage System containerisation facility to offer large-scale renewable integration solutions
- Expertise in executing solar projects, micro-grid electrification projects
- India's first 1200kV and 765 kV Gas Insulated Substation
- Strong reputation and significant share of markets in the India subcontinent, Middle East, Africa and ASEAN markets



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Business Segments

Water & Effluent Treatment

(WET)

Our Product/Projects

- Urban and Rural Water Supply
- Industrial Water Supply
- Water Treatment Plants
- Sewage Treatment Plants
- Effluent Treatment Plants
- Wastewater Collection Network
- Desalination
- Micro & Lift Irrigation Projects
- Water Management
- Smart Water Infrastructure
- Plant Water Systems
- 24x7 Pressurised Water Supply
- Non-Revenue Water (NRW)/ Unaccounted For Water (UFW)

Setting us Apart

- Offer an array of process technologies for water treatment covering conventional treatment and advanced treatment like Ozonisation and Granular activated carbon.
- Proven track record of offering total solutions spanning the entire spectrum of the value chain – right from tapping water through intake structures to tertiary treatment and safe disposal of the treated effluent through marine pipe
- Developing and adopting sustainable and innovative execution methods e.g., horizontal directional drilling and micro tunneling for fast project execution
- One-stop solution provider for digital and innovative technologies driven solutions in water and waste water management e.g. hydraulic modelling, leakage management, GIS asset mapping, billing and master data management etc.

Smart World & Communication

(SWC)

Our Product/Projects

- Smart Cities and Smart Infrastructure
- Safe cities
- Cyber security
- Communication network and telecom infrastructure
- Military communications

Setting us Apart

- L&T Smart World has played a crucial role in the National Smart City Mission offering their robust solutions for improving the liveability index for multiple cities and helping more than 27 cities in Covid Control measures through technology interventions



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Metallurgical & Material Handling (MMH)

Our Product/Projects

Mineral beneficiation, iron and steel making; aluminum, zinc and copper refiners and smelters; specialty conveyors; stockyard equipment; crushing systems and equipment; surface miners, sand manufacturing plants

Setting us Apart

- Dominant player in the country in EPC of metallurgical projects
- Provider of one-stop solutions in ferrous and non-ferrous sectors



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Defence

Our Product/Projects

Guns and armoured systems, missiles and aerospace systems, military communication systems, unmanned systems, frontline warships, auxiliary vessels, special naval platforms, submarines and underwater platforms, weapon and engineering systems, radar systems

Setting us Apart

- Proven command and competence of more than three decades
- Offers specialised turnkey defence construction solutions
- Seamless integration of solutions through our IT business



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Heavy Engineering (HE)

Our Product/Projects

Hydrocracker and Clean Fuel Reactors, Fluid Catalytic Cracking (FCC) Reactor and Regenerator Package, Coke Drums, Ethylene and Propylene Oxide Reactors, VAM Reactors, Molten Salt Bath Reactors, Ammonia and Methanol Converters, Key Gasification Equipment, Urea Stripper and Reactor, Carbamate Condenser, Waste Heat Boiler Package, HP Heat Exchanger, Ti and Exotic materials Heat Exchangers, Nuclear Power Equipment – Steam Generators, End Shields, Spent Fuel Canisters and Casks, Modification, Revamp and Upgrade (MRU) and Critical Piping Spools.

Setting us Apart

- Providing engineered-to-order equipment, solutions and critical piping to various industries
- Technology-driven, quick turnaround solutions for Process Plants offered by Modification, Revamp and Upgrade (MRU) business



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Business Segments

Power

Our Product/Projects

Turnkey solutions for coal-based and gas-based power plants, supercritical turbine generators, supercritical boilers, enviro solutions, power block auxiliaries, heat recovery steam generators, steam turbines, engineering services, construction services, other critical systems

Setting us Apart

- In-house engineering, state-of-the-art manufacturing facilities, competency in executing large and complex projects within and outside India
- Major player in new emission-control technologies such as Flue Gas Desulphurisation (FGD)
- India's first Ultra supercritical power project



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Hydrocarbon Engineering (LTHE)

Our Product/Projects

FEED, EPCIC and turnkey construction of projects for oil and gas extraction and processing, petroleum refining, chemicals and petrochemicals, fertilisers, cross-country pipelines and terminals

Setting us Apart

- In-house engineering and R&D centre. Onshore and offshore construction and installation capabilities
- State-of-the-art all-weather waterfront Modular Fabrication facilities at Hazira (India's west coast), Kattupalli (India's east coast) and Sohar (Oman) and an integrated manufacturing facility at Jubail in Saudi Arabia
- Offerings in new areas of green energy, modular solutions, cutting-edge hydrocarbon technologies and smart differentiated solutions



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Realty

Our Product/Projects

Real estate development offering mixed-use integrated developments, residential complexes, commercial and retail spaces

Setting us Apart

- Developer with sustainable design philosophy. Total portfolio of over 70 mn. sq. ft. across residential, commercial and retail segment
- Expertise in developing integrated communities such as Seawoods Grand Central in Mumbai
- India's first Transit-Oriented Development (TOD)



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L&T Valves

Our Product/Projects

Gate valves, globe valves, check valves, ball valves, butterfly valves, plug valves, control valves, automation solutions, after-market business

Setting us Apart

- Global presence, with two state-of-the-art facilities in Tamil Nadu, India and two facilities in the US and Saudi Arabia
- Caters globally to diverse sectors including some of the in-house segments such as defence, nuclear and aerospace



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Construction Equipment and others

Our Product/Projects

Manufacturing, marketing and sale of

- Construction equipment and mining machinery
- Rubber processing machinery for tyre industry

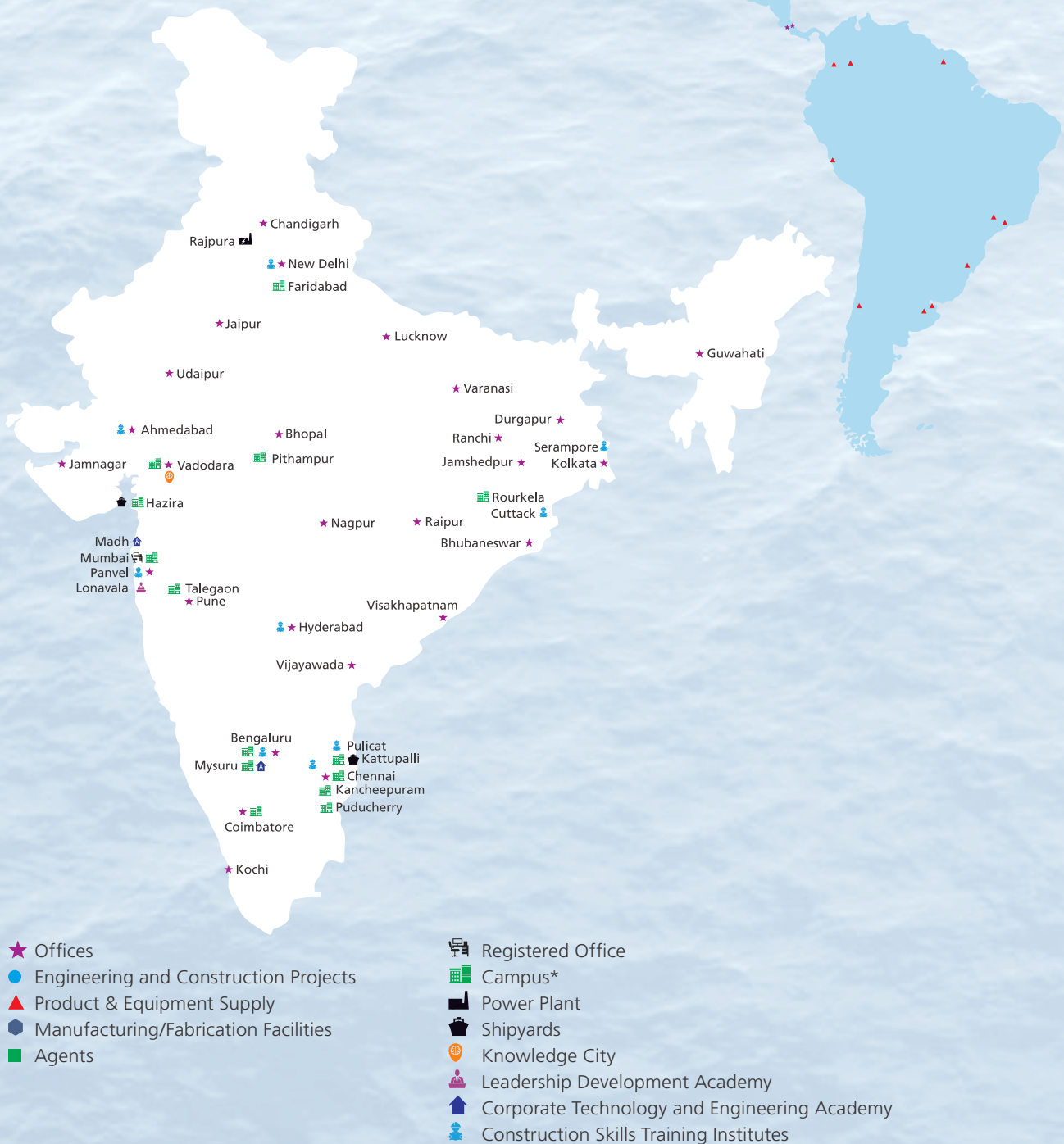
Setting us Apart

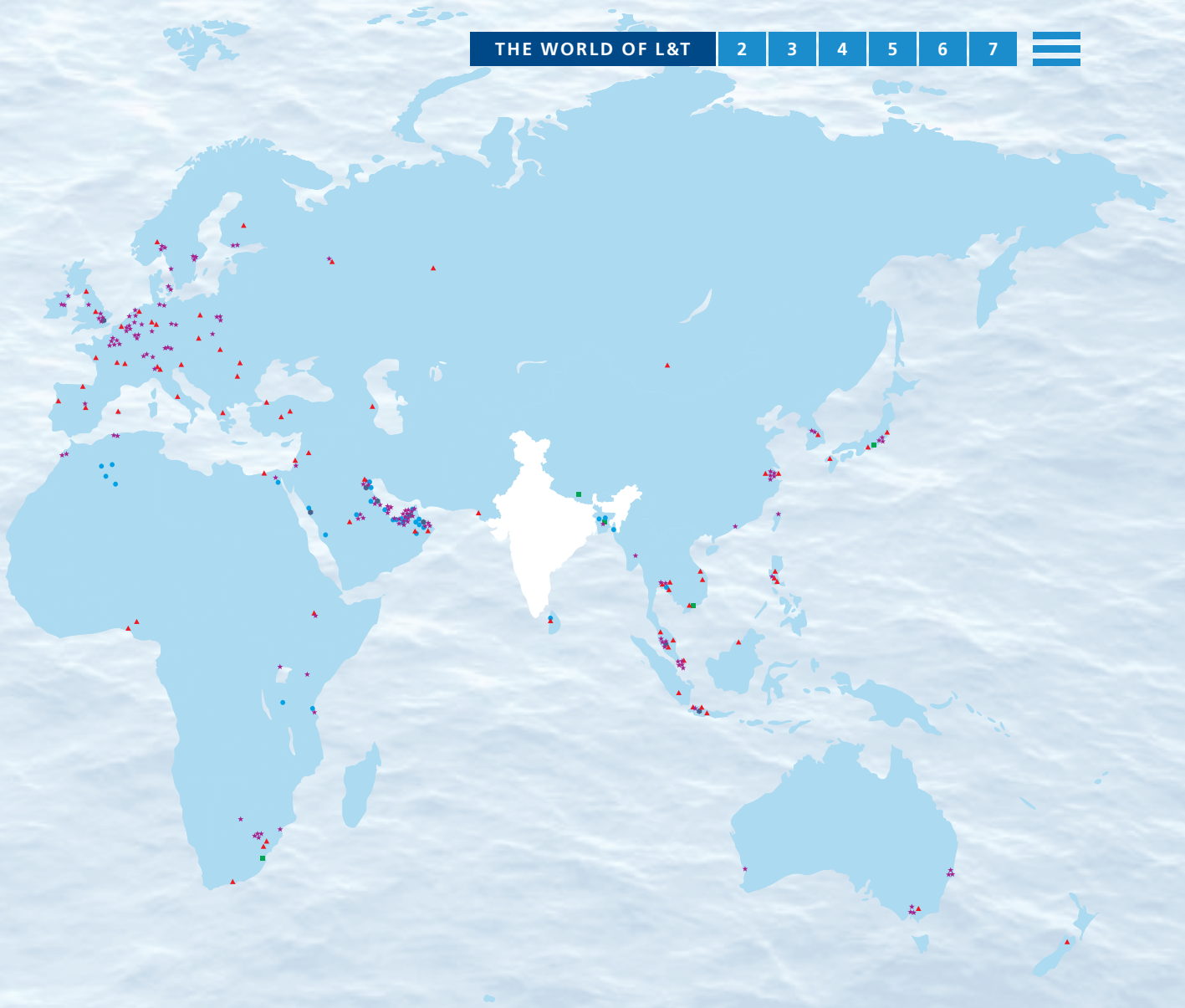
- Superior products and excellent after-sales service support
- Highly trained service personnel with well-equipped service facilities across India
- Successful implementation of sustainability and safety initiatives
- Industry leading manufacturing capabilities



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Present across Continents





Construction Skills Training Institutes at 9 Locations

GLOBAL PRESENCE

31

Presence in number
of countries

50

Locations in India

* 'Campus' denotes facilities for design and manufacture

Marquee Projects



Rewari-Madar Railway, DFCC

Changing the dynamics of India's freight movement

Dedicated Freight Corridors are game-changing mega-projects of Indian Railways, aimed at increasing share of freight transport through rail and reducing the transit times with dedicated tracks. This will help Indian Railways in meeting customer requirements better as well as improve its and country's carbon footprint through energy efficient and green transport.

Western Dedicated Freight Corridor, covering a length of 1,504 km, is designed to handle double stack containers with train speeds going up to 100 kmph. We are executing more than 80% of works for

this mega project with CTP-1, CTP-2, CTP-3R (civil and trackworks) and EMP-4 (electrification) being prominent packages. Civil and Trackworks is for a continuous section of 2,113 tkm, involving 228 major bridges and 1,460 minor bridges while the Electrical and Mechanical Works is for the entire section of WDFC (3,145 tkm) where we are employing various state-of-the-art automated techniques. One section (Rewari-Madar, 306 tkm) has already been commissioned, while other sections are currently under trial runs.



Al Rayyan Stadium

Gigantic stadium that upholds Qatar's unique identity

Al Rayyan Stadium (Ahmad Bin Ali Stadium) is a 40,000 capacity FIFA World Cup 2022 venue at Qatar. It was built on the site of a deconstructed stadium.

The stadium's most striking feature is a glowing LED façade, comprising patterns that characterise multiple facets of Qatar as a nation: the legacy and prestige of the ruling family, the beauty of the desert, native flora and fauna, and local and international trade. A fifth shape – a shield – brings together all the others, representing the strength and unity that is particularly relevant to the desert city of Al Rayyan.

These patterns resemble geometric shapes often found in Islamic architecture and their impressive intricacy reflects the exquisite handicrafts produced in Qatar. The stadium complies with the rules of FIFA with the complete field of play and spectator bowl areas airconditioned through under seat diffusers. The roof is designed with only peripheral columns to provide an obstruction-free view to the spectators. Roof system houses state-of-the-art LED pitch and spectator lighting.

As part of the project, we have also constructed an external precinct and a dedicated district cooling plant. The precinct spans soft and hardscaping, internal roads leading to stadium, running track, cycle tracks, horse tracks, car parks and houses six football training pitches, one of which has athletic tracks around pitch.

Marquee Projects



700 MWe Steam generators for GHAVP

Setting global benchmarks in project delivery

The Heavy Engineering arm of L&T dispatched the first (out of four) 700 MWe Steam generators for the Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) 1 & 2 project in 36 months, creating a new global benchmark in the nuclear manufacturing industry.

This hi-tech equipment was manufactured at L&T's state-of-the-art manufacturing facilities at Hazira and Vadodara Heavy Engineering Works (VHEW) in a short period of time. The benchmark set is an outcome of dedicated efforts by teams of NPCIL and L&T, which ensured early delivery of the steam generator in 12 months with highest quality standards, despite COVID-induced challenges.



Durgam Cheruvu Cable bridge

Bridging the world of possibilities

Constructed under Telangana's Strategic Road Development Programme, the Durgam Cheruvu Cable bridge will ease traffic flow towardsHITEC City, reducing commute time from Jubilee Hills to Madhapur from 30 mins to a mere 10 minutes and the distance from Mind Space to Jubilee Hills by 2 kms.

The cable-stayed bridge portion across Durgam Cheruvu Lake is 435 m long, including the approaches at both ends, 25.8 m wide with 52 stay cables. A unique aspect of this bridge is that it has the world's longest precast segmental span of 233.85 m in concrete for a cable stay bridge. Except for the special cables (procured from Germany), every other component has been sourced from domestic sources and thereby, continuing our Make in India legacy. Construction of this unique structure entailed usage of 430 MT of high-tensile strand, 26,600 cubic metres of concrete, and 4,800 MT of steel and 290 MT of stay-cables.

Engineering water lifelines for better irrigation

The Megalift Irrigation Project (Cluster-XII) comprises 16 lift irrigation schemes with 16 intake wells in river, 16 pump houses and 8 substations scattered across various locations in Sundergarh and Jharsuguda districts of Odisha having the command areas between 500 Ha and 2,000 Ha. The project also includes 1,170 km of closed conduit distribution network pipeline, along with centralised SCADA operated outlet management system.

This mega project aims to irrigate 21,300 Ha of upland areas during the Kharif season across the predominantly drought-prone areas of western Odisha's Sundergarh District. This translates into a distinctive shift in the livelihood of the people by converting this region into one of the highest rice producing basins in Odisha.



Bharatpur Pump House

Supporting India's clean fuel transition

With a view to strengthening LPG (liquified petroleum gas) security and ensuring availability of cleaner fuels in India's North-East, Indian Oil Corporation Limited (IOCL) as part of the Government of India's Hydrocarbon Vision 2030 conceived of 0.74 MMTPA INDMAX (INDANE Maximisation) Fluidised catalytic cracker unit and 0.23 MMTPA LPG treatment facility. IOCL's R&D unit developed the FCC technology and licensed through Lummus Technology, USA while Merichem provides the LPG treatment technology.

To execute this project of immense economic value, LTHE was awarded the contract in February 2017, to be executed under an aggressive time line of 30 months. INDMAX BGR was successfully commissioned on October 30, 2020 without any compromise on safety and the project covering over 9.5 Million safe man-hours.



IOCL RR Package

Message from the CEO & MD

The resolve to fight back and win. We are taking milestone decisions to reduce our GHG footprint in line with national and international protocols and improving resource efficiency in our operations. We have sharpened our focus on improving performance across all ESG parameters.



Dear Stakeholders,

There are two ways you can look at life around us. As a world where even as a pandemic raged, we were confronted with Green Swan events like cyclones, floods and other natural calamities. Or you could look at it more positively – as a world with the spunk to rise up, dust itself off, fight back and resolve to win. And this is the view we at L&T hold.

I believe, resilience in the face of adversity is one the greatest attributes humankind possesses. While we are conscious of the challenges ahead, we also have the confidence in our ability to face and overcome them. At L&T, we are more committed than ever to face this global crisis and make meaningful choices in our bid to resolve it.

ESG is the future

ESG has seen a surge in investment by governments and businesses worldwide. We have enhanced our focus on ESG with a new organisational structure and expertise in the area. We are also revisiting our vision, policies, frameworks, roadmaps and action plans on ESG and our new roadmap will align with our current 5-year strategic plan – Lakshya 2026.

We continue to enhance our engagements with internal and external stakeholders in this space. Our roadmap and actions are being aligned with national and international frameworks related to Climate Leadership, Water Stewardship, Circular Economy, Green Supply Chain, Biodiversity, Green Portfolio, etc. Our track record in these areas demonstrates that we are well positioned for a step-change in our ambitions to scale new heights.

Growth amid the pandemic

Amid all the challenges, we continue with a sterling business and financial performance record. Order inflow for the year at ₹ 1,754.97 Billion was achieved on the back of strong domestic wins in the Infrastructure and Hydrocarbon segments. The L&T Group recorded revenue of ₹ 1,359.79 Billion during FY21, a decline of 6.5%. The decline was mainly due to slowdown of project execution and manufacturing activity, affected by lockdown-related disruptions in first half of the year. As on March 31, 2021, the order book at ₹ 3,273.54 Billion provides multi-year revenue visibility. Shareholder value was delivered through healthy profit after tax which stood at ₹ 115.83 Billion, representing a growth of 21.3% over the previous year. During the year, the Company concluded the divestment of its Electrical & Automation (EA) business including the sale of the integrated marine automation solutions company, Servowatch Systems Limited.

Protecting Lives, Safeguarding Livelihoods

Governments and businesses world over are addressing the twin objectives of protecting lives and safeguarding livelihoods. At L&T, we continue to do well on both fronts. Stringent safety measures have been adopted Company-wide, across all our projects, plants and offices. This has resulted in fatalities coming down by 40% within a year. While work-from-home continued in some of our functions, project sites and manufacturing facilities saw graded increase in capacity utilisation. Our employees and all other stakeholders have shown remarkable resilience and determination to overcome challenges and keep the Company on the growth track.



Working together with the Government

Historically, L&T has been viewed as a private sector partner to projects of national significance and 'Revolutions' of various hues – White, Green, etc., We are closely involved with marquee projects including a high speed rail network (popularly called the 'Bullet Train'), major roads and bridges and other large scale infrastructure projects. We have been termed 'the builder of 21st Century India', and we are doing all we can to live up to that name. We are also among the early movers when it comes to aligning ourselves with national missions and help the country advance towards the shared objective of inclusive growth. Central and state governments and government agencies therefore remain some of our key stakeholders.

Straddling the 'phygital' world

There's a new world out there, and it is 'phygital'. It is faster, more accurate and safer. Businesses were already migrating to this space before COVID-19, and the pandemic has accelerated the shift. At L&T, we are leading the change. Our IT and digital portfolios operate at the convergence of the physical and digital worlds. Over 50 digital solutions are either in production or being deployed at hundreds of project sites. Our teams have real-time visibility into machine operations with over 11,000 construction equipment being connected. Meanwhile, new mobile apps have digitalised processes relating to safety, quality, activity completion and materials. Geospatial technologies and tools such as drones, Light Detection And Ranging (LiDAR), 3D scanning and photogrammetry enable quicker and more accurate collation of geographic information. We are sure that 'phygital' holds a lot more promise for all those who choose to explore it.

Fighting the pandemic challenge – together

As a projects company, L&T has hundreds of operational sites across the country and at global locations. We ensured that over 160,000 workmen and their families at our project sites continued to receive essential supplies. Their habitations were regularly sanitised and COVID-19 protocols were strictly followed. For our employees, we have initiated a broad spectrum of measures that encompass financial, medical and insurance assistance as well as educational support. In specific terms, this covered a lump sum payment of ₹ 35 Lakh in the event of death due to COVID-19, financial assistance for education and vocational training of family members of deceased employees. Through arrangements with reputed hospitals, we conducted vaccination drives across the Company.

Social Responsibility

Far from being a mandatory obligation, 'giving back to society' has been ingrained in the L&T culture all along. We do it simply because in our hearts we feel it is the right thing to do. The Company spent ₹ 150 Crore in FY21 towards CSR activities spanning water and sanitation, education, health and skill development – touching and transforming the lives of 1.2 Million people. At the Group Level, we contributed ₹ 150 Crore to the PM CARES Fund at onset of the pandemic, and an additional ₹ 39 Crore was later allocated towards Covid care initiatives.

Greening the Planet

As I said at the start, the world is learning the hard way about the cataclysmic consequences of climate change. All of us need to intensify our efforts to re-green the planet. We at L&T are gearing ourselves to deliver high performance in the arena of sustainable growth.

As we enter the decade of Ecosystem Restoration (2021-30) of the United Nations, we have already made significant progress in terms of multispecies tree plantation of over two million, in the past two years, creating urban forests in six locations and having one-and-a-half Lakh fully grown trees in campuses pan India. Our focus is to continue maintaining and preserving biodiversity, so that natural ecosystems are restored.

From economic indicators to the mood of the man on the street, everything seems to point towards recovery. On our part, we are cautiously optimistic about the times ahead. The light at the end of the tunnel may be a distant one but it gives us a reason to hope for recovery and revival. We are conscious that at this juncture, it is incumbent on us to redouble our efforts to maintain the trajectory of sustainable profitable growth. As always, we count on the support and guidance of all our stakeholders on the challenging journey ahead.

Mr. S. N. Subrahmanyam
CEO & MD

Messages from the Senior Leadership Team

// A new paradigm for business

Man is always tempted to seek lessons from losses and extract meaning and message from the challenges we go through. In that sense, FY21 was both textbook and tutorial. We learnt to temper our pride in our scientific, and specifically medical, accomplishments. We were made aware of our limitations and weaknesses as a virus all but brought the world to a halt.

In response to the threat posed by the COVID-19 pandemic, L&T extended a helping hand across the country. Our contribution covered a broad spectrum – donating funds and Covid-care related equipment, and supporting state governments with technology solutions. We also built Covid-care infrastructure at a rapid pace, provided food and shelter to workmen and offered a range of medical, financial and other support facilities to employees.

Shifting focus to the economy, FY21 tested the morale and resilience of all the constituents of the economic system. Despite the Government's fiscal support and the RBI's accommodative liquidity stance, India's real GDP contracted 7.3% during FY21. We view this setback as transitory, and remain positive on India's growth potential over the medium to long term. With most of the structural reforms revolving around formalisation of the economy having been implemented, we are positioned to achieve quality growth.

The bedrock of any economic system is an enabling environment for sustainable growth for both households and corporates. With this in mind, we see many countries aiming for a 'Net Zero' target. Similarly, the investing community is also looking to integrate sustainability insights and data into their traditional investment processes. This is also prompting companies to critically review their business models.

L&T's approach to sustainability covers a wide range of materiality parameters on energy conservation, use of renewable energy, GHG emissions, water efficiency, employee safety and materials management. Aligning with the rising trend of businesses world over, the Company is focusing on growing its green business portfolio. This includes Design, Engineering & Construction of green buildings and campuses, supply of renewable energy and carbon capture solutions, energy efficient effluent and water treatment plants, Smart cities, Microgrids etc. As part of its ESG objectives, L&T has commissioned a supply chain outreach programme to promote sustainable practices and improve safety.

Stakeholder welfare and value creation continue to be the cornerstones of our governance architecture. As a professionally managed company with a large and distributed shareholding, the core values of the Company pivot around the principles and ideals based on independence, transparency, accountability, responsibility, compliance, ethics and trust.

The Company is working on the integration of its ESG goals with business targets and chart a 5-year sustainable business roadmap. We target becoming a 'Net Zero' company, and will adopt best-in-class practices to set industry leading standards..

Sustainability is the outcome of a collective endeavour. We seek your inputs and suggestions to speed up the journey ahead.



Mr. R. Shankar Raman

Whole-time Director and Chief Financial Officer



// Sustaining momentum through Business Resilience, Innovation and Determination

While the financial year gone by was an unsparing one for businesses the world over, it was especially tough on the hydrocarbon industry which had to contend with the double whammy of a supply glut and diminished demand exacerbated further by the pandemic. The upheaval saw capex cuts, deferral of tendering and project awards, and an overall sluggish environment for business.

Yet L&T Hydrocarbon Engineering (LTHE) showed remarkable resilience and outperformed most of its global peers. During the year, we secured the largest EPCC contract awarded till date in the country in the refining and petrochemical sector and bagged two large value contracts, one each in onshore and offshore segments. These wins helped us maintain a healthy order book and navigate a challenging year.

The pandemic-led lockdowns brought on supply chain disruptions and threatened operations at numerous junctures, and we had to devise means to ensure they did not prolong project schedules. We achieved

this by reprioritising critical activities, automating processes, and employing digital tools to manage operations remotely. Thanks to our head start on the digital front, we were able to shift gears quickly and adapt better.

The year also saw us embark on a new strategic path of transitioning to Clean and Green Energy solutions in Hydrocarbon and its adjacent fields. 'New Energy' and 'Operations and Maintenance' have been identified as future growth engines and we are gearing up quickly to capitalise on emerging opportunities in these areas.

Even as we waded through such difficult waters, we did not let slip our environmental and social performance and continued to be vigilant about our sustainability practices and CSR commitments. Multiple recognitions including the top spot in Oil and Gas Middle East magazine's 2021 ranking of EPC Contractors, FIPI's EPC Company of the Year award, and a fresh haul of Safety, HR, and CSR awards bear testimony to our efforts.

Our experiences from FY21 will certainly help us tide over the challenges and perform better in the current fiscal and beyond. For they have us better prepared and more determined to grow and deliver value to L&T and all our stakeholders.



Mr. Subramanian Sarma

Whole-time Director and
Sr. Executive Vice President (Energy)



Messages from the Senior Leadership Team

// Technology-driven sustainable growth

Sustainability has never been more essential on the corporate agenda than it is now. Any business that wants to reap long-term rewards must be environmentally conscious and ethical in its operations. In the new sustainable era, more and more corporates have acknowledged the value of environmental policies and practices in achieving long-term sustainability, with the goal of lowering their carbon footprint. The experiences of management of companies leading in the field of sustainability provide several insightful lessons for other managers embarking on a move towards sustainable practices. As a result, sustainable practices are moving from the realms of corporate affairs and corporate communications to the foreground of business operations. Amid the uncertainty of the current pandemic, sustainability becomes even more important.

Being the largest construction company in India, L&T has been using technology and innovation to achieve sustainable growth. We have been a pioneer in the use of supplementary cementitious materials such as fly ash for making concrete. Reducing dependence on clinker cement, a major Green House Gas (GHG) emitter, and using more of fly ash results in concrete with lesser embodied carbon, which is good for the environment and a great way for safe disposal of fly ash. L&T's Building & Factories business is the first entity in India to construct a 2-storey building using 3-D printing technology with reinforcement bars. The building is made up of a locally-sourced 3-D printable concrete mix developed by L&T's own in-house team. We are well-positioned to push the boundaries of automated robotic construction in our day-to-day construction activities such as concreting, plastering, flooring, etc. We are also exploring the possibilities of using factory fabricated structural steel systems, factory cast floor slabs along with finish, pre-assembled MEP service lines and factory assembled false ceilings and other modular techniques in the near future. All these technologies are expected to be game-changers, as automation of equipment will help us achieve higher productivity and avoid wastages and rework, and ultimately will help us conserve resources and minimise pollution. It will also help us to achieve superior quality as it will enable us to avoid human error.



// Mr. M. V. Satish

Whole-time Director and
Senior Executive Vice President
(Buildings)

We are not just experts in building monumental structures, but also build them green. We built the world's largest cricket stadium, the Narendra Modi Stadium, Gujarat, which is an IGBC gold-rated green building. We have executed 82 projects on the green building concept with a total footprint of 104 Million sq. ft. till date, out of which four have been completed in the last financial year. We are using technology and digitalisation to conserve energy, both in terms of electricity as well as water, across all our campuses. L&T's Powai and Chennai campuses are highly energy-efficient.

Regular training of our workforce is conducted to foster environmental awareness and embed it in everything we do. We are integrating environmental protection across all our operational activities. Digitalisation furthers our sustainability progress. Regular safety and quality checks and audits using online apps and the digital stores initiative have helped us conserve nature by considerably minimising the use of paper. We have managed to save 4.5 Million sheets of paper through our digital initiatives. All our sites have incorporated the use of LED lights and steel bottles instead of plastic bottles. Waste water management is being done at project sites and the treated water is being used for toilets and gardening. We are also rolling out the use of sensors and solar lights to further save energy at some of our projects. Over time, this will become the norm for all our project sites.

As we are going through a crisis that has engulfed the human community, the priorities of businesses and organisations have undergone a major realignment. Big thinktanks have already started regrouping and developing a sustainable value chain with a greener outlook for the future. We intend to continue our strides in sustainable development and are ready to provide products and services to empower our customers in the 'new normal'. We have always valued the importance of leaving a better world for future generations and will continue to work towards this goal.



// Living in the era of Covid and climate change

Both the COVID-19 pandemic and climate change have emerged as the greatest threats to mankind. But they have also taught us how to be prepared well against unprecedented challenges. We are learning more and more about how to adapt quicker and faster. This has taught us how to be resilient and responsive. We have the tenacity to face challenges and overcome them.

Team L&T has been well prepared to respond to COVID-19. Work from home has become the new normal and we have learnt how to manage both work and home in this situation. While COVID-19 has impacted businesses within L&T, we have quickly adapted and bounced back. I am sure we will continue to be vigilant and ready to face any further challenge that comes our way.

Amid all of this, ESG has become the new-age mantra, and I am sure team L&T is well prepared to tackle this challenge. Our initiatives may include procurement of local materials with a lower carbon footprint, alternative

sourcing, developing a green supply chain, optimising transportation of material for each project, increasing consumption of alternative materials, using plastic waste to reduce bitumen consumption in road-building, adopting solar energy and bio-fuel and plantation of native species to meet the objective of ensuring low carbon generation.

We also design optimal structures with enhanced design life and end-of-life usage of materials, which are pivotal to achieving sustainability. Our employees are our greatest strength, and we spend significantly on employment and training of our workforce. We also focus on new-age areas such as Artificial Intelligence (AI) and Machine Learning (ML). Our innovation and R&D platforms help us in process optimisation as well as product quality.

As India is leading in the forefront of renewable energy with a target of 450 GW target, we should focus on leveraging the policy dimensions and increase our green business portfolio. This will help us to decarbonise our businesses and help us to become one of the leading players in ESG.



Mr. D. K. Sen

Whole-time Director and
Senior Executive Vice President
(Development Projects)



Messages from the Senior Leadership Team

// Performance and growth through Self-Reliance

If there is one lesson that the pandemic has taught us, it is to sharpen our focus on diversifying supply chains and promoting domestic manufacturing.

In the Indian defence sector, the pandemic and lockdowns provided opportunities for policy advocacy and resolving a range of issues being faced by the industry. It also encouraged the adoption of digital processes, including digitally enabled inspection of military systems.

Wide-ranging initiatives taken by the Government during this period, enabled the private sector to play a more meaningful role and make progress on a level playing field. These initiatives promise to open up huge opportunities for the technologically mature and competent Indian companies like ours, with established capacities and an unmatched track record.

At L&T, we continue to enhance our role and responsibility in EHS by reaching beyond the boundaries of the Company to customer sites and work-centres of business partners. All the campuses of L&T Defence have an enhanced focus on renewable energy and have implemented the zero-water-discharge policy. Emphasis has been laid upon energy conservation, operational excellence, cycle-time reduction, leveraging the learning curve, cost-reduction through innovation in processes for serial production, and achieving deliveries ahead of schedule. These helped us to optimally utilise our resources amid adverse conditions and deliver superior performance during the pandemic year.

In line with our pledge and commitment to build and nurture 'green' belts, our campuses use various techniques like rainwater harvesting and staggered drip irrigation to stretch every drop. The Miyawaki afforestation plantations at our facilities at Talegaon and Coimbatore provide requisite flora and a limited natural habitat for birds. Our Green House Gas (GHG) emissions are consolidated at about 24,000 tonnes of CO₂ equivalent and this is mitigated by the use of energy-efficient technology and processes. Fossil fuel based energy sources are being steadily replaced by renewable energy sources across our campuses. These initiatives along with extensive wastewater recycling and innovative techniques to reduce HVAC energy consumption, reaffirm L&T Defence's position as an ambassador for a green environment.

Across our operations at Talegaon, Coimbatore and Hazira, we have implemented skill-building initiatives. Our Technical Apprenticeship Scheme (TAS) provides skilling opportunities in multidisciplinary system integration. We recruit two-and-a-half the number of trainees required and release the unabsorbed trainees into the industrial ecosystem created by our campuses in the surrounding areas.

During the year, we reviewed the systems and processes at our skill training centre at Vishakhapatnam to enhance the quality of the workforce created. We revisited the training content to make it more enriching and resourceful to match the personality and behavioural development needs of the trainees.

At Coimbatore and Vishakhapatnam, we enhanced the quality of education and infrastructure in the village schools and schools for special children adopted by us in the areas around our campuses. We focused on equipping them with better sanitary facilities, drinking water facilities, library, e-learning and speaking walls, with an emphasis on STEM education. Collectively, these initiatives have helped create sustainable and inclusive growth and a better tomorrow for all our stakeholders.



Mr. Jayant D. Patil

Whole-time Director and
Sr. Executive Vice President
(Defence & Smart Technologies)



// Resilient utility infra in the renewables era

Operating in the 'emerging giants of electricity demand' such as India and other developing economies, we have an increased responsibility to guide the growth of these countries on a low-emission path. Even now, 80 Crore of the world's people do not have access to electricity, and where there is access, the per capita consumption is low, with unreliable power supply. We are committed to taking clean power to these people by building efficient, digitalised electricity networks and facilitating electrification of the related sectors.

With over 5 GW of solar PV plants having either been built or being built by us, our range of green offerings is broad and expanding. Be it the floating solar plants or the ones with bifacial modules and tracker mechanisms, we leverage our superior technological prowess and integration abilities to bring in land, cost and time savings to the developers. Our state-of-the-art container integration facility gives us the ability to serve globally with intelligent, modularised battery energy storage systems. Our Power Transmission and Distribution projects have helped electricity to reach millions, and have resulted in a more efficient network with the highest standards of reliability, reduced our carbon footprint, enhanced disaster resilience and improved grid stability.

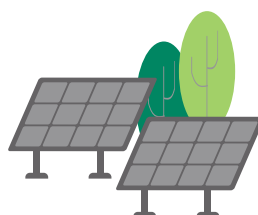
'Sustainable Sites' is the mantra we follow at our project locations and manufacturing facilities.

Our operations are aimed at the reduction of GHG emissions and recycling of waste. In addition to major flagship CSR initiatives, we work in the vicinity of our jobsites to improve social infrastructure, especially in providing education, water and sanitation facilities.

With projects running in 25+ countries, our initiatives in diversity, equity and inclusion have won us laurels from customers and the community. The international Graduate Engineer Trainee programme is one such example.

We are committed to extending sound ESG principles in our dealings with customers and vendor/subcontractor partners and to promoting the circular economy.

Despite the pandemic, global investments in clean energy transition exceeded half a trillion dollars in 2020. We are better placed to contribute to this decarbonisation and transition journey and to the achievement of sustainable development goals, especially the SDG 7.



Mr. T. Madhava Das

Whole-time Director and
Sr. Executive Vice President
(Utilities)

Messages from the Senior Leadership Team

// Excelling in the new normal

FY21 was a unique year which started and ended amid the peaks of the pandemic that unfolded unprecedented challenges globally and had a material effect on the infrastructure sector. The 'survival of the fittest' indeed holds true under the present circumstances, and has put the sustainability of corporates to test – not only in terms of financials but also in terms of social, economic and governance aspects.

Realigned Priorities

Right from the onset of the pandemic, we had realigned our priorities to the well-being of our staff and workmen by adopting stringent safety measures across all our sites to keep our projects up and running. A separate Task Force was formed to support and address the critical needs of our workforce such as hospitalisation support, dedicated isolation facilities, supply of vital medicines, oxygen concentrators and of course, vaccines. Once the well-being of our existing workforce was taken care of, our second biggest challenge was to remobilise our migrated workforce by arranging for special transport facilities and providing a slew of incentives through better facilities, healthcare, and a safe working environment for them to feel safe and motivated to come back at our sites. We also took proactive measures to balance the gap by identifying and training the local workmen in the required skillsets and through adaptation and implementation of mechanisation wherever possible.

So, even in the year overshadowed by uncertainty, our realigned priorities and dynamic execution planning ensured that we were able to turn in a creditable performance and register growth across key parameters. During the year, we secured the largest single construction contract ever awarded in the domestic EPC market and continued to win a few other strategic jobs of national importance and pride.

New-Age Technology

Over the years, we have been leveraging new-age technology and digitalisation into our traditional

construction practices in a bid to improve the control and efficiency levels of project execution. And the pandemic has paved the way towards larger dependence on these digital solutions such as WISA (online workmen database) which has helped us immensely in identifying and approaching workmen with a specific skill-set during our remobilisation planning; Digital Chipset to track and monitor our P&M assets; and Geospatial tech, LiDAR and drone-based surveys which helped us capture and monitor site data remotely during the lockdown. These innovative solutions are set to become the 'new normal' for us in the future.

Environment Sustenance

We stay committed to protecting the environment and contributing to society by undertaking actions in and around our work sites. During the year, we adopted sustainable construction practices that have optimised or reduced the use of fossil fuels by using more power grid supply to run our tunnel-boring machines, and by using the digital diesel dispensing platform and solar plants to power street lights, weighbridges, toll plazas and project camps. We also focus on community development around our project sites by not only generating employment but also providing education to children, scholarships to the needy, and implementing initiatives for the health and hygiene of the people.

Even as corporates across the world adapt to manage this pandemic and its aftermath, the reality that dawns is that the future is most likely to change in more ways than we can envisage today. The undercurrents of social contracts, environment, sustainability, and digitalisation will get even more accentuated to help us guard against the many uncertainties in the form of Covid phases and other such black swan events in the future.



Mr. Sudhindra Vasantrao Desai

Whole-time Director and
Sr. Executive Vice President
(Civil Infrastructure)



// Unprecedented challenges and opportunities

Climate change has been a burning issue for many years now. To this has been added the challenge of the pandemic of the last two years which, in a way, has highlighted the power of nature and its ability to strike and impact humanity.

Climate change has become one of the greatest threats to the future of mankind. The annual average temperature of the earth peaked in 2020 and it is rising to a great extent every year. The concentration of Green House Gases (GHGs), most notably CO₂, is rising in the atmosphere and is posing unprecedented challenges to mankind. This has also seen a surge of activities in past two years, with heightened focus of powerful bodies such as G7. ESG has emerged as a new focus area for companies. The US SEC and its Indian counterpart SEBI have come out with tough measures. SEBI has recently mandated 1,000 listed companies to report their sustainability performance through BRSR.

But I would say that this is an opportunity for all at L&T to rise to the occasion and face this crisis with optimism. This is also an opportunity to revisit our business models, business processes, efficiency improvements in the area of energy, water, waste, etc. We must work on new areas like the circular economy, which can improve revenue of the Company in the long term. New green portfolios around current and upcoming areas will open doors to new possibilities for the Company.

We have recently taken a number of measures to strengthen our ESG function so that we can have enhanced engagements with stakeholders, especially with customers and investors. I urge all L&T-ites to focus on these areas so that we continue to excel in our businesses.

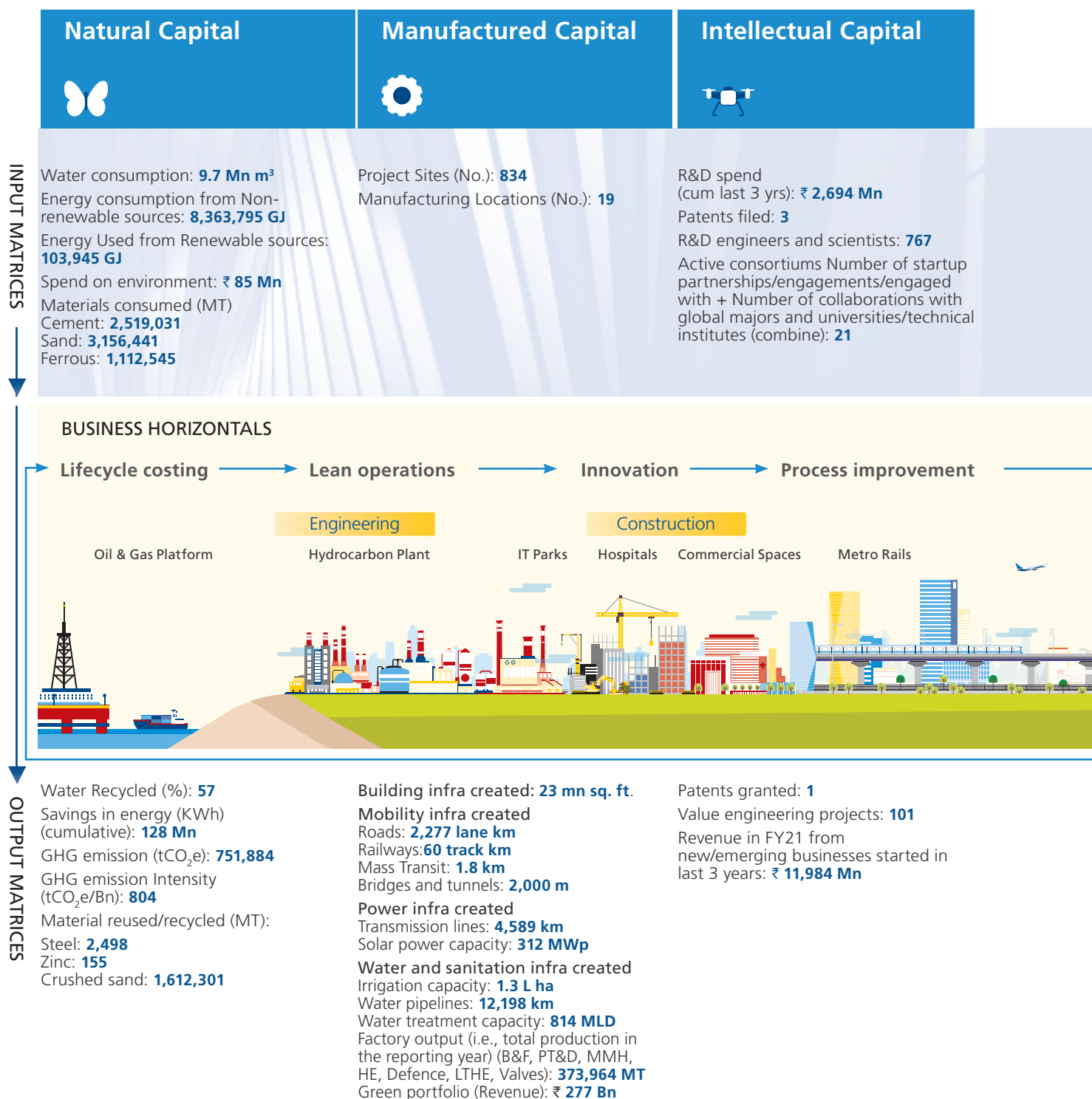


Dr. Hasit Joshipura

Sr. Vice President &
Head-Corporate Center



Value creation model



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Note: All figures are within the scope of the IR

Human Capital



Permanent Employees (No.): **50,092**
 No. of Engineers (BTech/MTech/
 Diploma): **37,010**
 Workforce (Contract Employees)
 (No.): **320,299**
 Employees covered under leadership
 development programmes (No.): **789**

Social and
Relationship Capital

CSR spend: ₹ **1,500 Mn***
 CSR partners (No.): **108***
 Total suppliers and
 contractors (No.): **236,170**
 MSME suppliers (No.): **5,782**
 Vendors/sub-contractors trainings
 (No.): **1,049**
 Number of industry chambers
 members: **16**

Financial Capital



Order book: ₹ **3,273.54 Bn**
 Net current assets: ₹ **575.56 Bn**
 Net fixed assets: ₹ **448.20 Bn**
 Gross debt-equity ratio: **1.51:1**

→ Digitalisation → Value engineering → Benchmarking → Design thinking

Technology

Manufacturing

Stadiums

Airports

Solar PV Plant

Thermal Power Plant

Hydro Power Plant

Steel Plant

Material Handling &
Mining Equipment

Revenue/employee (productivity):
 ₹ **18 Mn/employee**
 Attrition Rate: **18.26%**
 Employee Trained:
12 Man hrs/employee/yr
 Accident-free man hours:
1,037 Mn hrs

CSR Beneficiaries (No.): **1.21 Mn***
 Contribution to
 Exchequer: ₹ **108.33 Bn***
 Awards (No.): **42**
 Appreciation certificates (No.): **88**
 Joint projects (No.): **14**
 No of complaints received: **48**
 No. of complaints resolved: **46**

Group Turnover: ₹ **1,359 Bn**
 Turnover*: ₹ **934.91 Bn**
 PBIT*: ₹ **102.37 Bn**
 Dividend payout: ₹ **50.56 Bn**
 Return on equity: **16.25%**

*As per the scope of this IR
 Others: for L&T Group



Value creation process

Our value creation process assesses our operating context, identifies the key business risks, evaluates the relationship that are critical to our value creation abilities and assesses the availability of our resources.



1 External environment

The environment in which we operate including the economic environment, global pandemic, climate change impacts, infrastructure growth cycle among others.

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2 Identifying risks and opportunities

The key objective is to identify key risks associated with the business and their impact on our strategy and value creation process.

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3 Stakeholder engagement

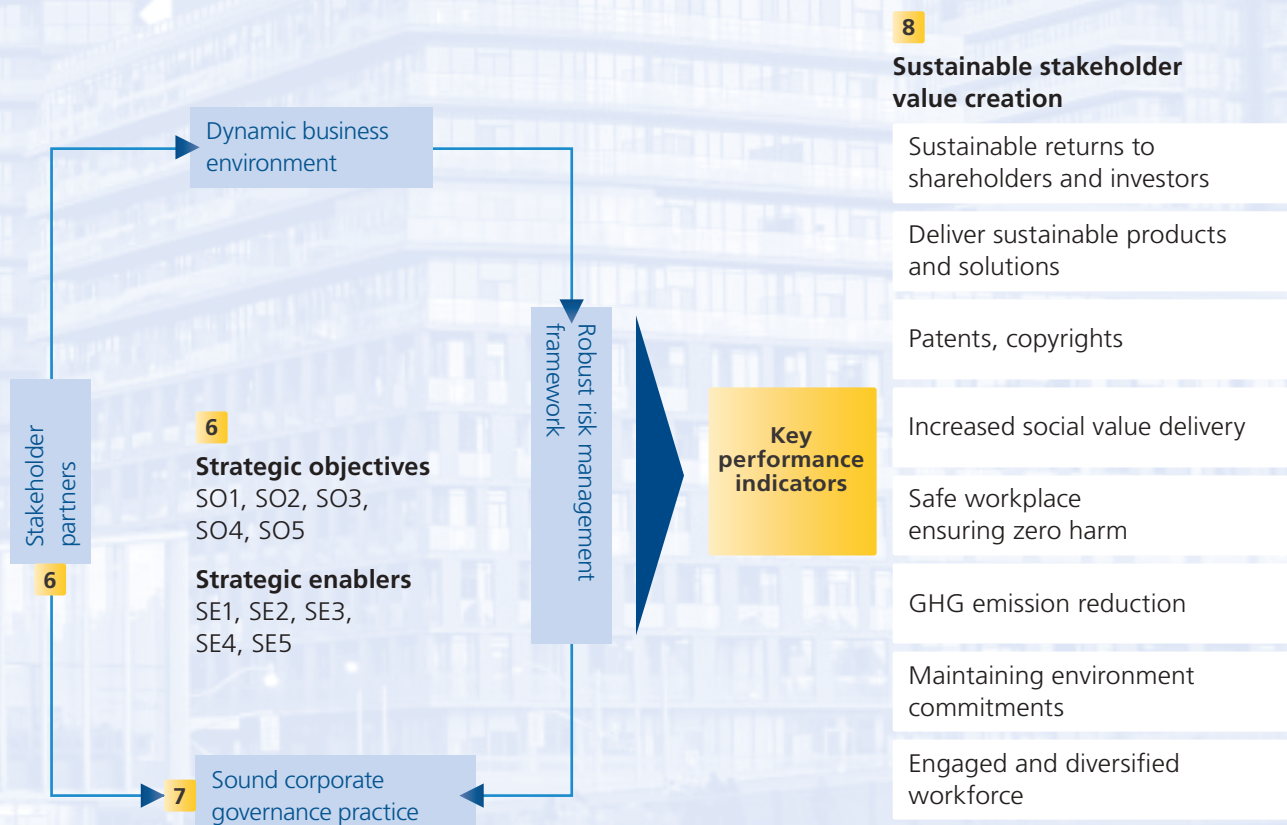
Our success and business sustainability depends on the support from our stakeholders and it makes imperative for us to understand the stakeholder needs and interests.

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4 Material issues

Material issues have the potential to impact our value creation and achieve our strategic objectives.

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5 Capitals

Our resources and relationships which are critical for us to create value and are classified into six capitals. We provide inputs under each of the capital to drive our business process.

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6 Strategic objectives

In line with our overall strategy, we prioritise the strategic objectives which help us in achieving our overall organisational goals.

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7 Governance

We are committed to highest degree of ethics and compliance. We ensure transparency across business processes and remain accountable to stakeholders.

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8 Key performance indicators

We have defined financial and non-financial KPIs to measure the impacts of our strategy execution over the short, medium and long-term.

Stakeholder Engagement

A regular timely dialogue with stakeholders is important for us to understand their concerns and act accordingly. We are able to enhance value creation by listening to our stakeholders and understanding what really matters to them. Key interest areas are pointed through our regular dialogue and we are able to manage risks and opportunities proactively, and set clear goals to deliver long term shared value.



Material Topics

- Business performance
- Improved Return on Investment (ROI)
- Effective financial and non-financial risk controls
- Fair business practices

Shareholders and Investors

L&T's Interaction and Engagement Approach

We interact with our shareholders and investors during quarterly calls, face-to-face meetings, annual general meetings to provide them relevant information and seek their perspectives on the Company's performance and strategy. We have set up investor grievance channels along with presentation of financial reports and presentations, Business Responsibility Reports (BRRs) and Integrated Reports (IRs) and regular announcements and filings with the stock exchanges.

Value creation

- L&T is India's largest E&C company with ₹ 1,360 Billion revenue and ₹ 1,992 Billion market capitalisation. Solid financial performance irrespective of challenges. Consistent credit ratings CRISIL: AAA/Stable; ICRA: AAA (Stable)

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Material Topics

- Timely completion of projects
- Confidentiality
- Competitive contract price bid
- Innovation and state-of-the-art engineering techniques
- High safety standards
- Transparency in energy, water and GHG emissions performance

Customers

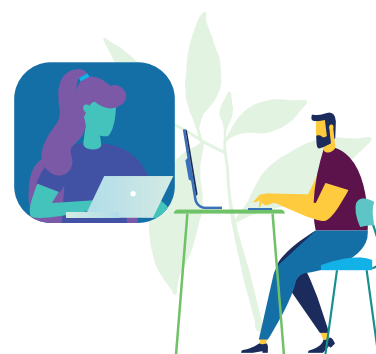
L&T's Interaction and Engagement Approach

We have a continuous ongoing interaction with our customers through various channels such as customer meets, workshops and conferences, exhibitions and trade fairs, advertising campaigns, bulletins and news, one-on-one interactions, periodic reviews, annual reviews, customer satisfaction surveys and feedback forms.

Value creation

- On-time project completion with deeper 'customer connect' at multiple levels. Tighter project monitoring and control, increased after-sales support and regular monitoring of projects. KPIs – Safety, water, material management, energy and GHG emissions, among others.

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Material Topics

- Career growth
- Employee benefits
- Skill development
- Effective/high-quality training programmes

Employees

L&T's Interaction and Engagement Approach

We connect with our employees through regular communication, project updates, town halls, departmental meetings and connect sessions where employees voice their ideas and concerns are heard. We have enterprise-wide employee portal called 'L&T Scape' for regular connect.

Value creation

- We focus on attracting and retaining talent. We promote employee wellness, functional and soft-skill development programmes, leadership development programs, continuous improvement in programmes for structured learning and development of workforce.

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Material Topics

- Timely payments
- Repeat orders
- Price reduction
- Different purchase processes by businesses as per the project/establishment's requirements

Suppliers/Contractors

L&T's Interaction and Engagement Approach

L&T interacts with its suppliers through periodic partner meets, e-tendering and e-procuring and supplier meets. We organise regular visits to suppliers' and contractors' facilities.

Value creation

- We offer cost-effective price negotiations. We align our suppliers with our environmental and social Code of conduct as part of the supplier agreements. Screening, assessment and audits of suppliers are also conducted related to quality and EHS aspects.

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Stakeholder Engagement



Government

L&T's Interaction and Engagement Approach

We maintain regular interaction with local governments. We are member of important industry associations and play an active role in policy formulation.

Value creation

- We ensure continual improvement in our efforts for triple bottom-line (people, planet and profit). We present our performance through mandatory and non-mandatory disclosure.

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Material Topics

- Compliance to regulations
- ESG performance and Integration
- CSR and reporting



Media

L&T's Interaction and Engagement Approach

We interact with media through regular press meets and periodic media visits.

Value creation

- We provide regular media updates, share critical information through press releases and feeds to social media (LinkedIn, Facebook and L&T website). We conduct media briefings and presentations.

Material Topics

- Providing transparent stakeholder communication



Communities

L&T's Interaction and Engagement Approach

We are committed to uplift the societies in which we operate. We regularly engage with the community through CSR initiatives, volunteering activities, quarterly review of our integrated community development projects, continuous engagement with village panchayats and local authorities.

Value creation

- We give back with our CSR programmes. Nine Construction Skills Training Institutes (CSTIs) impart training in formwork, carpentry, bar-bending, steel-fixing, masonry, construction, electrician skills, welding and CCTV installation training. Education, health and skill development for communities around L&T establishments and project sites. Access to drinking water and sanitation in water-stressed regions, integrated community development programmes.

Material Topics

- Expectation of livelihood creation
- Improvement in overall living standards
- Water and sanitation
- Development of community infrastructure

Materiality Assessment

We reviewed in FY20 our existing material topics and conducted an extensive stakeholder engagement dialogue to understand their perspective on our material topics and efforts for sustainability. We identified material topics of concern for us, by engaging with internal and external stakeholders. These material topics form input for our strategy, planning and disclosure.

Assessment process

The process of materiality assessment began with a set of 24 potential topics identified. We extended the topics and sought views of internal and external stakeholders. 11 material topics were identified as critical for the Company.

Materiality assessment process



Businesses a part of materiality assessment

Infrastructure

- Building & Factories
- Heavy Civil infrastructure
- Transportation Infrastructure
- Power Transmission & Distribution
- Water & Effluent Treatment
- Smart World & Communication
- Metallurgical & Material Handling



Power



Heavy Engineering



Hydrocarbon Engineering



Defence

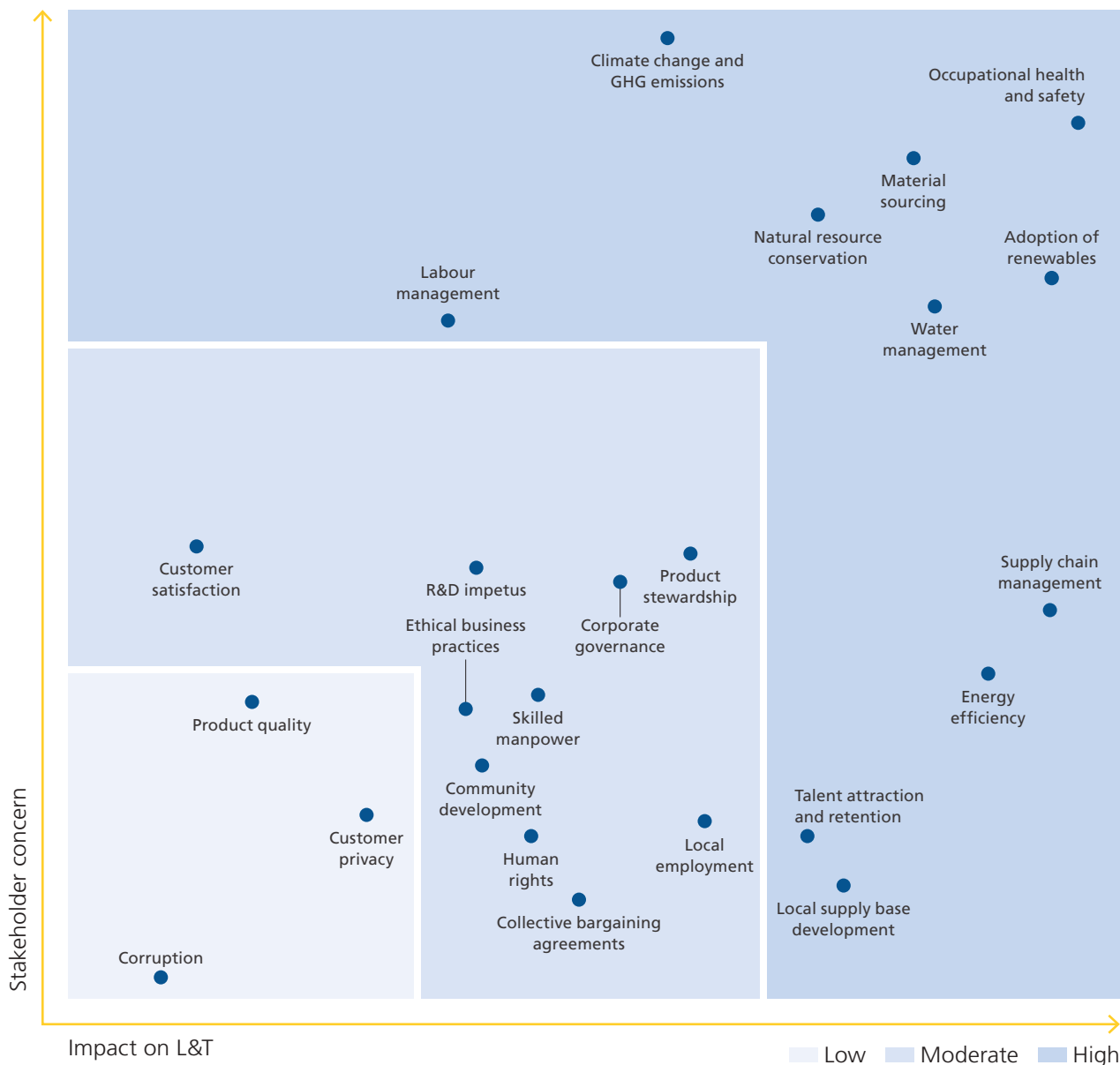


Realty



Materiality Assessment

Materiality Matrix



Material topics

1. Occupational health & safety
2. Water Management
3. Natural resource conservation
4. Material Sourcing
5. Climate change and GHG emissions
6. Talent attraction and retention
7. Adoption of renewables
8. Energy Efficiency
9. Supply chain management
10. Labour Management
11. Local supply base development

Description of material issues and strategy and capitals linkage

Material topics	Relevance of topic, boundary and limitations to the boundary (if any)	Capitals associated	Strategies
Occupational health and safety of employees and contractors	We strive to provide an accident-free workplace to our people and comply with relevant regulatory requirements for this purpose. Our preventive measures are built around the philosophy of embracing safety as a 'way of life'.		SO3
Water management	Water is critical for our business and we are committed to use it prudently. Accordingly, we have turned our facilities 'water positive' with 'zero wastewater discharge'.		SO3
Natural resource conservation	Our business essentially depends on natural resources and derived materials such as sand, aggregates and cement, including ferrous and non-ferrous materials. The judicious utilisation of such resources strengthens our efforts to reduce our carbon footprint, while improving productivity and profitability.		SO1 SO3
Material sourcing	Our focus is to enhance local sourcing of materials needed for our projects. Besides providing opportunities for economic development of local communities, this approach enables us in driving efficiencies by saving on logistics-related costs.		SO1 SO3
Climate change mitigation and GHG emissions	We believe, business sustainability and competitiveness are ultimately linked to the low-carbon economy. Progressively, we continue to invest in products and processes that promote sustainable growth, enhancing energy efficiency and developing low-carbon technologies for infrastructure development.		SO3
Talent attraction and retention	Our intervention requires expertise and high engineering skills, and we are proactive in engaging and retaining the best talent. We nurture talent, enhance productivity and efficiencies, and build a robust leadership pipeline.		SO1 SO2 SO3
Adoption of renewables	We are increasingly using renewable energy at our campuses and project sites, thereby widening our green cover.		SO3
Energy efficiency	Depleting energy sources is detrimental to long-term business objectives. Growing energy savings translate to reduced power cost and fuel, and thus less operational cost and enhanced profitability.		SO1 SO3 SO4
Supply chain management	Suppliers are our strategic partners in delivering timely performance. Significant supplies at our project sites are from the local suppliers. We encourage suppliers to partner our sustainable growth. Encouraging sustainability practices in the supply chain helps improve their economic, environmental and social performance.		SO1 SO3
Labour management	Our comprehensive CoC ensures that we follow best-in-class practices to protect human rights (no child labour, no forced labour, and so on). In addition to sensitising our workforce on these topics, we also make sure that our subcontractors adhere to this CoC. Our subsidiaries and associate companies are encouraged to follow our corporate HR policy.		SO3
Local supply base development	We undertake constant training and awareness campaigns to ensure that our suppliers understand our sustainable ways of working and embed them in their business. We also train them on key aspects of the business to partner them in their growth.		SO1 SO2 SO3



Natural Capital



Intellectual Capital



Social and Relationship Capital



Manufactured Capital



Human Capital



Financial Capital

External Environment

The long-term global macro-trends continue to remain robust in most of the business segments we operate in. The continued government focus on self-reliance and improving India's overall infrastructure for a vigorous and sustainable economic growth further provides a boost to our core operations.

Global E&P investments expected to be
\$ 415 Bn
in 2022

₹ 5.5 Lakh Crore
Capital Expenditure allocation for FY22
(34% y-o-y)

450* GW
India Renewable Target (2030)

111 Lakh Crore
National Infrastructure Pipeline (NIP)

15%
Natural Gas in Energy Mix of India (2030)

₹ 2 Lakh Crore
PLI scheme outlay (till 2025)

₹ 3 Lakh Crore
DISCOM reform scheme outlay (till 2026)

₹ 1 Lakh Crore
O&G PSUs capex outlay for FY22

*(source: rystad)

Deep impact of COVID-19 Pandemic

The year FY21 was an unprecedented one. The COVID-19 pandemic is the severe global health crisis of this century, endangering the whole of humanity and resulting in a substantial weakening of most economies. The Indian economy witnessed its first ever technical recession in FY21, with gross domestic product (GDP) growth remaining in the negative territory for two consecutive quarters. Lockdowns and travel restrictions imposed significant supply-side constraints on the economy, drastically reducing output and employment. Growth suffered broad-based deterioration with a decline in global trade and marked slowing down in the manufacturing and services sectors across the globe.

Stimulus and Revival

On a positive note, the accelerated progress in vaccination efforts and generous fiscal support is ensuring that many nations regain ground and bring the economies back on the growth track. With an aim to speed up the economic normalisation, the Indian Government accelerated the public investment in the key infrastructure sector. The wheels of India's capex cycle were set in motion with a strong revival in investment-led growth supported by the 'Atmanirbhar Bharat Mission' and PLI schemes.

With the economic activity gaining momentum post the COVID-19 lockdown, the measures announced by the government and rollout of coronavirus vaccines resulted in an uptick in economic sentiments, but the resurgent COVID-19 second wave has put a dampener on India's growth trajectory. Hopefully, the country should be able to control this second wave of COVID-19 infections and, with progress in vaccination and strict implementation of prevention and detection protocols, the country should be on the growth track for the larger part of FY22.

100%
Rail Electrification target-
by 2023

₹ 5 Lakh Crore
NABFID (National Bank for
Financing Infrastructure
and Development) -the new
DFI target AUM in next
three years



Infra spending and Capex supported recovery

The Infrastructure sector is a key driver of the Indian economy and contributes to India's overall development. The sector, accordingly, receives focused attention and resource allocation from both Central and State Governments. Despite the COVID-19 pandemic, in FY21, both contract awards and construction activities were robust. Tenders of ~₹ 7.8 Lakh Crore were floated in FY21, higher by ~50% y-o-y and cumulative contract awards reached ~₹ 3.5 Lakh Crore. Several large-ticket projects were tendered, some of which were also awarded, viz. expressways, metro and defence. The slew of other relief measures undertaken by the Central Government – including relaxation on EMD (Earnest Money Deposit) and performance security, increased frequency of payments for on-going contracts and other relief for contractors/developers under the Atmanirbhar Bharat Scheme – has aided the recovery of infrastructure companies.

The Union Budget 2021 has an unprecedented increase in capital expenditure allocation for FY22 by 34.5% to ₹ 5.5 Lakh Crore to push growth through infrastructure investments. Key growth areas like Railways, Highways, Metros, Transmission & Distribution and Water (Jal Jeevan Mission) have witnessed a significant increase in allocations. Creation of new Development Finance Institution, announcement of National Monetisation Pipeline and relaxed fiscal consolidation path would provide much needed support for capex funding requirements of a growing economy.

International Markets

The global oil and gas industry has faced periodic downturns in the past. However, the industry witnessed a double whammy – supply glut and diminished demand caused by the COVID-19 pandemic and the resultant lowering of oil prices to unprecedented levels. This led to many projects in the O&G sector being shelved or deferred. Construction industry in the MENA region also struggled in 2020, leading to a contraction of about 4.5%. However, as economies get back on track and oil demand recovers, it is expected that oil prices will stabilise and capex slowdown in oil producing countries will get addressed. Construction sector suffered a contraction in the ASEAN region as well, due to lockdown measures implemented to stem the spread of the pandemic. Public spending is expected to be increased to accelerate recovery in 2021. Increasing population, rapid urbanisation and increasing investments in infrastructure development shall remain the key factors to stimulate market growth in the region.

Opportunities supported by current trends

Rapid urbanisation in India is driving demand for better urban mobility in Tier 1 and Tier 2 cities and for new mass transit systems e.g., RRTS (Rapid Rail Transit System), Metro Neo, Metro. Providing faster and affordable mode of transport for people and materials is pushing Indian Railways to adopt new age projects i.e., High Speed Rail and Dedicated Freight Corridors.

COVID-19 pandemic has fast forwarded the clean energy transition across the world. Hence the capital allocation is likely to be diverted from fossil fuels to push new developments in renewable energy. Hydel power is evolving as a source of flexibility and grid stability while India's installed nuclear capacity is expected to reach 15 GW by 2027 from the present 6,780 MW, driven by fleet mode program of 10 pressurised heavy water reactor (PHWR) projects. 8-15 GW of solar capacity may get added in the next year in India with a perceivable shift towards hybrid projects. The renewable capacity addition plans in the Middle East, led by KSA expected to receive a further boost with growing interests in green hydrogen. African countries, such as Egypt, Morocco, and Ethiopia, also have plans for large utility scale solar plants.

Reforms-based result-linked distribution scheme announced in the Union Budget will provide the needed impetus to augment electricity distribution infrastructure with UG cabling, feeder segregation, HVDS, etc., in addition to smart metering.

The UN Sustainable Development Goal which aims to provide clean water and sanitation to all, is driving investments in India, Africa, and ASEAN markets. Recycle and reuse, water management, desalination, efficient irrigation technologies are gaining traction as means of addressing the demand-supply gap.

Good impetus is expected for integrated petrochemical plants, especially in Asia led by China and the Middle East. Commitment to COP-21 regulation is driving push towards technologies for cleaner fuels e.g., biofuels and syn gas. E&P operators are diversifying into renewables. Electric Vehicles as well as the use of hydrogen as a fuel is gathering pace. With economies recovering, demand for various commodities has increased significantly and driving the producers to bring back their shelved capex plans to table in metals and mining segments.

Risk Management

The L&T Board has formed a Risk Management Committee to oversee the implementation and effectiveness of the risk management framework as required by the Securities and Exchange Board of India's (SEBI) Listing Obligations and Disclosure Requirements (LODR). The framework was earlier overseen by the Company's Audit Committee.

The Company has institutionalised an Enterprise Risk Management Framework, which is continuously reviewed and benchmarked with industry-best practices. The Risk Management Committee periodically evaluates and monitors the Company's key risks, such as the impact due to the slowdown in the economy, geopolitical issues, risks relating to reputation and brand, competition, counterparty, foreign exchange & commodity prices, interest rates, cyber security and Environmental, Social, and Governance (ESG) related issues, and so on.

The Risk Management Committee periodically reviews the robustness and defensibility of the systems in place and suggests mitigation plans accordingly. The Audit Committee, in compliance with Companies Act and SEBI LODR, oversees the financial risk framework of the Company and reviews the corporate risk management framework once a year.

The aforesaid risk management processes are assisted by an Enterprise Risk Management System that facilitates monitoring risks across projects in various geographies of operation, provides a risk-weighted portfolio view of businesses and shares learnings across the organisation. An integrated Knowledge Centre portal is also available that provides a platform for the assessment of financials of counterparty, geo-political and macro risks to support informed and fact-based decision-making.

The Company has a Chief Information Security Officer (CISO) in place who is responsible for forming and assuring the implementation of IT security policies, frameworks to manage cybersecurity risk, and controls across the organisation. Also, the Company has rolled out Mission Zero Harm Plan, targeting the proper implementation of safety procedures, programmes, and practices.

The Company's apex enterprise-wide risks and their mitigation measures are summarised below:

Description	Mitigation measures
Pandemic	
<p>The pandemic has posed one of the key risks impacting the Company's operations. Project activity at worksites had slowed down during the period starting from March till May 2020 as governments worldwide resorted to a range of measures, such as complete lockdown, night curfews and partial lockdowns to curb the spread of the virus.</p> <p>The impact on economic and financial condition of counterparties in India or elsewhere may lead to delays in booking new orders or timely release of funds for the projects under execution.</p>	<p>The Company has quickly responded by implementing safety measures such as temperature screening, sanitising, and enforcing safe distancing norms and mandatory masks in private offices and project sites to ensure the resumption of work. The Company also stepped up its employee health welfare initiatives and established well-equipped quarantine facilities to take care of the sickness/recovery process.</p> <p>The Company took steps to ensure that liquidity was preserved to withstand any adverse developments. Credit-worthiness of counterparties is being continuously monitored to lessen the impact of adverse working capital resulting from customer delays in the settlement of receivables.</p>



Description

Mitigation measures

Execution challenges

The Company faces inherent risks throughout the project's execution phase. The project challenges include employee/workmen safety, working in difficult/harsh weather conditions, unavailability of work front, land acquisition and Right-of-Way (ROW), environmental clearances, visa issues, and so on. There were additional challenges due to the pandemic, such as labour availability and mobilisation, supply chain disruptions, and some of the projects getting delayed/slowed down at the customer's behest.

Projects are put through execution risk reviews utilising the recently implemented Enterprise Risk Management (ERM) System. Each risk identified through the ERM system is classified into generic and specific risks based on a comprehensive risk register. These risks are monitored regularly for resolution/mitigation. Projects are closely reviewed through a quality and EHS audit, ensuring employee safety, regulatory, and environmental compliance. Practices such as working in multiple shifts, providing a safe and healthy working environment, and arranging for workmen boarding with required facilities, are being implemented in projects. Sourcing from alternative channels has ensured minimum supply chain disruptions. Contractual remedial measures are being enforced with more rigour to mitigate the monetary impact arising out of project delays.

Under-performance in key sectors

Sectors such as Power, Nuclear and Defence and- Shipbuilding, continued to see slow growth and underutilisation of their capacities. These businesses are facing structural challenges, such as high receivables from Discoms, shift towards green projects, delays in environmental clearances, and so on. Additionally, the metro and financial services sectors have been adversely impacted by the pandemic.

Divestment of certain non-core business lines and proactive liquidity boosting have given the Company the financial flexibility to meet project milestones, while investing in high-growth areas. The Company works on sector-specific solutions to improve overall business performance.

Geopolitical risk

The Company operates in numerous geographies and faces risks on account of protectionist policies, political dynamics, trade barriers, sanctions, and geopolitical conflicts. The ongoing geopolitical scenario also impacts the supply chain, and hence could have a schedule and cost impact on projects.

The Company has in place mitigation strategies, such as country-clearance procedures, monitoring geopolitical conflicts, actively monitoring changes in sanctions regimes, along with the identification of alternative strategic sourcing options.

Inequitable terms of trade

The Company partners with multiple stakeholders in executing projects and the terms agreed upon with these parties have become more stringent over the years. Joint and several liability, long tenor of defect liability periods, cost overruns, back-ended payment structure, working capital challenges and claim management challenges will adversely impact performance and cash flows.

The Company relies on its leadership position in the businesses it operates, strong internal processes, back-to-back arrangements with vendors/subcontractors, project and business level working capital monitoring policies, and pre-bid reviews as appropriate risk mitigation strategies. Project teams also maintain the required documentation and follow redressal mechanisms with clients/vendors/subcontractors to address terms and disputes on a case-by-case basis.

Risk management



Description	Mitigation measures
Cyber security	
<p>The Company is undergoing digital transformation and cybersecurity has become a key concern for the continuity of our business. Vulnerabilities such as targeted attacks, ransomware threats, and phishing have raised the importance of protecting the information technology infrastructure and data of the Company.</p>	<p>The Company has a Chief Information Security Officer in place, who, under the guidance of the risk management committee oversees the implementation of strong enterprise-wide cybersecurity practices. These practices are grouped into people, process and technology control areas under the company-wide Cyber Security Assurance Framework. Employee awareness on cybersecurity is being enhanced through initiatives such as awareness courses, information security day, quizzes, and the creation of infotoons. Maturity of security controls is continually being measured to ensure they maintain the desired benchmarks.</p>

Financial Risks

Economic activity continued to be impacted in the wake of the worst humanitarian and health crisis in more than a century posed by the pandemic. Post the complete disruption of the logistics and supply chain as well as the reverse migration of the labour force, Q1 FY21 saw India's GDP decline by ~24%. With the phased easing of lockdown restrictions during Q2, Q3 and Q4, the country's GDP contraction for the full year of FY21 stood at 7.3%.

However, the second surge of the mutant strain of the virus and the relatively slow pace of vaccination gave rise to concerns on resumption of economic activity, asset quality challenges for the financial sector, and so on. Inflation in India rose sharply in the first nine months of FY21 mainly on account of higher food prices led by supply-side disruption in the lockdown phase.

The global economy shrank by 3.3% in 2020. Amid the various waves of COVID-19 stretching across different geographies, there was a broad-based contraction of various large economies, with the exception of China. Global trade has declined and there has been a marked slowdown in services activities, even though the manufacturing sector activity has gradually picked up. Governments and Central Banks worldwide responded with unprecedented fiscal stimulus and monetary measures to support economies, businesses and livelihoods. Central Banks adopted an accommodative stance and also provided liquidity to levels not seen since the global financial crisis of 2008.

As a result, the asset prices have recovered after the initial COVID-19 fears-led fall, and have remained

buoyant since. The pandemic has led to an uneven recovery and many sectors are still struggling to reach pre-COVID performance levels. Fragility in the financial sector in a number of economies continues to remain a concern, though with stimulus and liquidity pumped in by Governments, led to higher consumption of goods (in lieu of services) by people. A combination of higher consumption of goods, infrastructure build-up expenditure driven by fiscal boosts and catch-up on lost time being attempted by various industries upon reopening of the economies led to demand surge for raw materials such as steel, cement, base metals, semi-conductors, and so on. The supply of raw materials could not be increased at the same pace due to the spread of the pandemic in regions where the ores are mined, restricted supply chains, etc. This created a demand/supply gap leading to a sharp increase in commodity prices in the second half of FY21.

With the execution progress being impacted in the first quarter of FY21 due to the pandemic, the Company focussed on collection of receivables, making good progress, and also stepped up its support to the vendors during the crisis period. This has led to a decrease in the absolute level of working capital.

Capital structure, liquidity and interest rate risks

The start of FY21 saw the Company facing huge liquidity challenge as the duration of the lockdown and disruption of work at sites as well as at client offices was uncertain. This meant uncertainty of cash inflows while the Company had its short-term and long-term debt repayments, vendor payments and

other fixed costs to provide for. To mitigate these issues, the Company raised a significant amount of long-term liquidity at the beginning of the year through debt capital markets.

The Company also concluded the divestment of its Electrical & Automation business and used its proceeds to reduce its gearing, thereby maintaining a conservative capital structure. The proceeds were also used for investing ₹ 1,900 Crore in the form of rights issuance of its subsidiary L&T Finance Holdings and about ₹ 1,000 Crore to support its subsidiary L&T Metro Rail Hyderabad Ltd. (LTMRHL) whose operations were impacted severely due to the pandemic.

With business conditions improving progressively in the 2nd half of FY21 till the onset of the second wave, the Company ended the year with significant liquidity on the balance sheet, aided by the divestment and lower working capital. Low gearing levels and high cash balances will equip the Company to deal with business uncertainty in the face of the ongoing second wave of COVID-19. The Company plans to maintain the higher liquidity buffer on the balance sheet to deal with the lingering pandemic-induced crisis and possible downturn in economic conditions.

With the Large Exposure Framework guideline of RBI implemented from April 1, 2019 the Company has been focusing on ensuring sufficient available limits to retain the ability to bid for large-value projects, though currently it has adequate banking facilities to cater to business requirements. The Government's initiative to reduce the performance bank guarantee requirement in projects from 10% to 3% has also enabled the Company to retain adequate headroom in its non-funded facilities.

The Company judiciously deploys its surplus funds in short-term investments in line with the Corporate Treasury policy. It constantly monitors the liquidity levels, economic and capital market conditions and maintains access to the lowest cost means of sourcing liquidity through banking lines, trade finance and capital markets. The Company managed its higher-than-usual treasury investments during the year to generate investment return to neutralise the higher interest cost due to extra borrowings raised in the beginning of the year.

Given the extra liquidity buffer planned to be kept on the balance sheet due to the ongoing crisis and long-term debt raised, both the debt and investments on the balance sheet are likely to remain elevated in FY22 as well. The Company dynamically manages interest rate risks through a mix of fund-raising products, investment products and derivative products across maturity profiles and currencies within a robust risk-management framework.

Foreign exchange and commodity price risks

The Company's businesses are exposed to fluctuations in foreign exchange rates and commodity prices. Additionally, it has exposures to foreign currency denominated financial assets and liabilities. The business-related financial risks, especially involving commodity prices, by and large, are managed contractually through price variation clauses, while the foreign exchange risks and residual commodity price risks are managed by appropriate hedging products.

The disclosure of commodity exposures as required under Clause 9 (n) of Part C of Schedule V of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 in the format specified vide SEBI Circular dated November 15, 2018 is given in the Annual Report.

Financial risk management is governed by the Risk Management framework and policy approved by the Audit Committee and authorised by the Board. The financial risks in each business portfolio are measured and managed by Corporate Treasury.

Despite a sharp rally in commodity prices during the year, the Company's robust financial risk management processes ensured during the year that the impact of high impact costs on the Company's profits remained under control.

Climate Change Risk

Climate variability across the world has emerged as one of the biggest risks of the 21st century lately as a result of global warming. The Company's primary operations in the construction and engineering sector may be impacted by climate change. Some of the major concerns include: (i) The weather of a location cannot be predicted based on the meteorological data; (ii) Climate change is a risk multiplier and has also enhanced the instances of cyclones, floods and droughts, which may cause problems in basic supplies, raw material transportation, among others; (iii) It also threatens the lives of employees and damage property; (iv) Transportation and operation of equipment in unpredictable weather is also a major concern.

Emergency management plan is a major requirement to avoid this risk. The Company adheres to all safety and environmental compliances including ISO 14001 and ISO 45001. Occupational hazards and adherence to environmental management plan are carefully monitored at all locations. Alternative plans and measures are in place should there be emergencies.

Also, many climate related policies are emerging lately. There is a necessity to be updated with all the policies and regulations nationally and internationally. L&T is already working on including the G7, TCFD and other similar guidelines into its business.

Strategy

Strategy formulation

L&T's business strategy helps the Company adequately exploit its strengths, identify new opportunities and build new capabilities. This is enabled through three plans with time horizons ranging from long term (7-10 years) to medium term (5 years) to short term (annual). Each plan dovetails into the next.

The Company had earlier undertaken the development of 'Perspective Plan' focussing on a long-term view (7-10 years) of the Group's various businesses, which helped identify the megatrends, potential disruptions and future directions for the current businesses. Further, the exercise helped identify new business opportunities (SuFin, EduTech) which are now in incubation phase and expected to bring significant benefits in the coming years. The exercise also led to the setting up of an Innovation Fund which is focusing on identifying and investing in start-ups for digital

innovations, and for the core business. The insights garnered from the Perspective Plan exercise would also be inputs for developing the next 5-year strategic plan i.e. 'Lakshya-26'.

Lakshya runs for a 5-year period and is developed through a collaborative and consultative process across the organisation. Formulating the plan helps decide the strategic directions for the businesses as well as setting the year-wise performance targets along with supporting initiatives. FY21 is the terminal year of the last 5-year strategic plan, 'Lakshya 21'.

The pandemic delayed the formulation of the next 5-year plan 'Lakshya-26' and has also ushered in new dynamics in certain businesses, which need to be addressed. The Company has now initiated the formulation of 'Lakshya-26' plan and aims to complete the process by September 2021.

While the 5-year business outlook and broad financial goals are embedded as an overarching strategic plan, the annual operating plan is formulated before the commencement of every financial year. This helps provide flexibility in tailoring annual operating and financial budgets to changing circumstances while keeping the 5-year strategic plan in view.



EPC

The Group focuses on its proven core competencies of conceptualising, engineering, executing, and commissioning large, complex infrastructure projects in the areas of roads, bridges and tunnels; power transmission and distribution, thermal/hydel/solar/nuclear power plants; water and irrigation infrastructure; residential, commercial, institutional and factory buildings; airports; high-speed, metro, and conventional railways; onshore and offshore hydrocarbon facilities and metallurgical projects.

Manufacturing

Manufacturing is mainly concentrated on defence and shipbuilding, heavy custom-built equipment catering to process industries, material handling equipment, and industrial products and machinery. The Company has extensive manufacturing facilities at Hazira, Vadodara, Talegaon, Chennai, Coimbatore and Kattupalli in India and Oman, Saudi Arabia in international geographies.



Business Model



Value creation by the Group is enabled through leveraging its four business models



Services/Allied

The services and allied businesses cater to sectors of IT (through LTI and Mindtree), Technology services (through LTTS, Smart World and Communication and L&T-NxT), Real estate and Financial services (through LTFHL).

Development

The Company has also undertaken development projects such as the Hyderabad Metro, road operations and tolling [through Infrastructure Development Projects Limited (IDPL)], Nabha Power and Uttaranchal Hydel Power, among others.

Strategy

Our businesses and offerings are closely linked to global Megatrends

Urbanisation

Increasing population pressures in cities leading to various challenges e.g. congestion and call for better solutions

- High rise buildings for better utilisation of land space (B&F)
- Underground multi-level car parks (Geo)
- Redesigned utility networks (PT&D, WET)
- Safe and Smart cities (SWC)



Climate Change

Climate change and resource scarcity driving need for solutions to balance growing needs with environment

- Renewables – Solar, Energy Storage (PT&D, HC)
- Green buildings (B&F)
- Water Recycling and Reuse solutions (WET)
- Energy Efficient Electricity systems (PT&D)



Mobility

Safe, fast, affordable and environment friendly solutions for movement of people and goods

- Mass Rapid Transit Systems (TI, HC)
- World class airports (B&F, TI)
- EV and Autonomous systems (LTTS)
- Expressways & Rail Networks (TI)



Demographic Challenge

Universal coverage for basic amenities, keeping up with growing demands for global population

- Water Treatment and sewage systems (WET)
- Affordable & Mass Housing (B&F)
- Electricity distribution and microgrids (PT&D)
- Financial services (LTFs)



Digitalisation

Technology and services offerings to aid new age businesses across various domains

- Big Data, AI/ML in BFSI, Retail and Media (LTI, LTTS, MT)
- Automation, IoT in Manufacturing, HiTech, Industrial Products, Medical devices (LTTS, L&T-NxT)
- Cloud, Cybersecurity (LTI, MT)
- Mobile, Drones, AR/VR/MR (LTI, LTTS, MT)
- Platforms (SuFin, Edutech-skilling)





The pandemic has influenced some of the global megatrends. While it has negatively impacted contact-intensive sectors, it has also accelerated the push towards digitalisation, environment conservation, renewables, and health and wellbeing. Digitalisation initiatives, pursued over last 2-3 years, have enabled our businesses to develop significant capabilities and in turn, benefit from this tailwind in the coming years. The push towards environment-friendly solutions is expected to benefit some of our infrastructure businesses such as Renewables (PT&D)

and WET IC. The de-risking of supply chains via increased localisation or near-shoring and government incentives for increasing local manufacturing also expected to drive investments in new factories and capacity expansion.

Oil and gas industry was already undergoing transformation and pandemic has accelerated the shift. This could have some impact on LTHE's future offerings. Negatively impacted sectors due to pandemic e.g. airports, public places (stadiums), new office buildings etc. are likely to face short term challenges, however it is expected that these will pick up sometime in near future, given their long term uptrend.

Portfolio strategy

The portfolio strategy aims to de-risk the revenue while improving profitability in the pursuit of growth. This strategy focuses on:

Complementing the mature businesses with growth-stage businesses, with a focus on asset-light, and high-margin businesses. The Group is also trying to reduce exposure to asset-heavy businesses. Businesses requiring periodic capital infusion such as Financial Services will be reassessed periodically to gauge their strategic significance.

Well-balanced and geographically diversified businesses across domestic and international markets. India will attract global capital for infrastructure businesses over the next five years due to a change in market outlook. In addition to India, infrastructure business would focus on international markets such as the Middle East and Africa. Americas and Europe would continue to be the focus geographies for IT services businesses. To further de-risk the geographical concentration and pursue new growth opportunities, a few more high-potential countries in Africa and ASEAN region have been identified.

Balancing the cyclical nature of the EPC business through a portfolio of services businesses. The 'Services' businesses contribute over 25% of the Group's revenues. With the aim of better profitability and a stable revenue profile, the group intends to significantly increase share of services business while pursuing growth in the traditional EPC and manufacturing businesses.

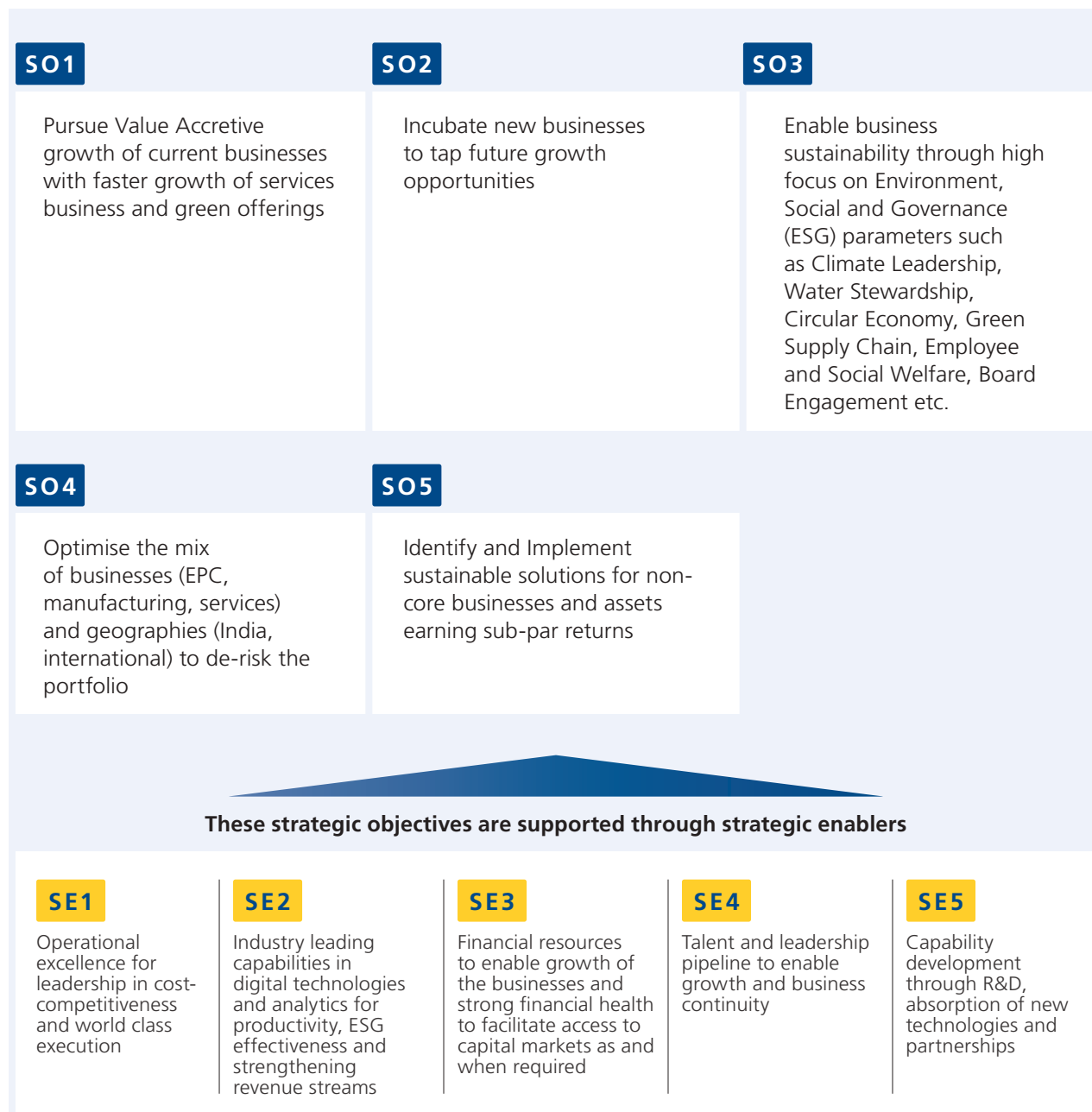
Supplementing the standalone offerings with partnerships. For the EPC and manufacturing businesses, the Company has partnered with several large global process and technology licensors, and for the IT and Technology Services businesses, the group has extensive partnerships with established global software product and technology companies. These engagements enable the Group to offer a bouquet of value-added services to customers in different businesses.

Strategy

Strategic thrust and direction

The focus of the Group's strategy is to create value for its shareholders, investors, clients, employees and other societal stakeholders through economic benefits, fulfilment of social obligations and ecological sustainability while protecting and promoting the L&T brand.

This value creation is driven through the Company's Strategic Objectives





Reviewing our Performance

KPIs

Performance

SO1

- Revenue Growth
- % of Services in Total Revenues
- Size of Green Portfolio

- In FY 21, despite effect of pandemic which resulted in large disruptions in execution, we achieved revenues of ₹ 1.35 L cr. (-7% y-o-y)
- However, services business stayed resilient and % share in revenues increased to 29% in FY21 from 24% in FY20
- Continuing with our focus on Green Future, we increased size of Green Portfolio of businesses to ₹ 277 Bn which is 29.6% of total revenues (as compared to 31.4% in FY20)

SO2

- New Businesses being incubated

A number of new business ideas were evaluated and the following were incubated in FY21:

- **SuFin:** A B2B platform focused on SMEs in industrial and construction products
- **EduTech:** An online skilling platform focused on employability assessment, reinforced learning and training
- **L&T-Nxt:** Focusing on the areas of artificial intelligence, internet of things (IoT), virtual reality, augmented reality, geospatial solutions for various industries

SO3

- Metrics linked to ESG performance based on materiality e.g.
 - GHG Intensity
 - Water consumption
 - LTI
 - Training hours

For details refer to sections

Natural Capital

[PAGE 56](#) →

Social Capital

[PAGE 122](#) →

Relationship Capital

[PAGE 140](#) →

Governance

[PAGE 158](#) →

Risk Management

[PAGE 42](#) →

Policies

[PAGE 160](#) →

SO4

- Revenue Composition (%) in terms of Businesses
- Revenue Composition (%) in terms of Geographies

In FY21, we continued to aim for a balanced portfolio mix. Business wise composition stood at EPC (61%), Manufacturing (7%), Services (29%), Others (3%).

In terms of Geographic mix, ratio of domestic to international revenues was 63:37 (FY20; 67:33)

SO5

- Businesses divested

In FY21, we completed a major divestment exercise sale of Electrical & Automation business to Schneider. We also divested UK-based marine solutions business 'Servowatch' to Rolls Royce.

Sustainability Performance

Sustainability Roadmap

Sustainability roadmap journey started many years ago. Over the years, we have reviewed and finetuned our sustainability priorities on the basis of evolving business realities in India and other global markets where we operate. We had kickstarted our third Sustainability Roadmap back in 2016.

The sustainability roadmap was formulated after taking cognisance of past learnings, peer analysis and stakeholder inputs. Our next sustainability roadmap for FY22 to FY26 is currently under development and will be finalised in the next few months. The roadmap will be displayed at our website and will be shared with the investors and other stakeholders.

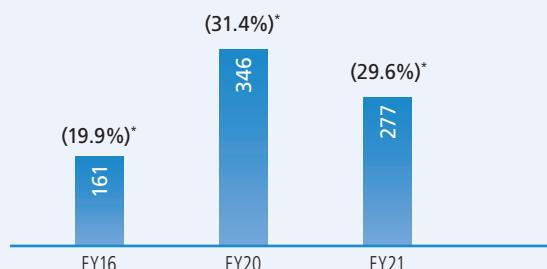
Our progress in the reporting year vis-à-vis set targets is provided below.

TARGET

Achieve green product and services portfolio at 25% of total revenue

Green Portfolio

Billion



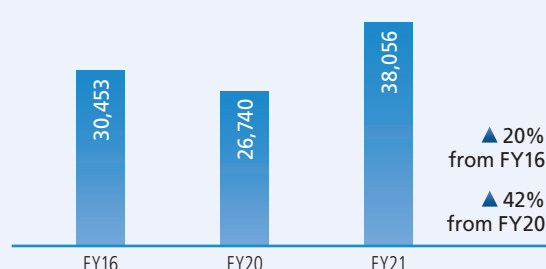
*Percentage of Contribution to the revenue within the scope of this report

TARGET

Increase energy conservation by 10% y-o-y

Electricity saved

GJ

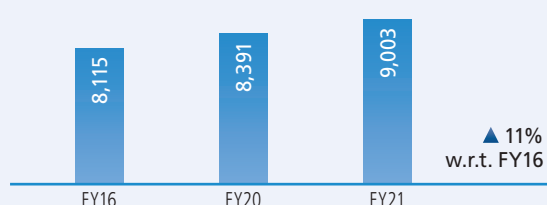


TARGET

Reduce total energy consumption intensity per turnover by 5% (GJ/₹ Billion) w.r.t. FY16

Total Energy consumption intensity*

GJ/bn



Although our total energy intensity has increased, our Indirect energy consumption reduced by 28% wrt FY16 due to energy conservation measures.

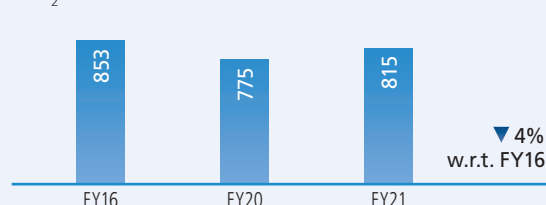
*In FY21 the energy consumption intensity increased as most of our project sites continued to be operational during the pandemic even though construction activity was low in H1.

TARGET

Reduce direct GHG emission intensity by 5% (direct CO₂/₹ Billion) w.r.t. FY16

Total Scope 1&2 GHG emission intensity*

tCO₂e/bn



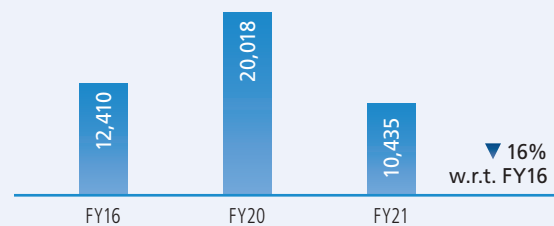
Even with our increasing energy consumption we have managed to reduce our emission intensity with the use of renewable energy (10.23% of total electricity mix).

*In FY21 the energy consumption intensity increased as most of our project sites continued to be operational during the pandemic even though construction activity was low in H1. Similar impact was observed for emissions as well.


TARGET

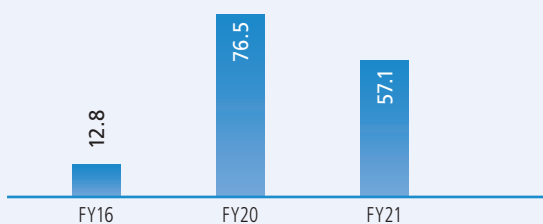
Reduce water consumption intensity by 10% (KL/Bn) w.r.t. FY16

Water consumption intensity
m³/bn


TARGET

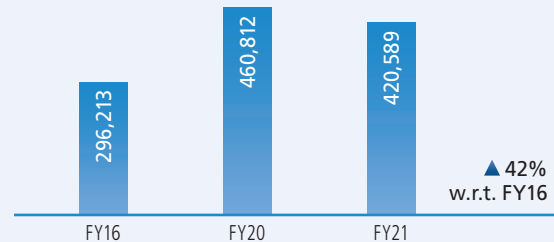
Increase water conservation and recycling by 5% w.r.t. FY16

Percentage of waste water recycled
%


TARGET

Increase in recycling, and use of recycled material by 5% w.r.t. FY16

Recycled materials used
Tonne



Safety

TARGET

Zero accident vision: Working towards the goal of achieving zero accidents

STATUS

Our frequency rate of accidents has reduced by 5% in FY21 compared to FY20. There was 40% reduction in fatality compared to FY20.

Corporate social initiatives

TARGET

Reach 3 Million beneficiaries

STATUS

1.2 Million beneficiaries in FY21

TARGET

Increase employee volunteering base to 5,000

STATUS

4,400 employees participated in the volunteering programme and worked for various social causes in FY21.

Note: We have made our criteria for CSR beneficiaries more stringent since FY20. Hence the reduced number of beneficiaries.

Managing Capital Trade-offs

Managing the COVID-19 pandemic

It is essential to allocate our capital and resources in the best possible way to create sustained value for all our stakeholders, while operating in a volatile market. The constrained and interconnected nature of the capitals availability pushes us to always evaluate and make smart choices about allocation of capitals.

Our strategic focus areas demonstrate our integrated thinking and act as a compass, guiding our decision-making for balancing growth with sustainability at all times, while managing capital trade-offs.

Explaining the trade-offs

The pandemic brought a sudden work halt at our sites. Our different businesses stopped operations briefly, for lockdown period and resumed projects. The manufacturing businesses adopted work from home mode.

Managing the trade-offs

Our focus was on protecting our employees and supporting communities and government during the global pandemic. We implemented temperature testing, sanitisation of offices and provided personal protective equipment (PPE) and sanitisers, medical care and other facilities to our employees. We converted inhouse facilities to quarantine centres for employees and family members along with hotel tie up for the same. Regular RT/PCR tests were conducted across offices, project sites and factories. We started iCALL facility for online counselling of employees. We supported our suppliers, vendors and partners in this journey. We ensured our contract workmen were provided with timely wages, food, shelter, 24X7 Doctor, Nurse, Ambulance and materials for daily needs at Labour camps.

The Company took steps to ensure that liquidity was preserved to withstand any adverse developments. We developed relevant communication to enhance COVID-19 awareness on appropriate behaviour, among other things.

-  Natural Capital
-  Manufactured Capital
-  Intellectual Capital
-  Human Capital
-  Social and Relationship Capital
-  Financial Capital



Capitals deployed



Capitals impacted



Divesting non-core assets and businesses

Explaining the trade-offs

During the year, the divestment of our Electrical and Automation (E&A) business to Schneider Electric, was completed. The exit from the E&A Business is a part of the strategic portfolio review process, to unlock capital from non-core businesses. The deal was complex, and required integrating 5,000 employees of L&T E&A to 2,000 employees of Schneider Electric India Pvt Ltd. L&T has a strong brand recall in the switchgear market and the related brand insignia will be used by Schneider for a specified period. This newly merged company will continue to manufacture switch gear products in line with the Make in India campaign and aims to bring tremendous value to the nation.

Managing the trade-offs

We have invested significantly to bring up this business vertical and while parting we ensured to find a like-minded responsible organisation. We believe this deal will continue to keep business on the path of growth. Our businesses are digitally driven and the use of technology has enabled us to smoothly conduct the transfer of employees, and resources.

Capitals deployed



Capitals impacted



Ensuring judicious utilisation of resources

Explaining the trade-offs

We operate a diverse range of businesses and create long term value for our stakeholders. Our Hydrocarbon, heavy industries, power and defence businesses are resource-intensive and utilise scarce natural resources. Our endeavour is to minimise our environment footprint and maximise materials we utilise. Being a project-based company, we follow the inputs from our customers to choose virgin/ recycled materials and sometimes our ability to use recycled material is restricted.

Managing the trade-offs

Our aim is to optimise our resource utilisation and contribute to a greener and more sustainable environment. Our EHS policy, sustainability policy, and green supply chain policy guide us in this endeavour. We promote the use of recycled materials, fly ash and granular blast furnace slag to blend with cement at our construction sites. We also offer Green Buildings development which are resource efficient.

Capitals deployed



Capitals impacted



Focusing on sustainable businesses

Explaining the trade-offs

We are consistently enhancing the share of sustainability-led businesses which contribute to the environment and society in a positive manner. Our portfolio includes - solar energy, energy storage, water reuse, recycling projects, eco-friendly fuel production, green building construction and metro & monorail projects. These projects offer significant benefits to the society over their lifetime.

Managing the trade-offs

Detailed due diligence is conducted to assess the long term outlook of these projects before their commencement. We significantly invest in building our team capabilities to enhance our portfolio consistently.

Natural Capital



The precious natural resources are fast depleting owing to growing demand from an increasing population and change in consumption patterns. Besides, various industrial activities are having lasting impact on the environment.

At L&T, we ensure that our operations judiciously use these resources and take multiple measures to preserve and protect them while reducing our carbon footprint. This requires prudent planning and collaboration with community partners, government agencies and non-profits who are already involved in this cause.



KEY HIGHLIGHTS OF FY21

56%

REDUCTION IN WATER CONSUMPTION Y-O-Y

894,062

SAPLINGS PLANTED IN FY21

KEY MATERIAL ISSUES IMPACTED

- Water management
- Natural resource conservation
- Climate change mitigation and GHG emissions
- Adoption of renewables
- Energy efficiency
- Supply chain management

SDGs IMPACTED



STRATEGIES IMPACTED

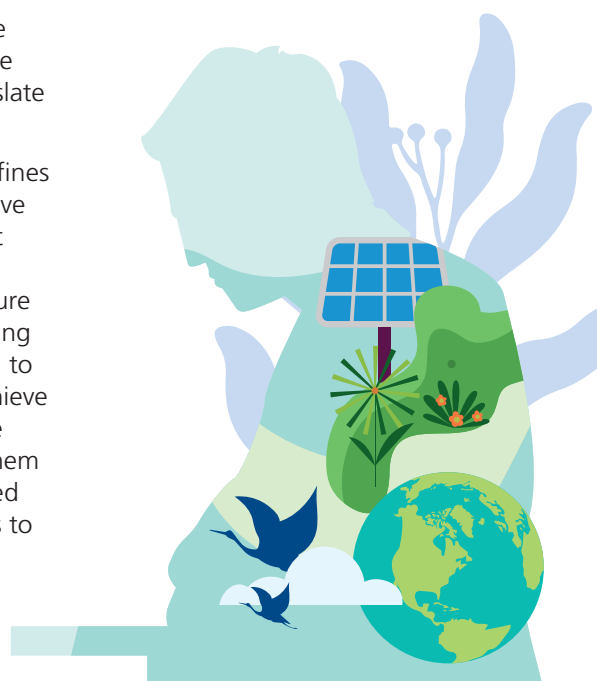


Natural Capital

Translating sustainability initiatives into lasting outcomes

Our strategy is to adopt a low-carbon pathway for all our businesses. In line with the Sustainable Development Goals of the United Nations, we optimise the use of natural resources, building efficient infrastructure, reducing emissions; and, more importantly, urging stakeholders towards a behavioural change through consultation and partnership. The objective is to translate our sustainability initiatives into lasting outcomes.

Our corporate Environment, Health and Safety (EHS) Policy defines our business philosophy on environment management. We have a team of dedicated EHS managers at our facilities and project sites to implement the policy initiatives. We regularly train our workforce on the aspects of environment conservation to ensure smooth implementation. For more than a decade, we are setting targets as a part of our sustainability programme and working to fulfil them. Our company also has a sustainability policy to achieve our sustainability goals. Our third sustainability roadmap came into effect in 2016, with the target year of FY21. To achieve them we periodically review our program. We have also implemented an Environmental and Social Code of Conduct, which helps us to manage the impact of a project lifecycle holistically.



KEY HIGHLIGHTS OF FY21

ENERGY CONSERVATION

128 Mn units

Energy saved
cumulatively (kWh)

0.47 Mn

Fuel saved (m³)

RENEWABLE ENERGY

28.87 Mn units

Renewable energy used
in our campuses (kWh)

> 10%

Of total electricity mix

GREEN BUILDINGS

**13 green
buildings**

Including our office spaces
and a green factory

MATERIAL MANAGEMENT

43,068 MT

Steel recycled
(cumulatively)

1,649 MT

Zinc recycled
(cumulatively)

CO₂ EMISSIONS AVOIDED

> 33,500 tCO₂e

in FY21

EXPENDITURE ON ENVIRONMENTAL MEASURES

₹ 85 Mn

in FY21 against ₹ 94.5 Million
in FY20

WATER

Zero

Discharge and high water
harvesting in the vicinity of
our campuses

ENERGY

Our aim is to progressively ramp up the share of renewable energy in our total pie of energy consumption. Across our businesses all departments have BEE certified energy managers and auditors. The primary objective of this team is to enable us to manage energy at our manufacturing facilities in the best possible manner. Energy audits ISO 50001 are conducted at regular intervals.

In FY21, our total energy consumption was 8,417,372 GJ, comprising direct energy consumption of 7,355,449 GJ and indirect energy consumption of 1,061,924 GJ. The transport facilities we provide our employees to commute outside the organisation's premises also enables us to reduce our environment footprint owing to reduced usage of private vehicles by our people. The energy consumption outside the organisation was 252,654 GJ in the year FY21, including employee commute and work-related travel.

Direct energy intensity increased by 9% y-o-y, while indirect energy intensity decreased by 38% with respect to FY16, primarily because of sourcing of renewable electricity at our campuses and increase in energy conservation activities. Our major business is Engineering, Procurement and Construction (EPC) of projects, where energy consumption is related to

project execution. We will continue to implement the measures recommended to manage energy consumption across our campuses and project sites.

Renewable energy

Increasing the contribution of renewable energy in our total energy consumption is a key focus area for us.

Our campuses utilised 21.2 Million units from wind powered turbines, which constitutes 7.53% of our total grid electricity mix.

Solar: In FY21, 2.6 Million units of solar energy was harnessed at our campuses.

8 campuses
Renewable energy
generated

4 campuses
Wind power sourced

3 campuses
Solar electricity
sourced



India's first large-scale solar PV project of 2 x 10 MW with 16 MW/8 MWh battery energy storage system in the Andamans

Natural Capital

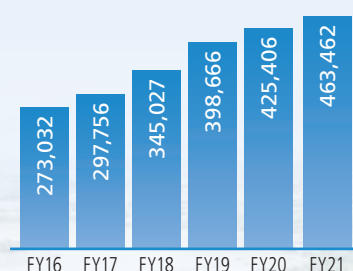
Energy conservation

At L&T, our core objective is to achieve a 10% increase in energy conservation measures, every year. The energy conservation measures have increased by 43% compared to FY20 and increased by 25.3% vis-à-vis FY16. Cumulatively, we saved energy equivalent to 128 Million units, thereby avoiding 33.5 mn tonnes of CO₂-equivalent emissions in FY21 through energy conservation and renewable energy use.

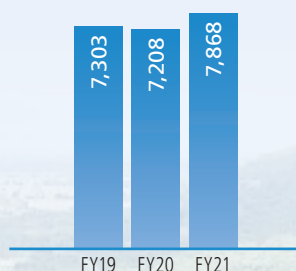
Energy conservation interventions (GJ/year)

Process re-design	1,968
Optimisation and operational control efficiency	3,304
Conversion and retrofitting of equipment	15,548
Change to CFL and LED lamps	10,755
Change in personal behavior and auto shutting of lights when not in use	2,294
Others	4,187
Total	38,056

Cumulative energy conserved GJ



Direct energy intensity GJ/₹ Billion



Indirect energy intensity GJ/₹ Billion



Floating Solar Project, Tirupati, Andhra Pradesh

EMISSIONS

GHG

We are committed to contributing meaningfully to combat climate change. Our focus is on realigning our processes and systems to reduce our GHG emissions.

GHG Emissions

Scope 1

Consumption of fuels such as petrol, high speed diesel, furnace oil, natural gas, LPG, CNG and acetylene.

Note: The energy, GHG emissions and water consumption intensity have been derived as per the Scope of Reporting Calculation methodologies; and are as per ISO 14064-1 standard and the global warming potential used in these calculations is taken from IPCC and WBCSD GHG protocol.

540,874 tCO₂e
Direct GHG emissions (Scope 1)

Scope 2

Utilisation of grid electricity supplied by state electricity supply boards.

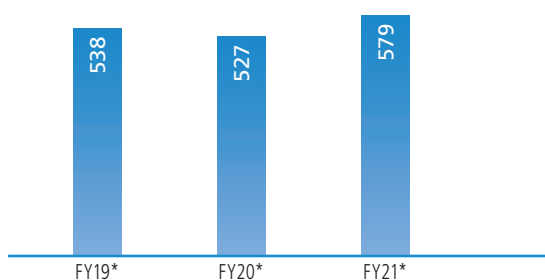
221,512 tCO₂e
Indirect GHG emissions (Scope 2)

Scope 3

We are revisiting Scope 3 to broaden the scope.

Direct GHG emission intensity

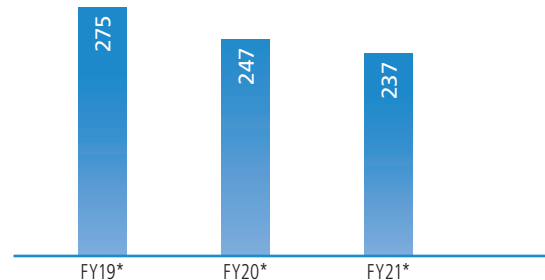
tCO₂e/₹ Billion



* Calculated with the revenue within the scope of this report

Indirect GHG emission intensity

tCO₂e/₹ Billion

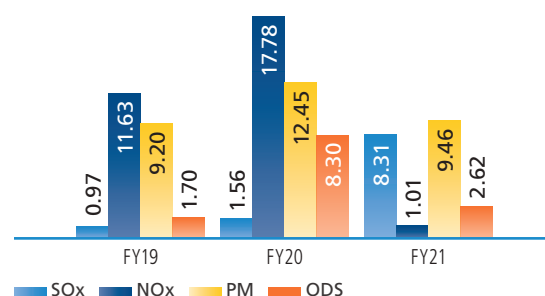


Air emissions

We monitor air emissions at our campuses and project sites and ensure that our emissions stay within permissible limits. Our principle sources of air emission are process stacks at a few campuses and diesel generator sets.

SO_x, NO_x, Particulate Matter (PM) and ODS emissions

Tonnes



*We have widened the scope of air emission this year

Natural Capital

WATER

We are continuously stepping up our water conservation initiatives as part of our overall commitment to sustainability. The construction business is largely water-intensive, but we were successful in reducing water consumption significantly.

Our campuses have also achieved 'zero water discharge status'. The quantum of water we recycle is used for gardening and flushing purposes. We undertake various measures to construct rainwater harvesting structures both inside our premises and in areas where our projects are functional.

Water withdrawal (m³/year)

Source	FY19	FY20	FY21
River/Lake	2,185,089	2,249,349	1,954,846
Municipal	1,444,293	1,049,722	1,009,999
Rainwater	18,140	56,672	56,575
Groundwater	15,453,730	16,102,233	4,124,985
Others	4,101,695	4,863,491	3,009,989
Total	23,202,947	24,321,467	10,156,394

Water Intensity (m³/Bn)

	FY19	FY20	FY21
	18,306	20,018	10,435

57%

wastewater recycled
in FY21

Total Water
Consumption in FY21

9,755,858 m³

WASTE AND SPILLS

Both hazardous and non-hazardous waste are handled diligently and responsibly at L&T. During the process of disposal, all relevant norms and procedures applicable are appropriately observed and documented for further reference, should there be an emergency. For example, we handle oil spills with meticulous care, and we continually report on waste and spills as mandated by ISO 14001 and OHSAS 18001. Periodic internal and external assessments are conducted to ensure compliance with applicable regulations.

Our waste management measures

- Hazardous waste – such as used oil, oil-soaked cotton waste, used chemical/paint/oil containers, batteries, paint residues and ETP sludge – is disposed of through Government-approved recyclers/re-refiners/re-processors.
- Hazardous waste is transported as per the statutory requirements.
- Electronic waste (e-waste) is disposed of through authorised vendors as per the statutory requirements.
- Biomedical waste generated at dispensaries and health centres is disposed of as per statutory requirement, and responsible disposal is ensured.
- We do not import, export, transport or treat any hazardous waste covered under the Basel Convention.

Compliance

Our campuses and project sites have obtained necessary approvals from local authorities before commencing their operations. Compliance is ensured with respect to various statutes, rules and regulations applicable to our Company. There is a 'system compliance report', which is reviewed at all our units and regional offices on a quarterly basis. During the year, there were no incidents of non-compliance, and no fines were imposed on our campuses within the reporting period.

2,595 tonnes

Hazardous waste

▲ 47% Y-O-Y

32,993 tonnes

Non-hazardous waste

▼ 25% Y-O-Y



Materials management

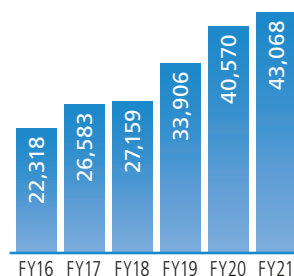
As a construction and engineering company, the materials primarily consumed in the course of our business activities are iron, cement and sand. We make all feasible efforts to gradually bring down our material consumption, while ensuring relevant quality standards. We make sustained efforts to recycle our steel and zinc at our production facilities. However, we are a project-based company, and most customer specifications insist on virgin material. Hence, the scope of using recycled material is limited. At our construction sites, we make judicious use of fly ash and granular blast furnace slag to blend cement.

Material consumption (partially reported) (tonnes)

Material	Consumption
Ferrous	1,112,545
Non-ferrous	419,855
Hazardous chemicals	93,963
Oils and lubricants	2,727
Cement and sand	5,675,473

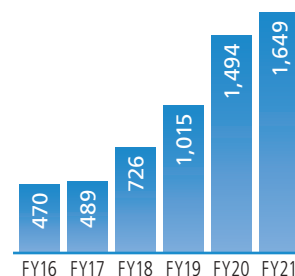
Recycled steel – cumulative

Tonne



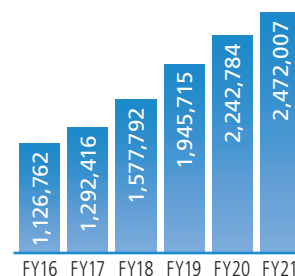
Recycled zinc – cumulative

Tonne



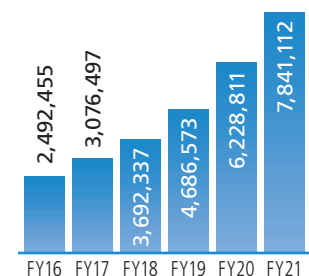
Fly ash – cumulative

Tonne



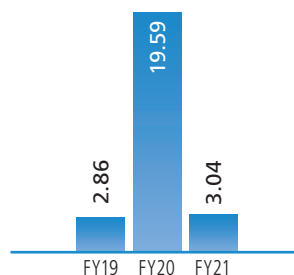
Crushed sand – cumulative

Tonne



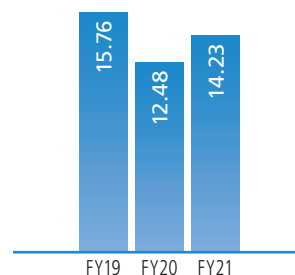
Percentage of recycled zinc used in place of Zinc

%



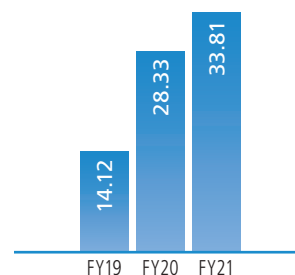
Percentage of fly ash and GGBS used in place of cement

%



Percentage of crushed sand used in place of Natural sand

%



Natural Capital

EXPANDING OUR GREEN PORTFOLIO

We are steadily developing a growing portfolio of sustainable engineering and design solutions. Any product development will always have some environmental impact.

Our green portfolio comprises projects embedded with advanced technology, solutions centred around renewables, water, effluent treatment plants, efficient power distribution, mass transit systems, green buildings. The aim is to lay stronger emphasis on energy efficiency and resource conservation to increase the sustainability quotient across our projects.

Our green portfolio offers infrastructure that has a low impact on the environment and focuses on public wellbeing. Our green portfolio contributed ₹ 277 Bn (29.6%) to the revenue of the company.

Our green portfolio comprises:

Renewable energy systems

- Solar power plants
- Hydro power plants

Efficient power transmission and distribution system

CO₂ emission reduction

(Metro and monorail)

Mass Rapid Transit systems provide enhanced connectivity, reducing the number of vehicles on the road, which in turn, reduces pollution and maximises resource efficiency.

Green buildings

(Buildings and Factories)

We construct certified green buildings, which consume less energy and water, utilise recycled material and locally source most of the construction materials.

Water and resource conservation

Water treatment and distribution infrastructure

We build bulk distribution and water treatment systems, wastewater treatment plants, effluent treatment and recycling plants as well as lift irrigation systems.

Effective Solid waste Management

- Our Smart World and communication IC provides automated communication softwares for effective solid waste management in smart cities.

Emission Reduction

- Flue gas desulphuriser (FGD)
- Our power business provides EPC services of FGD which helps reduce Sulphur oxides emissions from thermal power plants.
- Natural Gas extraction EPC projects also greatly reduce the emissions.

OUR GREEN BUILDINGS

U.S. Green Building Council (USGBC): LEED Platinum

- Technology Block, Hazira
- Administrative Building, Kattupalli
- SBU Block (2nd Floor), Hazira
- Administrative Building, LTSSHF, Hazira
- Office Building, Coimbatore

USGBC: LEED Gold

- Knowledge City, Vadodara
- North Block II, Mumbai
- Learning Centre – LDA, Lonavala
- East Block 2, Knowledge City, Vadodara

USGBC: LEED Silver

- EDRC, Chennai
- L&T TC III, Chennai
- Administrative Building, Vadodara

USGBC: LEED Certified

- L&T TC II, Chennai

13 Green buildings





BIODIVERSITY

Urban forest

Urban forest is a unique methodology proven to work worldwide, irrespective of soil and climatic conditions. More than 3,000 forests have been successfully created worldwide using this methodology.

As experienced globally, the forests created by Urban forest method are approximately 30 times denser and grows 10 times faster than conventional tree plantation, creating a self-sustaining forest in just 1/4 of time.

Comparing normal plantation with Miyawaki Method

Landscape/Plantation	Miyawaki Forest
Higher initial cost	Moderate initial cost
Extensive maintenance	Zero maintenance
Susceptible to pests and diseases	100% organic no pesticides used
Non-native plant selection	Only native plants selection
Single-layered greenery	Multi-layered green forest
Limited plant varieties	Minimum 25 to 50 plant species
	Kindles natural biodiversity

Urban Dense Forest

Location
Talegaon

Area
3 patches of 400 square metres

3,600
Saplings

Location
Coimbatore

Area
800 square metres

2,401
Saplings

Location
Bidkin

1 acre (12,500 saplings)

12,500
Saplings survived
100% Survivability

Location
Erode

8 acres (49,300 saplings)

46,835
Saplings survived
95% Survivability

Natural Capital

NATIONAL ACTION PLAN ON CLIMATE CHANGE

Larsen & Toubro's climate change, energy efficiency and renewable energy programs are aligned with the National Action Plan on Climate Change (NAPCC), released by the Prime Minister's office, Government of India in 2008. The Company's programs are also being aligned to the Nationally Determined Contributions (NDCs) ratified by the Government of India during the COP 21 – Paris Agreement.

MISSION 1

Solar

- L&T's solar business provides a single-point EPC turnkey solution for solar photovoltaic (PV)-related projects, along with energy storage solutions. Its experience ranges from flat to highly undulated as well as to landfill topologies with specialised technologies including designing and executing contour-following solar PV power plants.
- The solar business has in-house capabilities of different module mounting structure types (fixed tilt, seasonal tilt and HSAT) to choose, for most optimal solutions.
- As grid stability and power conditioning requirements gain significance in the wake of large-scale renewable integration, standalone and PV integrated storage solutions are being offered.
- 2.6 Mn kWh of solar power was harnessed at our campuses.

MISSION 2

Enhanced Energy

- Through focused energy conservation projects, more than 128 Million units (kWh) of energy was saved, avoiding over 109,428 tonnes of CO₂ emissions at our establishments, cumulatively.
- Hazira, Kancheepuram, Pithampur and Pondicherry campuses have implemented ISO 50001:2000 (Energy Management Systems).
- We are focusing on energy audit of our project sites. This has given us further opportunities for energy management and efficiency improvement at project sites.

MISSION 3

Sustainable Habitat

- L&T has 13 green buildings within its campuses.
- L&T constructed more than 3.2 Million sq. ft. of certified green space for its clients in FY21.
- As a part of the Sustainability Roadmap 2021, all new buildings within L&T campuses are to follow green building norms.
- Ensuring water and soil conservation and encouraging agro-based livelihoods for preventing migration.





MISSION 4

Water

- With continuous and dedicated efforts towards water conservation and establishing water stewardship, we constructed water harvesting structures both within our campuses and in communities.
- Adopted Zero Wastewater discharge approach and rain-water harvesting across campuses and communities.
- 57% of the total fresh water consumed at our campuses and project sites is reused/recycled.
- Our Water and Effluent Treatment business created water infrastructure to cater to the requirements of 30 Million people.
- The business also constructed more than 12,000 kms of water distribution pipelines in FY21, designed and constructed more than 539 Million litres per day (MLD) of water treatment and recycling plants in FY21.
- Achieved water adequacy for drinking, sanitation and agriculture through watershed projects, as part of Integrated Community Development (ICD) programmes in nine locations.
- Creating or desilting water bodies to increase ground water level with participation from communities.
- Conservation of surface water through Rain Water Harvesting in communities and schools.

MISSION 5

Strengthening the Himalayan Ecosystem

- Large scale tree plantation across project sites is being practiced across L&T, and we continue tree plantation in and around projects sites in the Himalayan region.
- Skill-building programs are conducted for the local youth to enhance their employability during the project execution phases at the Himalayan region.
- Health camps/medical camps are periodically conducted at project sites in the region.



Natural Capital

MISSION 6

Green India

- We maintain a green cover across all our campuses which exceeds the statutory limit of 35% of available open land by a far margin.
- More than 150,000 fully grown trees are nurtured at L&T campuses.
- L&T planted more than eight Lakh trees in FY21 across India.
- We continue to nurture a self-sustaining forest at six locations in India through the Miyakwaki technique.
- Our guests are felicitated either by planting a sapling or by presenting a Tree Certificate at the L&T establishment.
- Tree plantation and maintenance is a part of Integrated Community Development (ICD) program adopted across villages in Rajasthan, Maharashtra and Tamil Nadu.

MISSION 7

Sustainable Agriculture

- Our water and Effluent treatment business brought more than 130,000 hectares of land under irrigation.
- Through 200 check dams constructed by the L&T Public Charitable Trust, tribal farmers in Talasari block near Mumbai can grow two crops instead of one, along with vegetable cultivation. 196.5 Acres of land is under irrigation.
- Our CSR initiatives have built structures such as check dams, anicuts, contour trenches, farm bunds and farm ponds were constructed with community participation. These structures, along with support sustainable agriculture in the region.
- The ICD – CSR project focuses on increasing availability of water for agriculture at water-stressed locations and encourages sustainable agricultural practices by use of zero budget natural farming, drip irrigation, indigenous pesticides, seed treatment, balanced dose of fertilisers, discouraging plantation of water-intensive crops, and introducing horticulture through farm field schools and demonstrations.



MISSION 8

Strategic knowledge on Climate Change

- We actively participate in institutional and industrial forums and employees attend various capacity building programmes on climate change and green initiatives.
- Many in-house functional and technical capacity-building programmes on sustainability and climate change are conducted, including:
 - GRI standards reporting framework
 - Regular training on GHG accounting and management procedures for all the businesses.
 - Energy management and Energy conservation
- Employees actively participate in celebration of important events and days such as world Environment day, Earth Day, Earth hour.
- Prayag (the induction programme for new employees) covers sustainable development and climate change topics along with EHS and Human Rights.



PLANTATIONS

L&T WET IC has done plantations in more than 55.5 acres of land across India. The following trees were planted:

Type of species

1. Neem Plant
2. Mango Plant
3. Guava Plant
4. Indian gooseberry (Amla) Plant
5. Jamun Plant
6. Moringa Plant
7. Sheesham Plant
8. Almond Plant
9. Indian Elm (Chirrol) Plant
10. Babhul Plant
11. Karanja Plant
12. Teak Plant
13. Gulmohar Plant
14. Citrus plant

Our WET business has planted trees accross India

Cluster	Saplins Planted
Bangalore Cluster	111,634
Bhopal Cluster	84,350
Bhubaneswar Cluster	197,507
Delhi Cluster	72,028
Indore Cluster	86,308
Jaipur Cluster	108,669
Kolkata Cluster	141,620
Lucknow Cluster	3,150
Pune Cluster	45,880
West Cluster	19,197
Africa	235
Total	870,578

Other IC's and CSR initiatives have planted additional 23,484 saplings. All IC's combined, L&T has planted 894,062 saplings in FY21. Over the years (2008-2021) L&T has planted over 3.3 Mn trees.

3.3 mn
trees planted
between 2008-2021

Manufactured Capital

Our business segments across geographies and tech-enabled manufacturing capabilities provide us a big competitive advantage globally. We adhere to global best practices in manufacturing and invest in innovation to retain and grow our market share.

Notwithstanding major challenges in the external environment, we continued to make encouraging progress in all our business segments with prestigious order wins, order book at record levels and revenue momentum during the year.



KEY HIGHLIGHTS OF FY21

TOTAL PROJECT SITES

834

NO. OF MANUFACTURING
LOCATIONS

19

FACTORY OUTPUT

373,964 Tonnes

GREEN PORTFOLIO

₹ 277 Billion

KEY MATERIAL ISSUES IMPACTED

- Project risk management, quality of construction and EPC services
- Natural resource conservation
- Material sourcing
- Talent attraction and retention
- Energy efficiency
- Supply chain management

SDGs IMPACTED



STRATEGIES IMPACTED

SO1	SO2	SO3	SO4	SO5
SE1	SE2	SE4	SE5	

Manufactured Capital

Transportation Infrastructure (TI)

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A section of the 13km Phase 1 of Mauritius Metro

Overview

L&T's transportation infrastructure business is one of the oldest and largest brand in India for Engineering, Procurement & Construction of infrastructure projects in the road, railway and airport sectors. The business is broadly divided into two Strategic Business Groups (SBG), namely Railways Business Group (RBG) and Roads Runways and Elevated Corridors (RREC).

The Railways Business Group comprises two units: Mainline Business Unit (MLBU) and the Metro Business Units (MTBU). MLBU is in the domain of civil and trackwork, electrification, system integration for all mainline railway projects, Western and Eastern Dedicated Freight Corridors, and Rail Links for Port, Mining and Power Plant facilities, and so on.

MTBU business involves ballastless trackwork, electrification (rigid and flexible OHE) and system integration for all Mass Rapid Transit System (MRTS) projects and Regional Rapid Transit System (RRTS), both in India and abroad. This BU also addresses end-to-end Integrated Transit Systems, complete with civil and systems works.

The Road, Runways and Elevated Corridor Business Group has two units- Roads and Runways (R&R) and Elevated Corridor and Dedicated Freight Corridor (EC&DFCC). R&R provides EPC Design & Build Construction services for all types of roads (asphalt and concrete) including all associated structures, cross-drainage, toll booths, wayside amenities, and so on.

In the airport sector, the R&R BU is involved in the construction of complete airside infrastructure, such as runways, taxiways, aprons, airfield ground lighting, fuel hydrant systems, and also for international airports, both greenfield and brownfield. **The R&R BU** is also a pioneer in providing complete civil infrastructure for greenfield city infrastructure projects such as smart cities.

The EC & DFCC Segment provides design and build construction services for all types of urban flyover projects and civil works (earthwork, blanket, earth-retaining structures, drain) in dedicated freight corridor projects.

The business has Engineering Design Centres located in Mumbai, Faridabad and Chennai. It has a competency development centre at Kanchipuram for RBG and a workmen training centre at Ahmedabad for RREC.



IMPORTANT PROJECTS COMPLETED IN FY21

- 4 Lane Yadgiri to Warangal Road Project
- 4 Lane Chandigarh to Kharar Elevated Corridor Project
- RVNL Track Doubling Sambalpur Titlagarh all 3 Packages (Sambalpur – Barpali (P1), Barpali – Bolangir (P2), Bolangir – Titlagarh (P3))
- Civil, Trackwork in WDFC CTP 1 and 2 sections of Rewari to Madar (306 rkm) and electrification in the same section (EMP 4 Project). The section is among the first in the world that allows plying of heavy haul rakes, 1.5-km long to transport double- stacked freight containers from major ports to the hinterland.
- First EPC electrification project from Delhi Sarai Rohilla – Jaipur – Ajmer
- 4-Lane Rewa – Katni – Jabalapur – Lakhnadon Road Project, Packages 1, 2 & JL

Buildings & Factories

PAGE 170 →



Government Medical College Hospital, Madhepura

Overview

L&T's Buildings & Factories business is an unrivalled industry leader in Design and Engineering, Procurement and Construction (EPC) of multiple projects. These projects range from airports, hospitals, stadiums, retail spaces, educational institutions, IT parks, office buildings, data centres to high-rise structures, mass housing complexes, cement plants, industrial warehouses, test tracks and other factory structures.

The business offers end-to-end solutions, including in-house design expertise using advanced systems such as BIM 4D, 5D and BIM 360 field, an efficient supply chain management and extraordinary project management expertise. The business offers industry-leading modular, mechanised processes to fast-track construction across geographies.

IMPORTANT PROJECTS COMPLETED IN FY21

- Narendra Modi Stadium, Motera, Gujarat
- Al Rayyan Stadium, Qatar
- IKEA Showroom, Navi Mumbai
- Government Medical College, Madhepura
- Medical Colleges in Coochbehar, West Bengal and Patna, Bihar
- Prestige Leela Residences, Bengaluru
- RAMCO Cement plant, Odisha

3.28 Mn Sq ft

Green buildings were constructed in FY21.



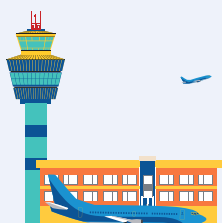
Hyderabad International Airport

Manufactured Capital

The business comprises six Business Units (BUs) – Airports, Health, Public Spaces, IT and Office Space (ITOS), Residential Buildings and Factories.

Airports

Design-and-build solutions for passenger terminal buildings and allied service buildings, and cargo terminal buildings, with integrated airport system solutions such as baggage-handling systems, passenger-flow monitoring system, passenger boarding bridges, visual docking guidance systems and other facilities.



Health

Design and execution of hospitals, medical and nursing colleges. Healthcare infrastructure is delivered with end-to-end healthcare facilities, including medical equipment, right from concept to commissioning.



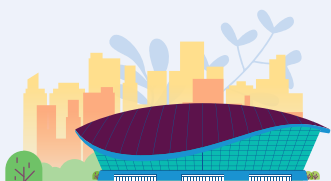
Factories

One-stop solution for EPC requirements of factories such as cement plants, automobile plants, glass and paint manufacturing, warehouses, automobile test tracks and food processing plants.



Public spaces

Design and execution of special structures such as tall statues, metro stations, convention centres, secretariat buildings, hotels, malls, integrated development, and educational institutions.



ITeS and data centre

Turnkey office space solutions for IT and office spaces. Leveraging the strong mechanical, electrical and plumbing (MEP) competencies of the business, it also offers concept-to-commissioning services for setting up data centres.



Residential buildings

EPC solutions provider of elite, affordable and mass housing projects.



A new vertical, B&F Fast, has been identified to explore and create value from advanced construction technologies such as prefabricated prefinished volumetric construction, offsite manufacturing, structural steel construction and 3D printing that will fast-track project delivery.

Dedicated engineering design centres, competency cells, advanced formwork systems, mechanised project execution, a wide network of consultants and vendors, digitised project control and a talented pool of employees help the business sustain leadership position.

Heavy Civil Infrastructure

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Highway construction



Overview

L&T's Heavy Civil Infrastructure business is a market leader in Engineering, Procurement, and Construction (EPC) projects in core civil infrastructure segments (metros, nuclear, special bridges, hydel and tunnels, ports and harbours and defence) that are crucial for economic recovery and development. The Government of India has also enhanced its focus on infrastructure creation to kickstart post-pandemic economic recovery. This will augur well for our business in the coming years.

As an industry leader in augmenting capabilities for urban mass rail transit systems, the business is involved in the construction of metro rail systems and has projects in almost all the major Indian cities. It provides extensive end-to-end engineering and construction services for both elevated and underground metro systems.

In the Nuclear segment, the business provides EPC solutions in civil, mechanical, electrical and instrumentation, including seismic qualification and modular construction technology. Its expertise extends to both Pressurised Heavy Water Reactor (PHWR) and Light Water Reactor (LWR) technologies, a step towards green energy.

The Special Bridges segment has extensive experience in executing a wide range of bridges – such as cable-stayed, precast, pre-stressed concrete, steel and concrete composite construction – using ingenious cutting-edge construction techniques, such as incremental launching, segmental construction, balance cantilever construction and span-by-span construction.

The Hydel and Tunnel segment offers EPC solutions for complete hydroelectric power projects, are a part of our green portfolio. The business also provides expertise for road and railway tunnelling projects which cater to nation-building in a greener way.

The Ports and Harbours vertical has extensive experience in greenfield ports, shipyard structures and seawater intake systems in all the coastal states

of India. It provides EPC solutions for breakwaters, berths, jetties and wharfs, dry docks and shore protection structures. It has unique expertise in providing design and construction solutions for state-of-the-art ship-lift structures.

Backed by the expertise and experience gained from managing mega projects, the business has established a position of pre-eminence in shoring up the country's defences. The business offers single-point EPC solutions in the form of infrastructure facilities for defence bases, underground facilities and surveillance.

The business has a strong presence in India, Middle East, Bhutan and Bangladesh. Dedicated design and technical centres, competency cells, specialised training centres, digital project management, and a talented pool of employees help the business sustain competitive advantage in unexplored geographies and secure major orders. Additionally, the projects are durable and have low capex over the life span.

L&T GeoStructure is a unique entity focusing on foundation and ground improvement related projects. It has a strong and professional foundation specialist team with the knowledge of design, equipment and methods to execute and supervise sophisticated foundation works. It has expertise in deep piling and diaphragm walls, multi-cellular intake wells for river-linking, marine terminals with berths and jetties and deep cut-off walls.

IMPORTANT PROJECTS COMPLETED IN FY21

- Kakrapar Atomic Power plant (MPCW), Gujarat – criticality achieved on July 22, 2020.
- Durgam Cheruvu project, Hyderabad-the world's longest extradosed cable-stayed concrete bridge was inaugurated on September 25, 2020.

Manufactured Capital

Water & Effluent Treatment

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Secondary clarifiers under construction for 318 MLD Waste Water Treatment Plant, Coronation Pillar, New Delhi

Overview

L&T's Water and Effluent Treatment business helps build comprehensive water management infrastructure with capabilities covering engineering and design, procurement, construction, operation and maintenance, and caters to the entire business value chain. The business has a proven track record of executing a multitude of projects in the areas of water supply, water transmission and distribution, water treatment, desalination, municipal and industrial wastewater network, wastewater treatment, integrated urban utilities, irrigation, canal rehabilitation, riverfront development, and so on.

Recently, the Water and Effluent Treatment business re-organised its business lines to reflect the changing trends and be more agile towards future opportunities. The business has been verticalised into three units – (i) Water & Wastewater; (ii) Industrial, Irrigation & Infrastructure; (iii) Water International. This business segment focuses greatly on water conservation and contributes to our green portfolio.

The Water and Wastewater vertical comprises Rural Water Supply, Urban Water Supply, Water Management and Wastewater Treatment. Thus, it deals with the complete value chain of water and wastewater solutions for domestic consumers.

The Irrigation, Industrial Infrastructure vertical constitutes Mega & Micro Irrigation, Industrial Water Systems & Effluent Treatment, Desalination and Smart Water Infrastructure, help to focus and increase its business footprint in the domestic market.

The Water International vertical focuses on global markets and will continue to tap business opportunities in the Middle East, East Africa, ASEAN and SAARC.

IMPORTANT PROJECTS COMPLETED IN FY21

- Lift canal system of Upper Indravati Irrigation Project, Odisha
- Erode water supply scheme, Tamil Nadu
- Kadana and Kakrapar Irrigation Schemes, Gujarat.
- 40 MLD STP at Rourkerla, Odisha
- Tabora Water Supply Scheme, Tanzania

Reuse

Galvanising plant rinse water for pickling and acid preparation

Substantial

Energy requirement of the plants met through renewable sources



Power Transmission & Distribution (PT&D)

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400 kV Grid Station at Misfah, Oman

Overview

L&T's Power Transmission and Distribution business vertical is a leading EPC player in the field of power transmission and distribution and renewable energy. It 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, fibre optic backbone infrastructure, solar PV plants including floating solar, battery energy storage systems, mini/micro grid projects and related digital solutions. In addition to being a dominant player in the Indian subcontinent, the business enjoys a significant share and a strong reputation in the Middle East, Africa and ASEAN markets.

The business also contributes greatly to our green portfolio.

Substation business unit provides turnkey solutions for Extra High Voltage (EHV) air insulated/gas insulated substations, Flexible AC Transmission Systems (FACTS) and digital substation related solutions, EHV cable systems and complete electrical and instrumentation solutions for various utilities, plants and infrastructure projects, such as metros, airports, and so on.

Power Distribution business unit provides a range of EPC services related to urban/rural electrification including last-mile connectivity, augmenting, reforming and strengthening of high voltage and low voltage distribution networks, power quality improvement works and advanced distribution management solutions.

Transmission Line business unit offers turnkey EPC solutions for overhead lines for power evacuation and transmission up to 800 kV.

The Optic Fibre Cabling (OFC) projects segment provides turnkey solutions for deploying gigabit scale optical fibre backbone for both Government agencies and private telcos. The business also provides operation and maintenance support.

These business units cater to the Indian market and the neighbouring countries of Bangladesh and Nepal.

L&T's Renewables business unit provides single-point EPC turnkey solutions for Solar Photo Voltaic (PV) related projects including energy storage solutions and microgrids, in India and abroad. With experience spanning decades, the business has a proven track record of ground-mounted and floating solar projects with different module technologies, module mounting structures and storage types and capability to execute Gigawatt (GW) scale solar projects, be it hybrid, floating or linear. The in-house Battery Energy Storage System containerisation facility augments the capabilities to offer large-scale renewable integration solutions.

The international units of the business in the Middle East, Africa and the ASEAN region offer complete solutions in the field of power transmission and distribution up to 500 kV level. These include substations, power transmission lines, EHV cabling, distribution networks, solar plants and Electrical, Instrumentation and Controls (EI&C) works for infrastructure projects such as airports, oil & gas industries, among others.

The Middle East business unit that caters to the countries of the UAE, Saudi Arabia, Qatar, Oman, Kuwait and Bahrain has strengthened its position in the GCC region.

Having commissioned several landmark projects, the Africa business unit has established itself in 12 countries across the continent. The four regional offices located in Egypt, Kenya, South Africa and Ghana address different regions of the vast continent.

Manufactured Capital

In the ASEAN region, buoyed by the proven track record of successful project execution in Malaysia and Thailand, the business is consolidating its gains in Myanmar and the Philippines as well, besides enhancing footprint existing regions.

The Middle East accounted for 13% of our total order book composition in FY21, the highest after domestic order book. The region also contributed 12% to our total FY21 revenue

Manufacturing facilities

- The digitally driven tower parts manufacturing units at Puducherry, Pithampur and Kancheepuram have a combined capacity to produce more than 1.5 Lakh tonnes of tower components annually. These cater to the requirements of business units that offer turnkey EPC solutions globally for overhead lines for power transmission up to 800 kV. In these facilities, the high-quality steel is fabricated and galvanised into tower parts of tall standing transmission towers that withstand challenging climatic conditions.
- The Tower Testing and Research station at Kancheepuram is among the most well acclaimed testing centres in the world. Utilities from 30 countries of the world receive the services of this centre.
- These ISO certified facilities meet stringent quality, safety and environment management norms and have won several awards. The factories employ automated CNC machines, large galvanising baths and other contemporary equipment. These facilities **re-use galvanising plant rinse water** for pickling acid preparation. Zinc Recovery machines have been installed to recover zinc from zinc ash generated during the galvanising process. Gas, electricity and water consumption are monitored online on a real-time basis. **Substantial energy requirements of the administrative buildings and utility services of plants are met through renewable sources.**
- State-of-the-art digital methods and flow control techniques are used to improve the overall efficiency of the plants. RFID based techniques help achieve seamless tracking of track parts till their final location of installation. During the pandemic, with digital collaboration tools and virtual inspections the manufacturing and testing centers served the customers to their fullest satisfaction.
- A BESS (Battery Energy Storage System) Integration Facility has been set up at Kanchipuram along with a microgrid testing laboratory. Equipped with photovoltaic simulators, grid emulators etc., the battery storage elements get integrated with requisite digital, electrical and mechanical systems and are containerised.

IMPORTANT PROJECTS COMPLETED IN FY21

- 400 kV Gas insulated substations at Lahal, Guindy, Mylasandra and Papankalan
- 230 kV Substations at Ranchi, Chennai and Ratangarh
- 132 kV Receiving substation & 132 kV cabling for Dhaka Metro
- Power distribution packages in Uttar Pradesh, West Bengal and New Delhi
- Packages associated with 800 kV Raigarh – Pugalur HVDC transmission line
- 765 kV Ghatampur Agra – Greater Noida transmission line
- 765 kV Ranchi – Medinipur transmission line
- 23 substations and 72 km of overhead/underground transmission corridor in the Middle East
- One of the biggest 400 kV substations and one of the longest 400 kV transmission lines in Botswana
- Substations and transmission lines in Egypt, Ethiopia and Morocco
- 500 kV Surat Thani – Bang Saphan transmission line in Thailand
- 310 MWP solar capacity



500 kV Bang Saphan-2 to Surat Thani Transmission Line

Smart World Communication (SWC)

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Command & Control Centre, Prayagraj



Overview

L&T Smart World & Communication (SW&C) delivers best-of-breed technological and digital interventions for clients for which the demand is growing evermore in the post-pandemic new normal unfolding around us.

The business, as a Master System integrator, provides technical solutions and services in the areas of Safe, Smart, Communication and Digital Solutions. The business leverages its technical prowess to solve problems through smart, scalable solutions for security, urban services, traffic, transportation, utilities and digital connectivity. Continuing its pursuit of technology and solutions, the business is working with global partners and creating competencies to cater to opportunities in the areas of Energy Analytics, Edge-based Video Solution as services and 5G and Cyber Security.

The business has three major segments:

Safe and Smart Cities

Smart Cities, Smart Utilities, Public Safety, Critical Infra Security, Intelligent Traffic Management

Communication and Telecom Infrastructure

Wired and Wireless, i.e IP/MPLS backbones, DWDM (Dense wavelength division multiplexing), Wi-Fi, Radio communication like APCO, TETRA, Metro Communications, Early Warning Dissemination System, Next Gen Data Centres and Security Operation Centres

Military Communication

Satcom System, Tactical Communication System, Network Management System, Secure Handsets

IMPORTANT PROJECTS COMPLETED IN FY21

- Telecom System for the 1st Section of Bengaluru Metro, Phase 1 Extension
- The state-of-the-art Command and Control Centre for Jhansi Smart City Project
- Integrated Command & Control Centre of NDMC Smart City
- Successfully commissioned GSAT 20, GSAT 29 and GSAT 11 Satcom Projects for ISRO
- Telangana State Police Public Safety Integrated Operations Centre located at Cyberabad

The business is further empowered by its Centre of Excellence and Solution Development Centre in Hyderabad, Technology Innovation Centre in Chennai, Smart City Skill Development Centres in Hyderabad and Kancheepuram and R&D Centre for Military Communication at Bengaluru.

Manufactured Capital

L&T Hydrocarbon Engineering Limited

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Overview

L&T Hydrocarbon Engineering Limited (LTHE) provides integrated 'design and build' turnkey solutions for the hydrocarbon industry globally. The business executes projects for oil and gas extraction and processing, petroleum refining, chemicals and petrochemicals, fertilisers, cross-country pipelines and terminals. In-house capabilities range from front-end design through detailed engineering, procurement, fabrication, project management, construction, and installation including commissioning services.

LTHE has a fully integrated capability chain across the value chain, accentuated with in-house engineering and an R&D centre, world-class modular fabrication

facilities, as well as onshore and offshore construction and installation capabilities. Major facilities in India include Engineering & Project Management Centres at Mumbai, Vadodara, and Chennai, and Fabrication Yards at Hazira (near Surat) and Kattupalli (near Chennai). The business has an overseas presence in the Middle East, i.e., in the UAE (Sharjah), Saudi Arabia (Al-Khobar), Kuwait and Oman (Muscat) as well as Algeria. International business is served through state-of-the-art modular fabrication facilities at Sohar in Oman and an integrated manufacturing facility at Jubail in Saudi Arabia.

KEY PROJECTS COMPLETED IN FY21

- Linear Alkyl Benzene, Normal Paraffin and Speciality Oils Unit are commissioned and under normal operation at Yanbu, Saudi Arabia for Farabi Petrochemicals Company. Performance guarantee test runs are completed.
- Achieved full production (40K BOPD) at Haliba field for Al Dhafra Petroleum. 72 hours plant performance guarantee test run demonstrated.
- INDMAX Fluid Catalytic Cracking Unit (FCCU) Project for IOCL's Bongaigaon Refinery in Assam successfully commissioned and handed over to the customer and accolades were received from IOCL Chairman on the implementation.
- Adani LNG – Dhamra – Critical milestone of 'roof air raising' of two tanks was successfully achieved.
- Completed offshore installation of all the three gas Production Deck Modules (PDM) completed in Arbiya and Hasbah fields off KSA and two oil PDMs in Zuluf field.
- Completed construction for Cairn–Vedanta Mangala field upgradation at Barmer and final stages of commissioning are in progress.
- IOCL's Paradip Hyderabad Pipeline Project substantially completed.



Indian Oil Corporation Limited BFCCU

LTHE caters to clients across the hydrocarbon value-chain through the following business verticals:

Offshore

- Lumpsum turnkey EPCIC solutions are offered to the global offshore oil & gas industry, and encompass wellhead platforms, process platforms and modules, subsea pipelines & systems, brownfield developments, offshore drilling rigs (upgrade and new builds), FPSO modules, deep-water subsea manifold and structures, living-quarters platforms, transportation and installation services, offshore windfarm projects, and decommissioning projects.
- The offshore vertical has comprehensive in-house engineering capabilities offering customised 'Fit for Purpose' engineering solutions covering the complete project life cycle, from concept to commissioning, for offshore projects. As a vertically integrated EPCIC player, it also has in-house fabrication and offshore installation capability. Marine assets comprise a self-propelled heavy-lift-cum-pipe-lay vessel – LTS 3000 – held in a joint venture, and a wholly-owned pipe-lay barge – LTB 300.

Onshore

- This business vertical provides EPCC solutions for a wide range of onshore hydrocarbon projects covering upstream oil & gas processing, petroleum refining, petrochemicals, fertilisers (ammonia & urea complexes), thermal systems such as cracking furnaces, cryogenic storage tanks and LNG regasification terminals, cross-country pipelines and terminals as well as coal/pet-coke gasification, coal-to-chemicals and crude-to-chemicals projects. Design Engineering Centres for the Onshore vertical offer the complete spectrum of FEED, process, and detailed engineering.

Construction services

- This business vertical renders turnkey construction services for refineries, petrochemicals, chemical plants, fertilisers, gas-gathering stations, crude oil & gas terminals, and underground cavern storage systems for LPG (leveraged for gas and new development such as hydrogen storage) and cross-country oil & gas pipelines.
- Its major capabilities include heavy-lift equipment erection competency, application of advanced welding technologies, high levels of automation, management of manpower and material in large volumes at construction sites and Quality/HSE systems conforming to international practices. The business has also invested in strategic construction equipment, a range of pipeline-spread equipment, automatic welding machines and other plant and machinery for electro-mechanical construction works.

Advanced Value Engineering & Technology Services (AdVENT)

- AdVENT vertical fosters new business lines and technologies to make LTHE future-ready. It provides all the in-house support required for new areas of green energy, modular solutions, cutting-edge hydrocarbon technologies and smart differentiated solutions in the hydrocarbon industry. Leveraging its domain knowledge and expertise in high-end engineering based on experience gained from the execution of large-scale, technologically complex EPC projects for the business coupled with collaborations with well-organised R&D centres, renowned institutions, hi-tech and core-tech start-ups, AdVENT delivers comprehensive customer-centric solutions. AdVENT will also focus on new energy areas, such as grey to blue hydrogen in existing refineries to reduce the carbon footprint.

Manufactured Capital

Manufacturing Facilities- Modular Fabrication Services

- This vertical specialises in modular fabrication and supply of offshore structures and process modules, including free-standing static equipment for oil & gas fields, refineries, petrochemical plants and fertiliser complexes. Leveraging its modular capability, much of the on-site work for mega jobs, such as Residue upgradation facility (RUF) for HPCL Vizag Refinery and for Sonatrach South West Gas project in Algeria – are being executed at the fabrication yard.
- World-class modular fabrication facilities are strategically located in India at Hazira (India's west coast) and Kattupalli (India's east coast). International projects are served through a state-of-the-art fabrication facility at Sohar (Oman). The combined annual capacity is more than 200,000 MT (depending on the product mix). An integrated manufacturing facility at Jubail in Saudi Arabia caters to the local market and works towards developing local skills and supporting the In- Kingdom Value Added programme of Saudi Arabia. The business is also equipped to supply foundations and other modules for offshore wind-farm projects and e-houses. The all-weather waterfront facilities provide easy access to clients across the globe, and have load-out jetties suitable for the dispatch of large and heavy modules via ocean-going vessels and barges.
- Our facilities are accredited with global certifications. With ISO ASME S, U, U2, R and NB Stamps as well as API 2B approvals under their belt, these facilities also deliver static equipment like pressure vessels and columns for refineries, petrochemicals, fertiliser projects and other process industries. These facilities function as a one-stop solution for module fabrication requirements. All the three facilities are pre-qualified by major International and National Oil Companies, Process Licensors and Technology Companies. Continuous improvements in production processes and deployment of automation and digitalisation initiatives including Serial Production of Jackets with jigs and fixtures enable us to provide customised comprehensive solutions to our customers.



Modular Fabrication Yard, Sohar, Oman

Power Business

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Overview

L&T has established itself as one of the leading EPC players in the thermal power plant business in India and is known to deliver complete turnkey business solutions from concept to commissioning. The business has expertise which encompasses every aspect of design, engineering, manufacture, construction and project management.

The business has developed its own capabilities for executing large and complex power projects, which include in-house engineering, state-of-the-art manufacturing facilities, competent manpower and decades of experience earned in executing large and complex projects within and outside India. It has a proven track record of delivering complete power plant solutions with the scale and sophistication to meet India's growing energy needs.

The business executes combined cycle gas-based power projects on a turnkey basis. It has an excellent track record in implementing projects in India and overseas.

The business has built on its core competencies and capabilities and has emerged as a major player in new emission-control technologies, such as Flue Gas Desulphurisation (FGD) in the thermal power plant industry. It has a sizable presence in the FGD business now.

KEY PROJECTS COMPLETED IN FY21

- Completion of facilities of India's first ultra-supercritical power project for Central Utility in Madhya Pradesh
- Final take-over of 2nd Unit in a project in Rajasthan for a state utility
- Commercial operation of a central utility project in Uttar Pradesh where the supercritical boilers are supplied by boiler JV



Qabel 400,132 kV Grid Station-Oman

Manufactured Capital

Heavy Engineering

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4 coke drums for Ecopetrol, Columbia

Overview

L&T Heavy Engineering is amongst the top three global fabricators. The business has achieved international recognition through an impeccable track record of executing large complex projects and constantly creating international benchmarks. Capabilities include state-of-the-art, fully integrated globally benchmarked manufacturing facilities, an experienced skilled talent pool and fully equipped technology centres.

The business is organised into Product Business Units (PBU) based on their specialisation.

- **Reactor and Pressure Vessels (RPV) PBU** specialises in fabrication of hydro-processing reactors, tubular reactors, gasifiers, ammonia converters, urea reactors, coke drums, FCC reactor-regenerator system, LNG/gas processing pressure vessels and heavy columns
- **Heat Transfer Equipment (HTE) PBU** specialises in ammonia and urea plant exchangers; hydrocracker BLE high pressure heat exchangers, methanol converters, PO reactors, VAM reactors and fired-tube waste heat boiler packages
- **Process Plant Internals (PPI) PBU** specialises in reactor and proprietary process plant internals

- **Modification, Revamp and Upgrade (MRU) PBU** offers value-added end-to-end solutions for FCC reactor, CDU/VDU revamps, urea reactor life extension, coke drum repairs, heat exchanger revamp, urea energy saving projects and emergency repairs
- **Nuclear PBU** specialises in core nuclear island equipment such as steam generators, reactor components (end shield assembly, end fittings), pressurisers, safety heat exchanger, spent fuel storage cask/canister; fusion reactor (ITER assemblies), fast breeder reactor critical for nuclear power sector and critical equipment for ATVP/ BARC programmes
- **The Piping center** fabricates critical piping spools for power plants and other process industries

L&T Special Steels and Heavy Forgings Private Limited (LTSSHF) is a JV with Nuclear Power Corporation India Limited (NPCIL) and caters to the demand for critical forgings required for the Indian Nuclear Power programme and other critical sectors, such as Defence, Hydrocarbon and Oil & Gas. The JV has set up a fully integrated forging facility (from steel scrap to finished forgings of alloy steels, carbon steel & stainless steels) with the capacity to produce a single piece ingot up to 200 MT and finished forgings up to 120 MT.



Cryostat Base Section for ITER, France

KEY PROJECTS COMPLETED IN FY21

- EO Reactor for IOCL's Ethylene Glycol Project at Paradip Refinery, Odisha, India
- LC-Max Reactors for HPCL's Visakh Refinery Modernisation Project (VRMP), India
- Steam Generator for 700MW GHAVP project
- ITER Cryostat for the World's Largest Nuclear Fusion Reactor

Manufacturing Facilities

Hazira

Hazira Manufacturing Complex (HZMC), a jewel in the crown of L&T group, is a state-of-the-art manufacturing facility located on the banks of River Tapi near the Arabian sea (about 16 km away from Surat, Gujarat). The facility spreads over more than 750 acres of land with a 1.6 km long waterfront. It employs more than 5,000 people directly and more than 12,500 people indirectly.

- It caters to critical, large sized ultra-heavy equipment for Process Plant and Nuclear sectors and is equipped with heavy thick rolling machines of 6,000 MT capacity, which can Roll plates up to maximum width of 4,500 mm and thickness upto 250 mm (Hot Rolling).
- CNC gas/plasma cutting machines which can cut up to 450 mm thick alloy steel plates, Water jet cutting machine with working pressure of 3,800 bar, Floor Mounted Horizontal Boring machines (12.5 m horizontal and 5 m vertical traverse), Vertical Boring machines with swing of 12 m and capacity of 250 MT, 4 Horizontal/Vertical Deep hole drilling machine with maximum drill depth up to 1,200 mm, Forming press with 1,200 MT capacity.
- IOT based digital welding stations, highly skilled empowered workforce, Heat Treatment Furnaces (for jobs up to 54m long) and quenching facilities, advanced welding equipment, manipulators and power sources, Hydro Test Beds with capacity of 60 MT/sq. m., testing facilities, ISO 17025:2005 NABL approved testing lab, Linear Accelerator for High thickness radiography, PAUT, TOFD capabilities.
- The shops have the capacity to manufacture equipment in mono/multi-wall constructions, with materials ranging from carbon steel, stainless steels, monels to titanium, high-nickel alloys, CrMoV alloy steels and high strength creep resistant maraging steels for the aerospace industry.
- Site Area: 900,000 sq. m.
- Shop Area: 98,000 sq. m.
- Fabrication bays with under hook lifting capacity up to 1,000 MT and facility to handle critical equipment more than 2,000 MT in weight
- Large Equipment Manufacturing Facility: 280,000 sq. m coastal facility with a load-out quay and RO-RO jetty
- Max Size: No Limitation



Hazira Shipyard, Surat

Manufactured Capital

VHEW

Vadodara Heavy Engineering Works (VHEW) is a specialised facility for manufacturing equipment and systems involving exotic materials like SS, DSS, Urea grade Steel, Inconel, Titanium, Zirconium etc.

- Vadodara Heavy Engineering Works is a specialised facility for manufacturing equipment and systems involving exotic materials like SS, DSS, Urea grade Steel, Inconel, Titanium, Zirconium etc.
- The facility serves various important industries such as Oil and gas, Fertiliser, Petrochemicals, Specialty Chemicals, Nuclear Power, and so on. ASME approved workshops with U, U2, N, NA, NS, NPT and MO stamps are equipped to supply highly critical equipment and assemblies, matching global standards.
- The facility is a trusted supplier of reactor internals, consistently delivering to refineries globally under Process Licensors - Axens, Chevron, Exxon Mobil, Haldor Topsoe, Shell, UOP and many more. This unit has also been supplying proprietary internals for CB&I-CLG, Scientific Design, Axens and Shell Global. The facility has been catering to FCCU units supplying FCCU cyclones globally in collaboration with a technology provider.
- Through its vast experience, Vadodara Heavy Engineering Works has attained expertise for manufacturing and supply of Ammonia Converter Baskets, Heat Exchangers and other critical equipment for refinery and fertiliser industries, under Process Licensors - HaldorTopsoe KBR, Uhde, UOP, and so on.
- Vadodara Heavy Engineering Works is involved in manufacture and supply of Dry Shielded Canisters to Orano, USA, thereby becoming the only unit in India exporting nuclear power equipment. This unit is also a significant contributor and partner to many strategic programmes for the Government of India. These include supply of Retorts for Titanium extraction, reflective panels for fast breeder reactor and advanced structures of Titanium.
- Fabrication facilities include CNC Water Jet Cutting machine for maximum 250 mm thick, column and booms and automatic grinding machines. Machining facilities include CNC horizontal boring machine with 150 mm spindle diameter, CNC vertical turret lathe up to 2,600 mm diameter, a four-axes vertical machining centre and Arboga Drilling machine.

- A wide variety of welding processes are carried out comprising submerged arc, GTAW, GMAW, PTAW, mechanised TIG, automatic tube-to-tube sheet welding, ESSC, FCAW, automatic nozzle welding and resistance spot welding.
- The unit also have facilities for RT, UT, MT, PT, TOFD along with a Universal Testing Machine for destructive testing and a Helium Leak Detection facility. The unit encompasses a plethora of state-of-the-art technologies for composites manufacturing. A class 10,000 DFE, 16,000 sq. ft. in area, ability of 48 spool multi-tape winding over 22m length, 4 filament winding machines and high temperature curing facilities form its key assets.
- VHEW's core strength resides in its capability to engineer custom-built machines that suit niche products. Some examples of custom built machines are high speed CNC turn-mill centre, Vacuum sputtering for 0.6µ aluminium coating on carbon epoxy shells, Robotic CMM machine and LASER tracker.

LTPC

L&T Piping Centre (LTPC) serves a range of core sector industries, from thermal and nuclear power to refineries, petrochemicals and fertilisers. For our customers, LTPC spells reliability, on-time delivery, cost competitiveness and high quality standards with no compromise on Health, Environment and Safety.

- LTPC has proven capability to handle Gr.P11/P22, P91/P92, WB36, stainless steels, incoloy and API 5L grade materials.
- With a total land area of around 38 acres, comprised of open warehouse, covered warehouse and fitting storage shop, the campus is well connected by rail, road and sea routes.

Defence

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A K9 Vajra at Republic Day Parade rehearsal in New Delhi

L&T has been active in the Defence sector since the mid-80s, well ahead of the opening up of the sector for private industry participation, by associating with the Defence Research & Development Organisation (DRDO) and naval indigenisation programmes. Having built a portfolio of technologies, products, systems, platforms and solutions, the business provides design-to-delivery solutions across chosen defence segments with a focus on indigenous design, development and production of naval (submarines and warships) and land platforms (armoured systems, howitzers), weapon systems, engineering systems, missile and space launch vehicle subsystems, sensors, radar systems and avionics. These are complemented by R&D and Design and Engineering Centres for targeted platforms, systems and solutions development.

The Defence Engineering operations extends across two R&D centres, three Design and Engineering Centres, and six production centres across India:

- Submarine hull-building facility and an armoured systems manufacturing, integration and testing facility at L&T's Hazira Complex (near Surat)
- Strategic Systems Complex for weapon and engineering systems and sensors at Talegaon near Pune
- Aerospace manufacturing shops for India's space launch vehicle subsystems at Powai (Mumbai) and Coimbatore
- Aerospace and missile subsystems manufacturing at the Precision Manufacturing & Systems Complex and Centre of Excellence for Advanced Composites at Coimbatore
- Strategic Electronics Centre at Bengaluru
- Modern shipyard at Kattupalli near Chennai

Besides these dedicated facilities, the business also operates a facility at Visakhapatnam under the Government Owned Contractor Operated (GOCO) model. These Work Centres are complemented by R&D Centres at Powai and Bengaluru, and Design and Engineering Centres for submarines and warships at Powai and Chennai, respectively, and a Design and Engineering Centre for weapon and engineering equipment at Powai.

The business is structured into two strategic business groups (SBGs):

Defence & Aerospace

Defence Shipbuilding



Manufactured Capital

Defence and Aerospace

Over the years, the Defence and Aerospace (D&A) business has built a wide range of indigenous products, systems, solutions, platforms and technologies through in-house efforts as well as by teaming up with the DRDO, and participated in the Indian Navy's indigenisation programme for the development of a range of engineering systems and weapon systems within the country. Till date, the SBG has indigenously developed more than 250 defence products, and more than 50 of them have been delivered in serial production mode. The business model is uniquely differentiated through its focus on in-house technology and product development, innovation for serial production, mature and equated partnerships with global majors and through-life support offerings.

The SBG also has a Joint Venture (JV) with MBDA, a global leader in missiles and missile systems by range of offerings and exports. The JV is well positioned to indigenously offer advanced missile systems to the Indian Armed Forces.

Defence shipbuilding

L&T's Shipbuilding business offers end-to-end solutions for design, construction of defence ships and refit services. The business owns and operates a greenfield mega defence shipyard at Kattupalli, near Chennai, located across a sprawling 980-acre complex. The Kattupalli Shipyard is India's largest shipyard, considering just the first phase spread across 150 acres that has been operational for nearly a decade. The design and construction of the yard is modelled to adapt global best practices, such as

modular construction, construction under covered shops, use of a ship-lift with dry and wet berths, etc., to enable simultaneous construction of different classes of vessels until near completion on land, and then launching them through the ship-lift. It is the only Indian shipyard with Industry 4.0 practices embedded, enhancing construction efficiency, cycle time and build quality.

A dedicated Warship Design Centre at Chennai is equipped with the latest integrated 3D design, analysis and Product Lifecycle Management tools, and interfaced with project management and ERP systems, in line with global best practices.

The Kattupalli Shipyard has been largely engaged in new builds and refits/repairs of defence ships of the Indian Navy and Indian Coast Guard. Since 2010, the Shipbuilding business has designed and constructed 62 defence vessels and delivered 61 of them, which include a floating dock for Indian Navy, interceptor boats and offshore patrol vessels for the Coast Guard in record time. A global benchmark was attained by the Yard in the sea acceptance trials of a 2,130 MT class offshore patrol vessel by completing the entire acceptance trials in the maiden sea sortie of the vessel to affirm its design and build quality.

The business does not manufacture any explosives or ammunition of any kind, including cluster munitions or anti-personnel landmines or nuclear weapons or components for such munitions. The business also does not customise any delivery systems for such munitions.



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

Powai, Mumbai

Powai unit caters to the precision equipment manufacturing needs of the Aerospace and Defence industries.

- It houses dedicated unit for design, simulation, prototyping and testing of various Defence systems and software. The Product Technology & Development Centre (PTDC, based in the Powai Campus) has a multi-skilled workforce with specialists spanning diverse areas of technology.
- The Centre has core capabilities in technology, development, concept design, system Integration and Prototyping for the Defence and Aerospace Sector.
- Submarine Design Centre undertakes extensive design and offers comprehensive solutions for submarine construction. Our contribution to India's first Indigenous Submarine includes 3D modelling and detailed engineering.

Kattupalli Shipbuilding

- Designed for modular construction and repair of a wide range of defence ships and submarines
- Houses our warship design centre
- Equipped with automatic blasting and priming line, plasma-cutting machine and advanced hydraulic press/forming machines and large assembly workshops with heavy material handling facilities

Manufactured Capital

Hazira, Surat

Hazira Manufacturing Complex (HZMC) is L&T's state-of-the-art manufacturing facility located on the banks of river Tapi near the Arabian sea (about 16 km away from Surat, Gujarat).

This state-of-the-art facility showcases cutting-edge manufacturing and system integration technology for the largest and heaviest equipment complemented by the best pool of engineering talent, and skilled manpower eager to take on the challenges to better global benchmarks in size, scale, weight, and complexity. Facility is involved in niche technology activities of building submarine hulls; outfitting and system integration of vessels.

The latest addition in HZMC is the Armoured Systems Complex (ASC) that is currently executing an order for K9 Vajra-T 155 mm 52 calibre Tracked Self Propelled Howitzers for the Indian Armed forces. ASC is a 50 acre, green-field state-of-the-art manufacturing facility created to manufacture, integrate and test advanced Military Armoured Platforms such as Self-propelled Howitzers, air-defence systems, infantry combat vehicles, future-ready combat vehicles and battle tanks.

This newly established and ultra-modern complex comprises a 320-meter-long bays of 30 meter and 15 metre shops with in-house Robotic Hull & Turret Welding, CNC Machining, System Assembly and Integration, and a Special Purpose Mobility Test Track facility to roll out the entire armoured platform from the complex. The full-fledged mobility test track, specially designed for rigorous testing, acceptance and qualification of armoured vehicles, ensures that every vehicle delivered meets the most stringent quality standard and is battle worthy across terrains. This state-of-the-art facility undertakes activities of complex assembly of optics, electronics, mobility systems, hydraulic systems, structural members, precision components, etc. It has multi-disciplinary skills working together in sync on such critically integrated platform.

Talegaon, Pune

L&T's Strategic Systems Complex (SSC) is a state-of-the-art facility at Talegaon (Pune) in Maharashtra. It is one of the finest facilities for realisation of series production and proto versions of Strategic Weapon Platforms, Sensors and Military Engineering Systems.

The facility is specially designed to undertake manufacturing, assembly, integration and testing of a wide range of complex defence products.

Coimbatore

The Precision Manufacturing Systems Complex (PMSC) was created in 2010 to cater to the exacting and growing demands of precision products in the Defence Aerospace sector. The Facility addresses needs of the customers for Missiles, UAV's, Aero-Structures and Space related subsystems.

The State of the art precision machining, fabrication, electro mechanical integration and testing facility is capable of serially producing and testing missile subsystems. The facility today delivers Subsystems to most of the tactical & strategic missiles in the country and also for a few offset programmes.

The two heavy precision shops are capable of fabrication, machining, heat treatment painting of motor casings for Dia 2.8 m class, 3.2 m class of Rockets. The facility also specialises in manufacture of light alloy structures such as heat shields, Interstages & base shrouds for all the Indian Launch Vehicles.

The Composite & Aero-structure Assembly shop is used to build composite airframes, aero-structures including wings for fighter aircraft, as well as airframes for hypersonic vehicles.

LTMMSL (L&T MBDA Missile Systems) has setup dedicated missile integration facility in SEZ area at Coimbatore for assembly, integration and testing of the Missile Launcher and Missile sub- systems. This state- of-the-art facility takes all the requirements in account for missile integration, spanning 4 acres including climate controlled space.



Kattupalli Shipyard



Office Building, Kattupalli shipyard

Manufactured Capital

Metallurgical and Material Handling (MMH)

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Finishing Mill for Rourkela Steel Plant

Overview

L&T's Metallurgical and Material Handling business offers complete EPC solutions for the Mining, Minerals and Metals sectors across the globe. The business undertakes end-to-end engineering, procurement, manufacture, supply, construction, erection and commissioning of the projects covering the complete spectrum – from mineral processing to finished metals.

The business also has a Product Business Unit offering comprehensive product solutions, including customised mineral crushing equipment for the cement and coal sectors, surface miners for blast-free eco- friendly open cast mining, advanced sand manufacturing plants which can replace usage of river sand, material handling equipment (stackers, reclaimers, ship unloaders, multipurpose cranes and other mining equipment), steel plant machinery and other custom-made equipment and critical fabricated structures (such as bridges, reformer modules and complex assemblies involving heavy fabrication, precision machining and critical assembly & testing) catering to core industrial sectors, including cement plants, the mining sector, power plants, the construction industry, steel plants, fertilisers and chemical plants, etc.

The complete range of product solutions is backed by five decades of experience and knowledge, in-house design resources, state-of-the-art manufacturing capabilities and providing cost- effective and value-added after-sales product support. The manufacturing centres of the Product BU are in Kansbahal, Odisha and Kanchipuram, Tamil Nadu.

Kansbahal Works, Odisha

- Has a facility for fabrication, machining, assembly, casting foundry and under carriage works.
- Is an ISO-certified unit accredited with ISO: 9001-2008, ISO: 14001- 2004 and OHSAS 18001-2007 certifications by DNV.
- Manufactures a wide spectrum of critical industrial products for core sectors such as cement, steel, paper, power, mineral and railways.

L&T's Engineering Workshop (LTEW), Kanchipuram

- An ISO 9001-2008 certified workshop, undertakes fabrication and supply of plant and equipment, including sophisticated, custom-designed equipment components for core industries such as steel, power and refinery, among others.
- Has been accredited with ASME U2 stamping for fabricating high-pressure vessels.

L&T Valves

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HIPPS (High Integrity Pressure Protection System) prevents catastrophic over-pressurisation and release of toxic flammable fluids

Overview

L&T Valves (LTVL) is a leading manufacturer of industrial valves and has a global customer base across key sectors, such as oil and gas, defence, nuclear and aerospace, power, petrochemicals, chemicals, water, and pharmaceuticals, across the globe. LTVL manufactures a wide range of products such as gate, globe, check, ball, butterfly and plug valves and automation solutions.

The business has two state-of-the-art facilities in Tamil Nadu, India and two facilities set up in the USA and Saudi Arabia.

Malumichampatti, Coimbatore

- Occupies 24.66 acres and houses R&D offices, labs and facilities to manufacture gate, globe, check, ball, butterfly and plug valves
- Provides customised solutions for nuclear, defence and aerospace industries
- Operates Valves School, a training facility for customers
- A zero-discharge unit and meets the requirements of ISO 14001:2015 and ISO 45001:2018

Kanchipuram

- Spans 18.93 acres and houses R&D offices and facilities to manufacture gate, globe, check, ball and butterfly valves (especially large-size valves)
- A zero-discharge unit and Meets the requirements of ISO 14001:2015 and ISO 45001:2018.

Intellectual Capital

To continue to make business progress, it becomes imperative to continue the innovation journey to stay relevant across time. At L&T, our innovation efforts are backed by advanced technology, helping us deliver projects which are showpiece and set new benchmark within its space.





KEY HIGHLIGHTS OF FY21

TOTAL PATENTS OWNED

46

TOTAL R&D SPENT

₹ 226 Million

AWARDS WON FOR INNOVATION

11

NEW PRODUCTS/SERVICES
DEVELOPED THROUGH R&D

101

NO OF R&D DESIGN ENGINEERS

227

as on March 31, 2021

KEY MATERIAL ISSUES IMPACTED

- Occupational health and safety of employees and contractors
- Project risk management, quality of construction and EPC services
- Climate change mitigation and GHG emissions

SDGs IMPACTED



STRATEGIES IMPACTED

SO1	SO2	SO3
SE1	SE2	SE5

Intellectual Capital

RESEARCH AND DEVELOPMENT PROJECTS

Structural parametric studies on light weight aggregate concrete using sintered fly ash

Depletion of natural aggregates calls for alternative sources. Light weight aggregates produced artificially from industrial waste materials such as slag, flyash etc., can potentially replace natural aggregates. Besides, the utilisation of industrial waste as construction material also helps in solid waste management. Also, light-weight aggregate concrete has several advantages over conventional such as providing lower dead weight of structures to reduction in erection costs for precast structures. However, it still lacks mass production.

This understanding of behaviour of structures is important to safely design and construct light weight aggregate concrete structures. At L&T Construction Research and Testing Center, we planned and conducted a comprehensive experimental program to study the properties of light weight concrete. The results were obtained and compared with similar grade normal aggregate concrete and compiled into a detailed report for future reference to help design engineers gain insight into its behaviour and boost future usage.

Structural design optimisation of tall and mid-rise buildings using genetic algorithm technique

The analysis and design of tall and mid-rise buildings is usually performed by using commercially available structural design software. The software are developed to perform the required analysis and design of various structural members for the given structural, material and geometric properties of various members. Various codal requirements on the structural behaviour under the given set of wind and seismic forces make the analysis iterative and time consuming even in high end computers. Besides, obtaining cost optimum structural design requires special attention as the nature of the optimisation problem is highly discrete and multimodal in nature. Hence, an optimisation technique using simple genetic algorithm is developed to handle this optimisation problem.

This technique mimics the natural evolutionary processes like reproduction using Darwin's theory, crossover, and mutation of genes. The software named as 'iBOSS' stand for intelligent Buildings Optimum Structural Sizing software has been successfully applied to many real time problems and has yielded practical solutions with the savings of about 5-10% in the structural quantities compared to the solution obtained from conventional design approach.



The IoT Innovation Hub in Bengaluru is where IoT solutions come to life – from connected workers to smart fuel dispensers

DIGITAL INITIATIVES B&F

Digitisation Initiatives Process/Employee focused (for internal purposes only)



WISA (Workforce Induction and Skills Application)
New Inclusions:
labour colony module, Covid Protocol checklist & Safety Training Module for workers

EHS App (Application for site execution team for creating, safe to start card, raise EHS observation, conduct PEP talk, suggestions)

Ib4U (Inspect before use) application used for inspecting plant and machinery assets, tools for periodic maintenance, conduct third party inspection, labor colony and other inspections
New Inclusions: Third party inspection for strategic assets conducted jointly by external agency and P&M Staffs.

Conquer App (Quality application) mobile application for conducting/raise inspection for pre-concrete check, post concrete check, quality walkdown, customer and executive feedback

Procube - Project progress monitoring software

FORM FIT - Solution to track formwork panel and its repetitions

RPA - Robotic process automation for Finance team and P&M team to avoid mundane work carried by BOT instead of staffs

HPC Procurement tracker - Digital solution to record all the quotes provided by the vendor, prepare a comparison statement and keep track of all the package status with different stakeholders



Mindtree West Campus, Bengaluru

Intellectual Capital

DIGITAL INITIATIVES HCI



Digitisation Initiatives Process/Employee focused

ConPro - Digital Concrete Chain

It is a digital application for end-to-end tracking of concrete chain focusing on wastage reduction. It is accompanied with detailed dashboards for wastage monitoring and Automated Concrete Reconciliation for better insights and decision making. The initiative also won the Best Innovative Digital Solution 2020 across Construction ICs.

Cognitive Search

It is an intelligent search engine to address the information needs of site engineers, resulting in improved EHS & quality compliance at the projects. The engine helps to carry the usual voluminous EHS & Quality data such as SOPs, Standards & Specifications, Manuals in fingertips for easy reference and accessibility for engineers at site through mobile.

Workmen Attendance and Management System

Centralised online biometric attendance system along with Workmen Management Application, an Activity based workmen monitoring system is being implemented across all the projects in the IC. This initiative helps in improved workmen monitoring, job allocation and utilisation.

Client focused (for external purposes only)

DMS

A unified Document Management System is being implemented across major projects in the IC for digitally managing all communication in a single solution. This enables improved project management, execution and delivery through proper collaboration, improved traceability/documentation, and knowledge capture.



Mumbai Trans-Harbour Link

DIGITAL INITIATIVES

WET

Digitisation Initiatives Process/Employee focused (for internal purposes only)

Risk Management - ERM

An Enterprise Risk Management system to capture all technical and financial aspects of tender to analyse the risk associated and its probability and impact to prepare suitable mitigation plan

AI Contracts (Under Development)

Identifying risky clauses from tenders through NLP thereby assisting contracts team to ensure no risks are overlooked during bidding process.

Geospatial survey

Utilising latest technologies like LIDAR, drone, Satellite imagery, DGPS etc. for survey. These technologies enable us to complete the survey in a short span of time with higher accuracy.

BIM

BIM is a shared digital representation of physical and functional characteristics of any built object (including buildings, bridges, roads, etc.) which forms a reliable basis for decisions.

EDMS

Inhouse developed engineering document management system to schedule documents, communication, transmittal, generate workflow/reports and to stored documents which facilitates document revision control for projects.

Constzon

ConstZon is a powerful catalogue management tool meant to drive standardisation and optimisation in the procurement process. It provides benchmark rates for all major services and materials that L&T procures, and guide the buyer to buy at the best price.

MST

Online system-based Material Scheduling Tracker application to plan and track the actual status of complete procurement cycle from EMR to MRN.



SAUNI Yojana Lift Irrigation Scheme, Gujarat

Intellectual Capital

DIGITAL INITIATIVES WET

Digitisation Initiatives Process/Employee focused (for internal purposes only)

LMNOP+ - Locate Measure Navigate on Phone + GPS catalyst	A mobile based application developed in-house to help project execution team to access all design data, topography survey data and other project parameters at any points of time in mobile. It is additionally connected with GPS Trans-receiver to help execution team to work offline in remote location and forest areas with no mobile signal.	ViewEHS	Mobile app with online system to help site team to access all SOPs and forms for submission and verification, thus ensuring 100% safety compliance as per the standards.
MFlow	M-Flow is developed with the objective to digitally monitor and track the materials issued and consumed in every project done by WET IC. M-Flow provides a real time visibility on the project material consumption status and for reconciliation.	Knowledge Finder EHS (KF EHS)	<p>KF EHS empower users to search and retrieve any information pertaining to EHS in both text and image form. The specific answer to the query followed by a redirection to the document containing the exact information with minimum time is the unique feature of the solution.</p> <p>The module is having a vast repository of EHS documents including 133 SOPs, HIRA and EAISR for 216 activities including routine and non- routine activities, Master Legal Register, EHS Alerts of last 4 financial years, good practices, compliance and non-compliance images from EHS observations, audit findings, EHS Today and many more documents and pictures related to EHS activities will get added into the knowledge base in future.</p>
P-FAB	In-house solution to ensure quality compliance in every stage of pipe fabrication in factory with monitoring progress of production and ensures 100% pipe traceability by having online data base for all quality reports and progress reports.		
Smart Glass	Smart Glass solution is a combination of hardware and software solutions that is used to observe the project progress, safety, quality, workmen welfare and administration from any remote location.	SWADESH	SWADESH helps in assessing safety observations based on the severity of its potential impact, the number of repetitions, location of work and staging height where it was recorded. SWADESH is an online dashboard which highlights and tracks the safety performance of project based on the following indices: Risk Score, Repetition Percentage, and Average Repetition Risk Score.

**ePragati**

'E - PRAGATI' is an online platform designed and developed by WET IC for monitoring the operating projects. The project monitoring includes the processes to ensure that the project is planned and executed according to client's requirements. It includes scheduling, tracking, reviewing and managing the progress and performance of the project along with managing changes when required.

GIS Progress Monitoring

Integration of Geographical Information System (GIS) and project management with visualisation is recognised as one of the most important tools in construction. Pipeline networks can be monitored using GIS with differentiation of coding with respect to status of work.

QIR

Mobile based application to ensure quality effectiveness of projects for identification and rectification of quality observations via proper workflow approval.

Conquer

Conquer – Construction Quality Enabler is a comprehensive Quality Platform which will enable all quality process of projects. Conquer will facilitate both Construction & Quality Team to make easier the inspection and documentation process.

Project Quality Index (PQI)

Project Quality Index (PQI) is an objective measure of a project's quality measure with respect to different parameters. Every project is supposed to update the PQI parameters on a monthly basis.

The PQI (Project Quality Index) is a derivative of 3 indices

1. Engineering Quality Index
2. Procurement Quality Index
3. Construction Quality Index

Each index has a list of parameters which have are scored individually. A total score is derived for each index based on the weightage assigned to individual parameters.

The final PQI for a project is calculated by summation of individual index scores after factoring the weightages assigned to each Index.

Vendor Performance Rating

A comprehensive 360-degree performance rating system to evaluate project execution capability and efficiency of sub-contractors and suppliers which helps project team to decide on scope management with sub-contractors and also helps Top Management to review the past and current performance of sub-contractors and vendors before awarding new contracts.

P&M Asset Insight

Plant and Machineries are the key drivers in project execution. These assets are either owned, hired or subcontracted. The optimal utilisation of P&M assets can be achieved by monitoring through a telematics device. The data captured helps in planning mobilisation and demobilisation of the assets.

Intellectual Capital

DIGITAL INITIATIVES WET

Analytical Dashboards - HR, Finance, Safety, Quality, Engineering

Dynamic and insightful analytical dashboards for Top management and department heads to monitor, control and take data based decisions on operational parameters and functions like HR, Finance - cashflow, JCR, site progress monitoring, engineering document Status, vendor performance, quality effectiveness and safety compliance of sites

Workmen Uberisation App

An application to send manpower requirement directly to the subcontractors from EIP Database.

Digital Health Monitoring

A digital health monitoring kit that can be utilised to monitor 8 key health parameters of workmen in under 5 minutes. This can be utilised prior to onboarding workmen or for routine health check ups.

WISA

The entire workmen induction and screening process has been digitised and contactless. The system also provides a digital pass to each workman comprising the workman's relevant data through QR code. Workmen attendance can also be captured through the mobile app using facial recognition.

CMMS - Computerised Maintenance Management

System Digitise our O&M assets, getting routine maintenance transactions translated to management metrics. Setting goals and tracking maintenance of each asset in various O&M sites. Visualise and analyse the life history of each asset easily and the complete user-friendly solution for maintenance activities.

RMS - Remote Monitoring System

Using RMS, the real time data of the all the sites will be available in HQ and the necessary intervention in the operations can be made immediately if there are any instances of non-functioning of equipment/abnormal process changes.



375 MLD Sewage Treatment Plant, Jebel Ali, UAE

DIGITAL INITIATIVES PT&D



Empower

An integrated tool for project monitoring including material tracking at site

Time lapse Camera

Capturing time stamped photos for documentation, visualisation and monitoring purposes

Geospatial Portal

Web portal integrated with align and empower for project visualisation in a geospatial format

Prapti Bodhi

Scientific planning for businesses based on historical data on volume and productivity and sequencing done by the system, based on the project variables. Predicting schedule variances based on progress and trade off analysis for course corrections.

EHS App

Mobile based application for PTP, DWP, shut down operation and managing safety observations with checklists and workflows to ensure plan, communication and action.

VR Training

Immersive Safety training modules for workmen and staffs using virtual reality

WISA

Application for managing workforce induction and skills in a digital platform

Video Analytics

A POC through video analytics for identifying PPE, face mask and social distancing violations

QIR App

Mobile application for quality incident reporting and closure, toolbox training record and SOP modules

T-TRAX

RFID-based solution for tracking tower bundles across factories and site locations to improve towerwise visibility, traceability and lot completion

Digital Stores

Applications to handle material from issue to consumption at site with proper reconciliation

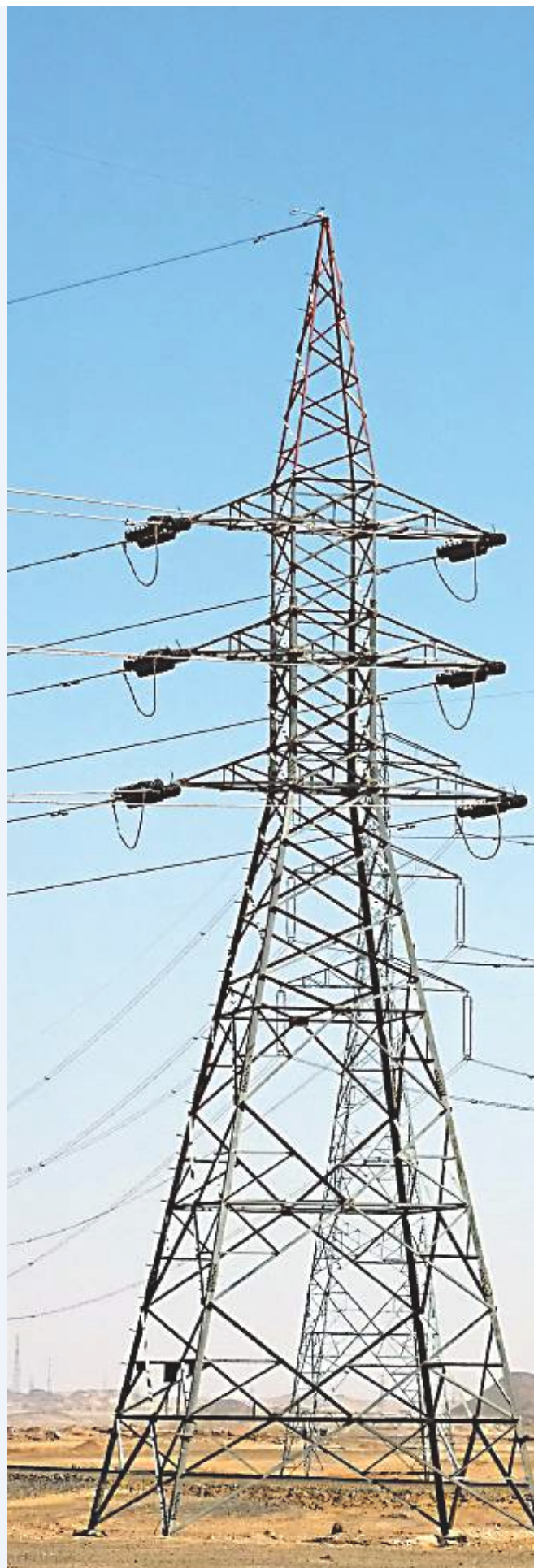


Lambir 275,132-33 kV Gas Insulated Substation, Sarawak, Malaysia

Intellectual Capital

DIGITAL INITIATIVES PT&D

Empower	P&M equipment remote monitoring of equipment for utilisation and conditional monitoring
Factory IOT	Monitoring of OEE (overall equipment effectiveness) through IoT data
Dhruv	Simplified survey with BOQ through mobile application and GPS device to reduce survey time
GIS	For engineering purposes and quantity estimation
Drone survey	Survey through photogrammetry using drones
Fibertrack	App for ensuring tracking and monitoring of patrollers and O&M of around 16,300 km fiber network Engineering Optimisation Development and testing of web based solution using Python Programing with optimiser engine and migrating the structural logic from excel sheet to backend services
AI For contracts and engineering	Contract comprehension includes clause key clause identification, risk quantification, document and datasheet extraction
BOT for Finance	Hedging entry generated from the Treasury inputs by the BOT



Transmission Lines

DIGITAL INITIATIVES

Defence



IoT @ Hazira for Welding Machines

Monitor and enhance quality and utilisation, through analysing data pertaining to process, welder, welding, machine, consumables, job and environment.

For Cranes'/Robos –monitor and enhance health and utilisation

Man Hours Booking System Automation

Process automation in Man Hours Booking system

EHS Audit and Inspection platform

Digital platform to audit and inspect safer working environment to minimise the risk of workplace injuries, minimise down time by detecting early risks, lower repair and maintenance cost, improve equipment availability

sQMS

Complete online digital quality management system right from receipt inspection to dispatch inspection with online documentation and track history.

LTMMSL IT-Security Monitoring

Real time analytics of various security devices like Firewall, Active directory, Exchange server.

News clustering

Collate defence related information from various sites to identify various business opportunities and competitors updates. AI/ML help to read various sources of news and identify related topics making a quick summary to give gist of the news classifying various topics as per business need and showing it in user friendly interface.

Robotic process automation

Various robotic process automation in areas of Quality, Design, F&A etc. with more than 7,000 Man hours of saving by automation.

Online Bid management

Making the entire bidding process online (RFP>Pre-bid Queries>Technical and Commercial Bid preparation and compilation>Compliance Table>Risk Mgmt>Print and Submit Bid>Capture Bid result>Analytics)

e-File Note

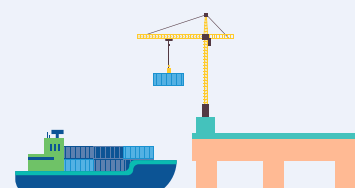
Digitised solution for file note preparation as a centralised repository of project budget bookings, savings, forex spend etc.



Offshore Patrol Vessel

Intellectual Capital

DIGITAL INITIATIVES LTHE

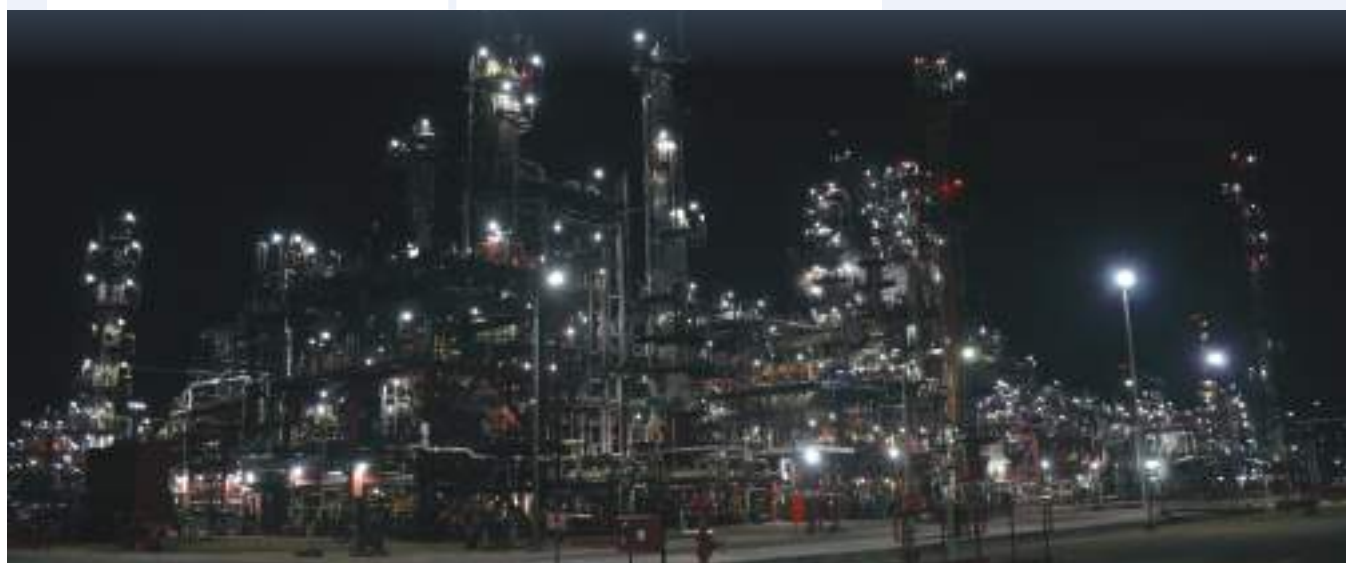


Digitisation Initiatives Process/Employee focused

SMART Glass/Merge reality solution for remote inspection, supervision and management.	Connected worker solution using IIOT at offshore projects for worker productivity and safety management.	Marine Vessels Fuel Monitoring System using Smart Sensors on Chartered Vessels
AI/ML based video analytics solution for machine utilisation and worker safety at Hazira and Katupalli Yards	Material handling equipment tracking using IIOT at yards and onshore project sites	Marine Integrated Transport Planning System (MITP) for people and material tracking in offshore
QR based piping spools and electrode tracking in yards	Integrated Project Management System (EPSILON) for projects progress tracking	RPA (Robotic Process Automation) in Finance and HR to automate manual processes

Digitisation Initiatives focused on clients

Virtual Reality Solution for engineering model review and approvals from client	SMART Glass/Merge Reality Solution for remote inspection, supervision and management
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A 28,000 DWT defence vessel on the ship-lift at L&T's shipyard at Kattupalli



DIGITAL INITIATIVES

Realty

Digitisation Initiatives Process/ Employee focused internal use

Digitally most advanced office space offering with the usage of CISCO Software Define Network, Secutech ELV & LTTS iBEMS solutions for optimising the utilisation of Energy and Space

Digitally Advance Design Process

3D Modelling using Autodesk Revit for clash Detections and visualisation

Digitisation Initiatives Client focused

- Salesforce CRM for managing effective Interactions with customers.
- Community Portal and Chatbot for Customer Self Service.
- Commercial Portfolio Management solution on Salesforce platform.

- Website on 'Platform as a Service' PAAS mode with Chatbot for prospects lead generation.

- 3D Scanning of a Commercial Towers to provide a virtually Walkthrough.
- Smart Building Video made for promoting Commercial Towers with 40+ sub packages.

- Smart Home Rollout for Tower 6 in Crescent Bay.



Residential project, Centrona, Mumbai

Intellectual Capital

DIGITAL INITIATIVES MMH

Digitisation Initiatives Process/Employee focused

Superprocure App for tracking procurement	SLIM App to track material	CHATBOT capturing daily progress report using chat window
Procube App for daily construction progress reporting	WISA App for workmen registration and database	



Power

Digitisation Initiatives Process/Employee focused

Project progress monitoring using CCTV	AI enabled CCTV surveillance at Khargone stores	AI based COVID-19 compliance check	AI based defect identification in Digital Radiography
AI RPA - GSTR-3B Sheet preparation	Automated - unmanned weighbridge at Buxar	Material issuance using KIOSK at Buxar	Volumetric survey using drone
Parametric Price Prediction for cable and cable tray	STARRT Card mobile application for faster work pass approval		



HE

After successful implementation of IoT stations in Hazira East side shops, 16 IoT stations for weld overlay stations are developed for Hazira West side shops.	TPM application to measure online OEE, MTTR, MTBF and predictive maintenance etc. Total 75 machines are covered under TPM.	AI tools like NLP, RPA and ML are implemented in cost estimation and proposal engineering system.	In Paperless initiatives, developed smart applications like Incident management system, Medical Module, Dangerous Occurrence (DO) and near miss module, Reported Safety Concerns (RSC) and Behavior Based Safety (BBS) reporting, training modules.
Project monitoring tools like PROTON, DIGI-EYE, CREMS become part of system to keep project on time.	Advance metrology for digital inspection and marking, Digital Twin for virtual set up is way of life now. Total 20 procedures are established.	Further focus is on office automation with help of RPA, ML, image processing and autonomous welding in manufacturing.	

DIGITAL INITIATIVES

Transportation Infrastructure (TI)

Digitisation Initiatives Process/Employee focused

WISA (Working Management Solution)

During COVID-19, it has helped the business immensely by identifying and approaching the workmen with specific skill sets during the remobilisation planning.

Connected Assets and Geospatial

It has helped the business to monitor and collect the data of its assets remotely with the help of digital chipset, LiDAR & drone-based project survey.



Smart World & Communication (SWC)

The business successfully launched its own Solution Platform 'L&T Fusion' – an augmented Intelligence platform aimed at solving the problems of cities, law enforcement agencies and critical infrastructure.

The business, in collaboration with DRDO, developed an indigenous Mission Command & Control Software (In-House) for perimeter security.

The business has also signed a strategic Transfer of Technology (ToT) with Centre for Development of Advanced Computing (CDAC) for TETRA technology.

City Operations Centres (COCs) across all the smart cities were working as war rooms during the entire duration of the pandemic.

Variable Message Displays (VMDs), Public Address Systems (PAs), were efficiently used to spread awareness messages.

AI-based system monitored vehicle movement through cameras.

Mask-detection application: Based on AI, helping to track and enforce wearing of face masks while monitoring social distancing.

Mobile-based app for the issue of a chatbot-based e-passes

Crowd analytics across Commissionerate to generate alerts on overcrowding

M-governance app, developed for Vizag Smart City, empowered health workers to carry out house surveys

In Tamil Nadu, the business is entrusted with hosting e-governance of 190 critical government applications.

Human Capital



The ingenuity and enterprise of our people play a key role in driving seamless operations in the ever-evolving business environment and deliver projects effectively on time, every time. At L&T, we strive to create an enabling work environment that encourages continuous learning, promotes inclusivity and equality and ensures a healthy and safe workplace.

KEY HIGHLIGHTS OF FY21

TOTAL EMPLOYEE STRENGTH

50,092

ENGINEERS

37,390

MEDIAN AGE

33 years

AVERAGE TRAINING HOUR PER EMPLOYEE

12 hours

SAFETY TRAINING HOURS

3.2 mn hours

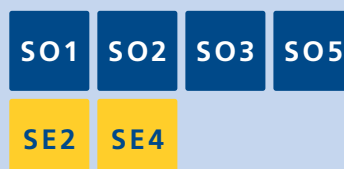
KEY MATERIAL ISSUES IMPACTED

- Occupational health and safety of employees and contractors
- Talent attraction and retention
- Labour management

SDGs IMPACTED



STRATEGIES IMPACTED



Human Capital

Learning and development in the new normal

The pandemic shattered the myth of working in a physical workplace. A large proportion of the working population selected 'Work From Home' worldwide and it became almost a way of life. The learning and development (L&D) team identified an opportunity in this adversity and quickly adapted itself to working in the new normal with the theme around 'L&D-Delivering in the new normal'.

Management & Organisation Development: The team was quick to recast its benchmark programmes into a virtual mode by adapting the content and delivery system to suit the virtual delivery mode. The core Supervisor Executive Development Program and Management development programs were all delivered in a virtual mode. The STEP programmes such as STEP-1 and STEP-3 were recast to a virtual mode, maintaining the same high standards that existed in the traditional mode. Distance did not matter as the team could leverage the involvement of Directors, Senior Leaders and customers through these programmes by connecting virtually. The team conducted several programmes, pushing the pedal on learning.



1.9 Lakh

Courses conducted against 44,000 in FY20

5.06 Lakh

Hours of courses conducted in FY21

Summary of the programmes conducted by this team in various categories:

Programme type	Total programmes	By international faculty	By external faculty
Leadership development	2	0	2
Core development	13	0	13
Competency development	31	29	2
Calendar	26	21	5
Accreditation	1	0	1
HR for HR	3	2	1
IC requirements	116	116	0
Webinar	33	0	33

The team designed specific programmes during various phases of the pandemic:

- a) the initial crisis;
- b) new normal;
- c) the bounce-back.

The ATL (Any Time Learning) team: Over the years, we have made online learning a culture that is well entrenched within the organisation. This was further magnified during the pandemic with the team rising up to meet the increased demand.

The learning hours were high despite the pandemic situation. There was on an average 11,000 hrs of learning per month to 24,000 hrs of learning per month (excluding data of April to Sept).

The team also delivered two other important programs to help effectively train the new joinees.

GET orientation: The courses were specially curated and provided to all the GETs before joining L&T. Around 1,100+ GETs who joined L&T in FY21 were enrolled in this seven module course.

Newbie to Knowbie: The leap is a six-month blended journey program for first-time managers. It was launched just before the pandemic hit. The first batch had 189 enrolments while the second batch was launched in Feb 2021 and the enrolment touched 534.

Corporate Technology and Engineering Academy (CTEA) Madh & Mysuru

At L&T, we undertake employee development in these academies. It takes place at 3 levels (L1, L2 & L3).

Level 1 includes all young recruits such as GETs, DETs and FLS (frontline supervisors).

The pandemic led us to onboard GETs/PGETs virtually and the CTEA offered technical training online to make them industry ready. The highlights of the program were use of effective PPTs, videos, simulations and gamification techniques, virtual industry visit, hands-on using virtual labs for subjects such as PLCs, context setting by L&T business leaders, group project-based learning.

Level 2 training helps develop competence needed by employees to hone their knowledge and skills at their workplace. During the pandemic, CTEA conducted about 350 virtual instructor led training program (VILT) covering 7,000+ working professionals.

Level 3 aims to provide 'Windows to the Future' and the academies conducted regular coffee sessions on emerging technologies to de-mystify and encourage everyone to embrace new technologies to provide a competitive edge.

During the pandemic, CTEA conducted 3D model design competition online covering 800+ participants.



Learning Development Academy

Our Leadership Development Academy, situated in the tranquil environs of the popular hill station Lonavala, contributes to its scenic beauty and serenity. Established in 1997, it presents an appropriate ambience for learning and development.

Born out of the vision to fulfil the constant demand of corporate India for a holistic learning centre that will help manage their training programs better. Even after two decades, the Academy continues to meet the objective of emerging as a preferred training destination for L&T group.

The residential academy is equipped with relevant infrastructure to conduct various types of training programs. Capable of accommodating multiple levels of leadership programmes at the same time, this campus holds the distinction of being one of the few places that have been designed exclusively to meet our growing demand for training.

LDA recognises that learning happens through discussions/debates in classrooms, in the privacy of a library, or in the quiet repose of a recreation room. This integrated facility provides all these advantages to nurture thought leaders and entrepreneurs of the future.

Human Capital

L&T IPM drives excellence in project management

L&T IPM commenced its journey in 2008 for creating global project management professionals. It is set up for furthering excellence in project management with a basket of globally benchmarked courses.

The entire five phases of project lifecycle – initiating, planning, execution, monitoring and controlling and closing – are covered in its pedagogy. L&T IPMs offering comprises flagship programmes, role-based programmes, online programmes, project management certification, software-tool based programmes, SCDMs (Specific Competencies Development Modules) and customised programmes considering project management functional and strategic aspect requirements of projects for training L&T-ites in the field of project management. The course content of L&T IPM is developed spanning emerging scenarios in project environment, and its application to domestic and international practices. The curricula are reviewed periodically by industry experts and renowned academicians to keep our courses relevant.

L&T IPM is headquartered in KC Residency which is part of a sprawling 115-acre L&T Knowledge City, Vadodara and the second campus is located at L&T Construction campus, Manapakkam, Chennai. The lecture halls are equipped with state-of-the-art project management tools and professional software. Other facilities include syndicate rooms, a well-equipped library with online access to international journals and digital resources. In addition, there is a world-class clubhouse, along with recreational facilities to make the learning experience truly international. Each program is designed to be highly interactive and driven in terms of situational learning by promoting active participation by project professionals and innovative pedagogy through the use of live cases, games/simulation, templates, tools and techniques and project videos.



L&T Institute of Project Management

L&T IPM has strong associations with the following global bodies:

- Project Management Institute (PMI®)
- International Project Management Association (IPMA).

It has established strategic partnerships with renowned global institutes such as:

- SDA Bocconi School of Management (Italy)
- Cranfield School of Business (UK)
- George Washington University (USA)
- University of Texas Austin (USA)
- Indian Institute of Management, Ahmedabad (IIM-A, India)
- Indian Institute of Management, Indore (IIM-Indore, India)
- National Institute of Construction Management and Research (NICMAR, India)
- Royal Institute of Chartered Surveyors (UK)

These institutes help deliver globalised project management curriculum. Some executive education programs are co-designed and delivered, along with these partners. As part of the global initiatives, international faculty from leading business schools/ universities regularly visit L&T IPM and joint research/ case development is also undertaken for knowledge creation and dissemination. In this ongoing journey of fulfilling L&T's dream of creating global project management professionals.

The core aim of L&T IPM is to create a pool of well-trained project professionals. Under the able leadership and guidance of Project Management Council (PMC), it is committed to develop contemporary programs that strengthen project management talent to meet evolving business aspirations. These initiatives of L&T are empowering our talent pool with the right skillsets that would enable them to perform their roles better. The efforts in this direction led to grooming people not only on the technical front, but also in project management and leadership development.



2,642 hours

of training on Human Rights provided in FY21

~17,000

L&T executives trained in project management at L&T IPM

DIVERSITY AND INCLUSION

We foster a culture that celebrates the diversity in our talent pool. At L&T, our employees cut across the barriers of race, gender, nationality, caste and age, reinforcing us as an inclusive organisation. The culture encourages cross-pollination of ideas and perspectives and challenges the 'business as usual' approach to seek feasible solutions to concerns that really matter.

Our unique platform 'Renew' empowers female professionals to continue their corporate journey following a maternity and child-rearing break. We have put in place a stringent redress mechanism (under the Protection of Women's Rights at Workplace Policy) to evaluate complaints from our female employees. We have constituted apex and regional complaints committees to address specific cases of sexual harassment at the workplace, if any.

24.82%

Of personnel with 10+ years in L&T

8%

Share of women in senior management



Human Capital

Non-unionised workforce numbers

(age wise and gender wise) Staff as on April 1, 2021

Gender	Age			Total
	<30	30-50	>50	
Female	1,435	1,463	155	3,053
Male	15,568	27,057	4,414	47,039
Grand Total	17,003	28,520	4,569	50,092

33 years

Median employee age

Attrition* (age-wise and gender-wise)

Attrition details (01/04/2020 to 31/03/2021)

Gender	Age			Total
	<30	30-50	>50	
Female	278	178	9	465
Male	3,563	4,378	743	8,684
Total	3,841	4,556	752	9,149 (18.26%)

New joinees (age-wise and gender-wise)

New Joinees (01/04/2020 to 31/03/2021)

Gender	Age			Grand Total
	<30	30-50	>50	
Female	407	92	2	501
Male	2,505	1,741	176	4,422
Grand Total	2,912	1,833	178	4,923

*Figures are excluding superannuation, 356 employees were superannuated

Employees covered under leadership development programmes (does not cover Leadership Development programmes done by the ICs)

Year	20-21			
Category	No. of Progs	Training Days	No. of participants	Training Man Days
Leadership	2	36	95	1,775
CDP (Core Development Programme)	13	75	443	2,575
Competency	3	22	251	2,506
Total	-	-	789	-

Men to women remuneration ration is

1:1



ENSURING EMPLOYEE HEALTH AND SAFETY

Our objective

At L&T, we have a Mission Zero Harm in Health and Safety making it a key cornerstone of our philosophy. L&T is committed to ensure a safe workplace for everyone through mission.

Employee and workforce health and safety is accorded high priority in the organisation. Safety issues and performance are reviewed periodically by the CEO & MD, the Heads of the various businesses, and by the L&T Board. Enhancing systemic improvement and implementing best practices is driven by the EHS Council chaired by Senior Executive.

All senior managers and employees are required to embrace the Mission Zero Harm philosophy in the execution of their duties.

We extend the Health and Safety commitment to our contractors and suppliers working on our behalf at any of our project sites or premises. The Corporate EHS Policy is translated into a viable strategy through a Corporate EHS framework, which has well-defined procedures and guidelines. Each employee and stakeholder under our policy plays a key role in developing a safety organisational culture.

We have deployed EHS teams at each business and project site, working in tandem with the project site teams, to implement industry-leading safety practices. These teams also facilitate the implementation of business specific EHS programs.

Integrated safety management

L&T EHS Council is chaired by Mr. Subramanian Sarma, Whole-time Director and Sr. Executive Vice President (Energy). The structure of L&T EHS Council is to ensure that the L&T main Board of Directors is fully appraised on the implementation and direction of L&T Health and Safety Policy and systems across L&T.

The Council undertakes periodic review of all accidents and incidents. It agrees and formulates procedures, based on risk analysis data gathered through the respective IC. This data is used for predictive analysis measurement and enables us to identify where the key areas of risk are. This guides the Company to proactively manage and focus resources to prevent any accidents or incidents. Such analysis is shared across all businesses to support the L&T Mission.

A primary drive towards the Mission Zero Harm is the use of data collated on unsafe acts and conditions. This heavily features in our development of behavior-based safety awareness and training, leading to a more positive understanding of safety by staff and focus in accident prevention. Furthering the Company's development of a safety culture among the workforce. Such data allows Executive Committee members to be informed of active behavioural based training and safety culture development.

These include managing additional operational risks, focusing on mitigating the risks to new team members during the early stages of deployment, imparting safety training, enhancing supervision across all areas of operation and so on.



Ultra-supercritical/Supercritical turbine manufacturing facility at Hazira, Gujarat

Human Capital

Extending safety guidelines to the suppliers

In our Mission to Zero Harm, our suppliers and contractors are evaluated on their safety infrastructure processes and strengths before awarding them a contract. A significant portion of our construction activities is performed by workers on contract. This is to ensure that under contract our suppliers must comply with L&T's policies and practices.

The continued monitoring and measuring of suppliers and contractors ensure a comprehensive understanding of safety requirements. This is further enhanced with regular refresher training sessions and capacity-building programmes. In addition, periodic site visits and audits by the senior management are conducted to improve EHS performance.

The safety and wellbeing of all the contract workmen at our project sites is important to us. At our manufacturing locations and project sites, safety committees are constituted, and regular meetings are organised. These committees comprise senior management representatives, as well as union members. We have included unionised employees in the safety committee at our manufacturing locations.

These committees facilitate specific safety objectives, in line with the Company's 'Mission Zero Harm'. In the collective bargaining agreement, specific clauses related to health and safety are incorporated as well.

Safety statistics

Safety dashboard	Reduction %	FY21	FY20	FY19
Severity rate	87%	143.6	204.29	105.2
Frequency rate	82%	0.10	0.11	0.10
Fatality rate	24%	7.72	10.19	5.06
Fatality	39%	25	41	22

Strong Safety Management Systems

L&T Safety Management Systems are accredited to the international standard ISO 45001: 2018 (Health and Safety Management Systems). Each Independent Company (IC) operating within the L&T Group manages its operations to this safety standard. In addition, some of our operations such as Oil & Gas and Maritime operate under specific standards and accreditation applicable to those industries. L&T safety management systems across our IC are also supported with internally developed Safe Operating Procedures (SOP) on agreement they are fully endorsed by the L&T EHS Council. Every business, through their Safety management systems (SMS) sets targets and goals to achieve the Zero Harm objective. These are closely monitored ensuring that improvements are made, and best practices and innovation particularly in digitalisation are adopted.

Leveraging digital to bolster safety measures

The COVID-19 led pandemic posed significant challenges. This sharpened our focus on the use digital innovation. The use of Artificial Intelligence (AI) will be developed and used more as AI solutions were used to detect and prevent unsafe acts and conditions. We plan to increase the use of 3D models to more construction sites such as scaffold erection and dismantling and introduce more VR modules. In remote places the use of drones has been applied to identify safety hazards without the necessity of putting people at risk.

Our focused efforts on digitalisation allows us to move further to the 'Connected EHS Manager' and the 'Connected Workman' as we continue to push boundaries and standards in safety to significantly improve our safety performance.



Safety is embedded in the organisational culture

We organise a number of initiatives and campaigns to spread awareness of safety across our employees, workforce and suppliers.

L&T Safety Month theme: Let's work towards an accident free workplace. All the business and the project sites participate in Safety Month through various training programmes and communication campaigns. The overall direction and priorities are communicated by the CEO & MD and the Executive Directors.

Launched EHS-centralised reporting, documentation, and performance measurement system ISO 45001:2018 and ISO 14001:2015 and audit modules, incident reporting and investigation module

- Introduced the Safety Task Analysis Risk Reduction Talk (STARRT) Card
- Zero tolerance against wilful violation; visible leadership in weekly management EHS
- Hazard Identification Tool (HIT) Card. This is to encourage all employees to report hazards observed and to get action
- Introducing the concept of maintaining minimum two protection layers, while working at height; monthly life saver programmes
- Management Review Meetings (monthly/quarterly); drive safety leadership through measurable actions; implementation of risk control before work commencement.

- Fire Service Week (2020) – Prevent fires, prepare yourself, promote safety
- National Safety Week with a message to reinforce positive behaviour at the workplace to achieve safety and health goals
- Developing innovative programs to groom fresh Diploma Engineers to perform the role of EHS professionals
- Safety awareness programs in specialised areas of tunnel, marine and launching girder in our metro, transportation, and special bridges business units.

Additionally, we conduct in-depth training on behaviour-based safety programmes. These programs are automated by various technology platforms.

We even conduct cross-functional safety audits, along with train-the-trainer programmes. The objective is to progressively ramp up site-based safety capabilities.

We firmly believe in recognising the efforts of individuals for their contribution to safety across projects. Every IC actively recognises this through various award schemes.

Auditing Safety Management System

At L&T, we undertake auditing of the safety management systems applied in all the ICs and projects through accredited external and internal lead auditors. This is to maintain safety standards required for the continued accreditation of ISO 45001. Internally accredited lead auditors ensure that all our operations maintain ISO 45001 Standards adopting and sharing best practices and innovation across our ICs. Our EHS Council monitors and measures the compliance of corporate procedures.

Major supply chain contractors and subcontractors are audited before awarding any contracts to ensure that safety standards are maintained throughout contract duration.

Human Capital

Safety training

In line with the L&T progressive safety initiatives and innovations, a comprehensive safety training program has been developed to enhance safety awareness for all employees. During the year, we introduced specific and interactive training sessions about COVID-19. Our classroom training modules have been converted into online sessions, with internal and external faculty. We introduced Virtual Reality training modules for our workmen across the board, hastening the process of bringing a new labour force up to execution speed. The training includes interactive tests and sessions where a 3D screen and AI provide attendees the opportunity to apply their learnings from their interactions.

Program

- L&T has developed an award-winning carded training system called WISA. This initiative was and is part of the Mission Zero Harm drive in which the workers and subcontractor workers are trained to a recognised standard.
- The newly formed Edutech allows interactive training of workers and supervisors where following online training they undertake an interactive session which tests their understanding of the safety requirements when working for L&T.

- Development and mandating of training matrix for all employees, including those of contractors. We involve and evolve EHS in all steps from project bid to award and execution.
- Redefine Standard Operating Procedures (SOPs) for all temporary works, including dos and don'ts. Conduct safety surveys regularly and 'Voice of Customer' workshop for the line management.
- As an industry leader in safer practices, we have always been proactive in adopting digital technologies to craft e-learning modules at project sites.
- VR-based training modules
- Digitalisation also plays a critical role in designing safety cards for reporting unsafe acts/conditions, incident investigation, safety inspection, improved SOPs to reflect evolving work methodologies, EHS suggestion systems, and so on.

Additionally, we conduct in-depth training on behaviour-based safety programs. These programs are automated by various technology platforms. We also conduct cross-functional safety audits, along with train-the-trainer programs. The objective is to progressively ramp up site-based safety capabilities.



Safety Training Mock Drill

RESPONDING TO COVID-19 CHALLENGES

L&T's crisis management team responded proactively to the pandemic and focused on protecting the lives of teams across projects. The Crisis Management Team set clear guidelines and real-time information on the necessary action.

Procedures were developed and a central monitoring and reporting structure was put in place. This facilitated quick decision-making. The use of digitalisation was having an immediate impact on how the projects and the overall business was combating the crisis.

Apart from putting in place processes to maintain real-time communication, downward, upward, and horizontal, we are using AI extensively to monitor our projects 24/7 to detect and prevent unsafe situations and behaviour.

Mobile Safety Apps are ensuring real time compliance without the need to have direct interaction with offices. Search engines provide direct access to doctors and medical facilities through mobiles. In India, we have witnessed a huge churn in our labour force and our digital workmen induction programme (WISA) has made the process of on-boarding quicker, more efficient, and safer.



Social and Relationship Capital



We have a dedicated CSR team committed to maximising our social impact. This team acts under the guidance and framework approved by the CSR Board Committee. They devise, execute and monitor CSR programmes in partnership with NGOs or government agencies that help drive societal causes, with the aid of teams at our campuses and business offices.



KEY HIGHLIGHTS OF FY21

LIVES BENEFITED THROUGH OUR
COMMUNITY DEVELOPMENT
PROGRAMMES IN FY21

1.21 Million

KEY MATERIAL ISSUES IMPACTED

- Water management
- Natural resource conservation
- Climate change mitigation and GHG emissions
- Adoption of renewables
- Supply chain management
- Occupational Health and Safety
- Local supply base development

SDGs IMPACTED



STRATEGIES IMPACTED



Social Capital

Inputs Matrices

CSR SPEND

₹ 1.5 Billion*

CSR PARTNERS

108

NEW SUPPLIERS, CONTRACTORS

29,407

MSME SUPPLIERS

5,782

*In addition we have also spent 9.88 Cr by our Hydrocarbon business

Outputs Matrices

TOTAL CSR BENEFICIARIES

1.21 Million

VENDOR/DEALER/SUB-
CONTRACTOR TRAINING (NOS)

1,049

CONTRIBUTION TO THE
EXCHEQUER

₹ 108 Billion

L&T helps catalyse socio-economic development of communities around its premises and at various locations across the country. This was part of L&T's culture, long before the CSR concept was introduced in the Companies Act 2013.

The Company builds on its ability to understand the pressing requirements of local and underprivileged communities, and provide appropriate technology-based solutions, thereby accelerating development. Its interventions are in the areas of water and sanitation, health, education and skill development. L&Teering, a structured volunteering program, inspires and empowers employee volunteers or L&Teers to contribute their time to programs supported by the Company, enhancing its social impact. The Prayas Trust which comprises employees' wives and female employee groups drive CSR initiatives too, by reaching out to distant communities.

The Company's well-entrenched CSR program focuses on areas that align with the global and national development metrics: water & sanitation, health, education and skill-building. The activities are brought under the CSR theme 'Building India's Social Infrastructure', to bring about an impactful and long-lasting social change.



BUILDING INDIA'S SOCIAL INFRASTRUCTURE

Our aim is to improve the quality of life, mitigate social inequalities, build self-sufficiency and help individuals achieve their true potential, in the identified communities.

WATER AND SANITATION

110,525

(no of people)



HEALTH

822,967

(no of people)



EDUCATION

244,962

(no of people)



SKILL DEVELOPMENT

35,522

(no of people)



DRIVERS OF CSR INTERVENTIONS

Corporate CSR Team

L&T has dedicated CSR teams at the corporate level, committed to maximising social impact. Corporate CSR team acts under the guidance and framework approved by the CSR Board Committee. They devise, execute and monitor CSR programmes in partnership with non-profits.

CSR coordinator and teams at campuses, area offices and sites

Area offices and campus teams perform need-assessments, identify local projects and NGO partners, implement and monitor the projects; providing support in achieving CSR goals.

L&Ts Health Centres

L&T's multi-speciality health centres with a team of professional personnel equipped to provide outpatient and tertiary health services reach out to the underprivileged communities, making healthcare accessible and affordable to them.

Prayas Trust

The Prayas Trust originated as L&T Ladies Club more than two decades ago. It is run by the wives of employees and female employees, to provide services to the underprivileged sections of society, located around various L&T facilities. They drive programs around the thrust areas identified under the L&T's CSR theme.

Volunteers

L&T has a structured employee volunteering program, L&Tearing, which enables and encourages employees to participate in community development activities. Volunteers invest their time in programmes that benefit underprivileged communities.

L&T Public Charitable Trust

LTPCT was established in 2004. The contribution from employees and management grant from L&T has made the institution sustainable and a unique not-for-profit entity within the large L&T conglomerate. LTPCT has been undertaking projects to create a better world for the marginalised population. Its mission has been to facilitate visible and sustainable development of society through well directed initiatives in the realms of vocational training, water management, holistic development of children and healthcare. LTPCT benefits from the committed support and in-house expertise of various L&T companies in the areas of engineering, architecture, construction, IT and medical services to design and deliver its programs for the community. In a nutshell, LTPCT is an L&T initiative, that goes beyond the statutory mandate of corporate responsibility.

Social Capital

CARING AND REACHING OUT

L&T continues to be on the frontline to help save lives in the pandemic. Some of its critical measures comprise:

Setting up ICUs for treating COVID-19 patients, equipping existing government hospitals with ventilators, providing Personal Protective Equipment (PPE) kits, gloves, masks to health workers

Making available basic provisions and food to those in need

Educating communities about the prevention and safety measures in the project areas and providing counselling and referrals

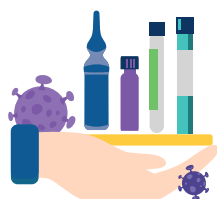
Extending support

- During the lockdown, an L&T initiative ensured food security to underprivileged children in Mumbai as a first pandemic response.
- Under its CSR initiatives, for over 10 years now, L&T has been reaching out to children in the slums around its Powai and Mahape campuses through balwadis and after-school study centres.
- These children belong to families that have just one daily wage earning member.

Thus, L&T's primary concern during the lockdown was to ensure that these children should at least have food security. In collaboration with an NGO partner Save The Children India (STCI), it undertook relief work to aid these children and their families, as well as other vulnerable families, all residing across Powai and Turbhe.

Ration kits containing essential food items were provided to 1,400+ beneficiaries. Sanitation kits containing bathing and washing soap, toothpaste, hair oil and sanitary pads were also distributed among these families.

Additionally, cooked meals were given to 8,000 families. The drive was carried out with utmost care and by adhering to Covid-appropriate behaviour.



L&T reached out to 12 states in India and spent ₹ 36 Crore for Covid relief in FY21.

Providing food to the hungry

Mumbai Food Project comes to the rescue

The local administration set up relief camps and food canteens for Daily wage earners and migrant labours. Municipal Corporation of Greater Mumbai (MCGM) approached corporates and non-profits for support. L&T partnered with Pratham Mumbai Education Initiative Trust to respond quickly to the pressing need.

On March 30, 2021 entrepreneurs, corporate leaders and others together launched an initiative named the Mumbai Food Project.

Temporary food camps and distribution zones were set up across Mumbai, serving nearly 8,000 packaged meals and kits of essential items in a day. The drive was carried out through NGO Pratham's well-established network and community programmes, with the much-needed support from MCGM.



Caring for caregivers

In Chennai, L&T swung into action to meet the urgent needs of the community. There were many patients, caretakers, health workers and hospital personnel in hospitals with no access to essentials, especially food. To mitigate their food problem, L&T in association with YRG Care served hygienically prepared 43,150 meals (2,500 meals per day for 17 days) across 7 government public hospitals in Chennai.

Another 20,000 meals were distributed in association with Feed My Chennai program to people in distress.

Strengthening the healthcare ecosystem

Government's efforts during the pandemic to prevent the Covid infection and treat the infected were falling short with limited overburdened resources. L&T responded to this challenge by supporting health infrastructure, providing preventive gear and supplies for frontline workers as well as donating treatment, testing and diagnostic equipment.

We continued to mitigate the impact of the pandemic as best as possible while continuing to stay on our mission.

INTEGRATED COMMUNITY DEVELOPMENT PROGRAMME

The Integrated Community Development program (ICDP) of L&T started in 2014-15, to improve the availability of water, the very 'necessity of life'. Under the program, five water-stressed locations were targeted in Rajasthan, Maharashtra and Tamil Nadu covering 11,362 households across 22,958 hectares. When L&T started working in these villages, water scarcity was the most intensely-felt need. L&T sensed that this could turn into an opportunity to organise the community to work around a common cause

In the last five years water sufficiency was achieved not only for drinking but also for sanitation and agriculture in the programs initiated in 2014-15. Today, all the project areas have access to drinking water and sanitation, as well as water to cultivate fodder for livestock and extra crops.

These projects are now on their way to be self-sustainable continuing the processes developed by the project.

Based on the positive results achieved in the earlier programs, ICDP is now implemented in four additional contiguous water-stressed locations in Maharashtra and Tamil Nadu covering 12,545 households across 13,223 hectares, since FY19. This will ensure the impact lasts longer over a larger geography in a particular region.

The ICDP starts its activity from need assessment of the location and follows a systematic community organisation strategies. These include mobilising people around the problem, creating rural development and monitoring committees, creating awareness about saving water, building civil infrastructure to help water and soil conservation, ensuring its maintenance by the community, providing sanitation facilities with people's contribution and building capabilities of local people to use the resources judiciously.



Social Capital

INFRASTRUCTURE

The CSR team shaped the water intervention to make it a community-led process. Priorities were chalked out to make drinking water available first, leading to sanitation and agriculture. As a part of the intervention, structures such as check dams, anicuts, contour trenches, farm bunds and farm ponds were constructed with community participation. These structures, along with other sustainable agricultural practices, helped increase water level in the water bodies, and retain soil moisture.

Water distribution system

One of the major objectives of the project is to provide 100% drinking water security to all beneficiary families. For this purpose, after ensuring the availability of water, water distribution schemes are introduced in six villages in Rajasthan. This ensures that households from these villages are provided with adequate piped water supply within or nearby the household premises to relieve women and girls from the drudgery of fetching water. This will give them more time for education and also to indulge in leisure activities.

Long walk to a better life

Women from the project area Bhim would wake up at 4 am to walk two to five kilometres to collect water from community wells or hand pumps. They walked five times a day in the scorching heat, carrying heavy pots balanced on their heads. Now with 18 water distribution schemes and 70+ hand pumps, women of 3,315 families are relieved of their duties of fetching water from far away. Now they can spend the extra time with their families or engage in any livelihood activities.



Sanitation drives

L&T's ongoing initiatives in the area of sanitation in villages was boosted by the Government's Swachh Bharat Abhiyan program. Community-led total sanitation approach for ensuring behavioural change on a large scale was adopted by the project. The project spread awareness on sanitary practices among communities, while making toilets and water available to them. The project, with contributions from the community and 'Shram Daan' (volunteering), constructed well-designed 4,216 household and 58 school toilets with bathing facilities using locally sourced material and labour by the end of FY21. Community monitoring committees were formed to ensure villages become and stay free from open defecation.

The community sanitation program was also extended to schools where children were made aware of use and importance of the toilets and then became the torch bearers by spreading awareness through rallies and cultural programs.



Capacity building

The communities concerned were trained to facilitate optimum, equitable and efficient water use and implement other agricultural methods and technology to increase their yield. Farmers were trained in agricultural practices that required minimum water use, use of zero-budget natural fertilisers, preparing low-cost organic manures to retain land fertility. A large number of farmers realising its cost-effectiveness have started using this manure preparation. The community members also devised methods that improved arability.

Indigenous knowledge on managing livestock was revived, and young men and women were trained in ethno-veterinary care. Women's groups were given training in the retention of the nutritional value of food in traditional millets recipes and growing vegetables in kitchen gardens.

Once the water was available, various agro-based livelihood options were made available to the community such as horticulture, dairy management, goatery, poultry and so on.

Families having access to water

54% to 100%
2014-2020

Institution building and sustainability

Along with water security initiatives, the community was made aware of the importance and methods of water conservation. Community groups such as Village Development Committees (VDCs) with 50% participation from women, farmers' groups and Self-Help Groups (SHGs) were created. The VDCs, farmer groups and SHGs assumed the responsibility to maintain the structures created through the project.

A sustainability index indicating the maturity and readiness of the local committees to sustain project efforts was computed and the groups were further provided inputs to strengthen their solidarity.

The impact of the ICDP projects which were completed last year has sustained and visible this year by either same/increased level of water in the wells, area of arable land and irrigated land and same/decreased percentage of fallow land which is shown in the following graphs. (Attached in the annexure G)

Families having access to water for toilets

33% to 98%
2014-2020

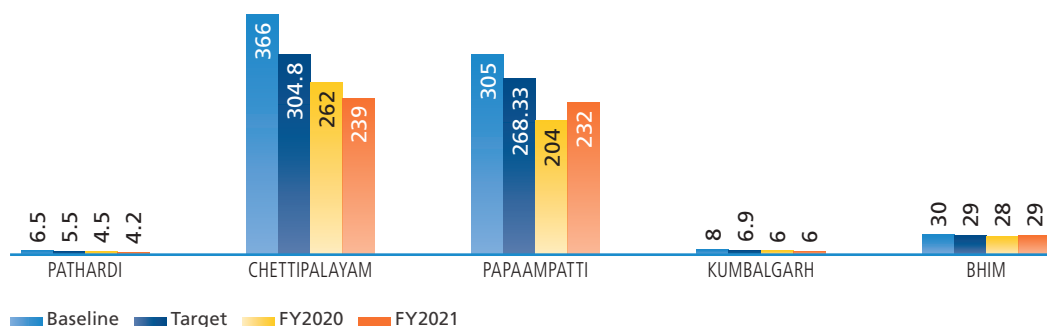


Various agro-based livelihood options such as goatery, poultry were made available to the community.

Social Capital

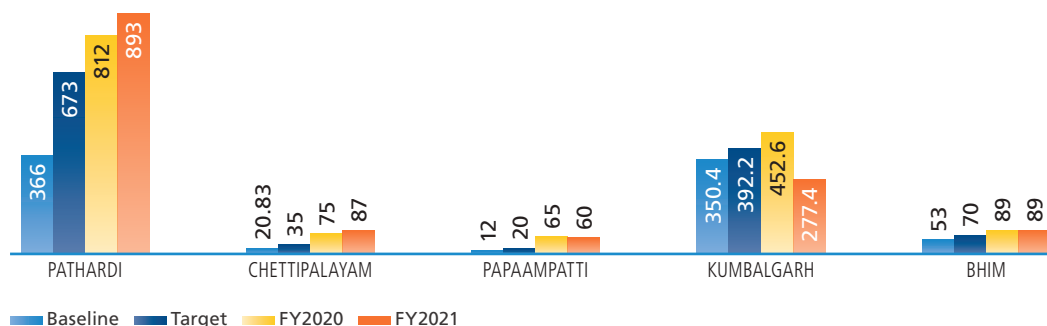
Depth of water from land surface

M



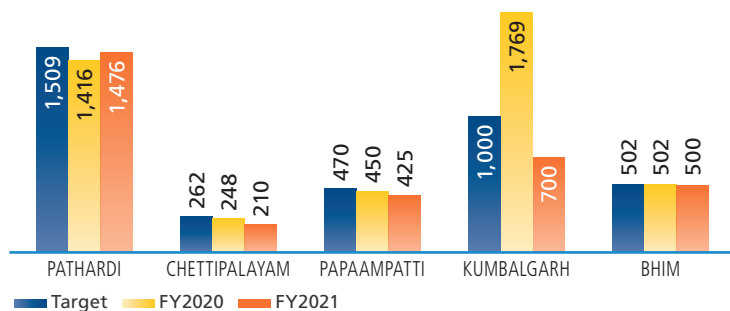
Increase in irrigated area

HA



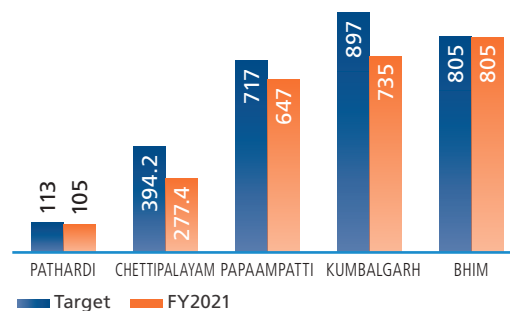
Increase in arable land

HA



Fallowland brought under cultivation

HA



Water brings rural prosperity

The villages of Pappampatti, Kalangal, Appanaickenpatti pudur and Peedampalli in Coimbatore, Tamil Nadu suffered from severe water scarcity impacting every aspect of people's life. Most rural people were solely dependent on agriculture and farming as their only means of income. With acute water scarcity many farmers completely abandoned farming and searched for other means of livelihood for sustenance. Many were able to grow only fodder crops on smaller patches of land, while the better part of the land was left fallow due to the water scarcity. Dryness in the farms, impacting the yield per acre, was leading to financial losses. Those who had borewell facility could not get water even at a depth of 1,000 ft, further increasing the expenses for farmers. Based on the participatory analysis and detailed project report, natural resource management strategies were implemented to improve the ground water level in the watershed area.

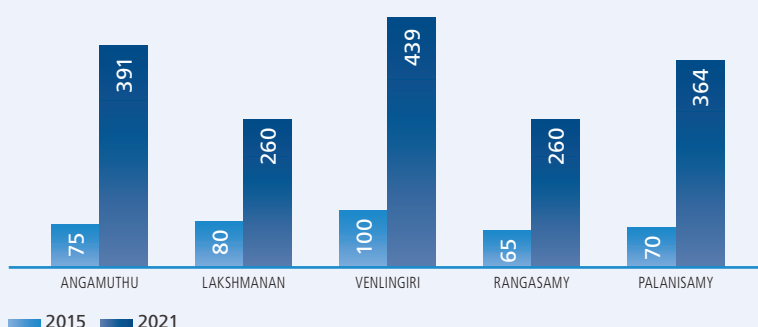
Village Development Committees (VDCs) were formed in each village to garner active participation of people in the project activities. VDCs conducted regular meetings to understand the nature and quantum of work to be completed, select beneficiaries based on well-defined criterion, take stock of impact achieved through interventions and resolve any issues impeding project implementation. They also acted as intermediary between people and public institutions such as Gram Panchayat, Block Development Offices and ensured seamless implementation of the project.

~25-50%

Increase in household income of Pappampatti watershed area

Water level in observatory wells

Tonne



L&T supported the construction of water and soil conservation structures such as field bund, farm ponds, check dam, channel formation and percolation pond. The adoption of techniques such as bore well recharge, chisel and disc plough helped water body rejuvenation and soil conservation. The various NRM interventions to harvest water and channelise surface run off, as well as proper management of water resources led to significant increase in the water holding capacity.

In FY21, the rainfall in Pappampatti watershed was 81% which translates to an average of 650 mm. The water bodies created under the project can store 1,322.67 Lakh litres of water.

Data from observatory wells showed in the graph clearly indicates a sharp increase in average water level up to 215 feet compared to the water level in pre watershed period. Also, water pumping time considerably increased due to an increase in the ground water level.

Social Capital

Small is big

Small but meaningful steps can usher in large community development outcomes. L&T's Integrated Community Development Project (ICDP) at Pathardi, Ahmednagar in Maharashtra in 2015 was started to help improve the overall quality of life of people residing in the communities.

With a specific objective of increasing water availability for agriculture and hence its production, farm ponds were constructed for individual farmers through the project. Since project conception, 164 farm ponds were constructed in six villages of Pathardi cluster. Also, 30 micro irrigation units were distributed to demonstrate increased efficiency of water utilisation.

110,525

Lives touched through our water and sanitation in FY21

One of the beneficiaries, Mr. Nana Bhikaji Wagh, from Khandgaon village of Pathardi cluster had two acres on which he regularly cultivated wheat for his own consumption and sale. The wheat crop requires minimum 8-9 times irrigation and Nana was able to irrigate crop 6-7 times owing to less available water in his farm well and insufficient monsoon rain. It affected the yield of the crop by 5-7 quintals per acre. In FY21, as part of ICD Project, a farm pond of size (10ft*10ft*3ft) was dug near his well in the farm. After monsoon, excess run-off water got collected in his farm pond which also recharged his well in the farm. The water in the well increased by four meters which was such a memorable and satisfying moment for him. The increased water level in his farm well remained even after monsoon because of which he could irrigate his wheat crop 10 times this year. And the result was even more satisfying as he could produce 15 quintals per acre this year.

He also took advantage of micro irrigation to efficiently utilise the increased water level. Nana claimed that he was able to save 40% of his water intake for wheat crop. There are many farmers like Nana Wagh who could increase their agricultural production with enhanced irrigation potential. Thus, the small contribution in constructing a farm pond has resulted in increasing meagre incomes of farmers of this cluster and demonstrated a successful and sustainable model of farmer empowerment.



Drip Irrigation at ICDP at Pathardi, Ahmednagar

Challenges and opportunities in STEM project

After the pandemic struck, initially schools were apprehensive about remote learning. It was challenging to bring all the primary stakeholders such as the principals, teachers and students on this new learning platform.

Regular virtual teachers' trainings, online classes by teachers, e-learning, regular HoS (Head of the School Sign-off) meetings, virtual STEM workshops, and community engagement with students were some of the strategies under this project. Content sharing on WhatsApp groups along with Google assessment forms and regular communication with all the stakeholders were held to align to the different needs of each learner.

However, the sudden transition to online schooling came with its challenges -- unavailability of the required materials for STEM experiments at home, absence and the limited access to smartphones, lack of mobile network/data plans and network issues. The project team conducted home visits and distributed worksheets to those who could not connect virtually and guided them regularly.

Impact of strategies adopted

Trained 350 EF teachers (100%) equipped on remote learning strategy and methodologies conducted online classes for students.

100% of Science and Math curriculum covered through remote learning content and classes.

10,628

(64.2%) students participated in the remote learning program

6,035

(56.8%) students were able to perform STEM activities

4,884

(29.5%) students who do not have access to smartphones were reached out to through community visits and worksheets

10,628

(100%) parents gave feedback on remote learning experience and encouraged children to participate in the project



Anita, Math Teacher from Government High School Karambakkam



Student remote learning

Social Capital

HEALTH

L&T organises health and welfare activities for the underprivileged across its establishments in India. They bring good quality healthcare to the patients in urban and remote areas, in the form of permanent health centres or health camps which provide free medical care. The Company set up its first health centre at Andheri in Mumbai in 1967. L&T has 12 community health centres operational currently at Ahmednagar, Chennai, Kattupalli, Coimbatore, Kansbahal, Thane, Lonavala, Surat, Vadodara; along with three in Mumbai. In addition, L&T also set up artificial kidney dialysis clinics for the underprivileged at six health centres in Mumbai, Thane, Titwala, Vadodara, Surat and Chennai.

Two mobile health vans cover marginalised communities in and around Mumbai including Mumbai slums and tribal blocks near Thane and Ahmednagar. Specialised health camps cover eye care, anaemia diagnosis and treatment, basic and rubella vaccination drives, skin ailments, geriatric care, dental, paediatric and gynaecological care. Specialised health promotion program are conducted with focus on hygiene, reproductive health and family life education for children and adolescents in Government remand and corrective homes and homes for neglected children.

L&T Mumbai's Anti-Retroviral Therapy (ART) centre conducts HIV/AIDS awareness camps, provides medical support along with therapy, counselling and testing. Comprehensive TB related treatment is provided in Mumbai including individualised treatment OPD, check-up, diagnostics, medicines and nutrition support, home visits and counselling.

Subsidised dialysis services are provided at the L&T-run kidney dialysis centre at Thane.

Cancer detection camps are targeted at women. L&T promotes preventive education and early diagnosis of cervical and breast cancer through cancer detection camps.

The health centre in Mumbai provides infertility services free-of-cost for the underprivileged communities, who find these treatments prohibitively expensive. The Company also has a well-equipped child guidance clinic in Mumbai, which offers this unique service, in addition to parent counselling.



822,967

Individuals were provided better access to information and healthcare facility in FY21



Samitha with her Mother

CASE STUDY

Chalking out an effective diet plan

Samitha, a 2 year old child and her mother residing at village Lighthousekuppam visited the general medical camp organised by community health centre, Katupally.

Samitha's mother complained that her child was quite inactive despite being fed well. The counselor at the camp discussed the nutrition and food patterns to be followed. With regular follow-up from the centre, Samitha's mother has included fruits and vegetables in her child's diet regularly. She made sure to give six small meals and avoided junk food. Now Samitha is more active and healthier than before. Her mother also attended a Pediatric camp held near her village and was happy to receive the services at her neighborhood especially during the pandemic.



L&T Health and Diaylasis Center, Vadodara

CASE STUDY

Proper healthcare for all

Kunj Patel, 20, from Savli village in Vadodara, is the only son and his father is a farmer and mother a homemaker. Kunj was born with congenital kidney dysplasia (one kidney).

However, he was leading a normal life till the age of 9 years. Then he developed facial and pedal oedema for which he was admitted in Kidney Disease and Research Centre, Civil Hospital, Ahmedabad. He was diagnosed with CKD stage - 5 and advised peritoneal dialysis. After seven years, peritoneal dialysis failed and he was put on haemodialysis. He was put on Double Lumen Catheter (DLC) in jugular vein in civil hospital and haemodialysis was started twice a week.

After taking admission at LTHDC, Vadodara, there is a marked improvement in Kunj and he is leading a completely normal life. It saved him physical discomfort during travel to Ahmedabad for treatment and helped the family to save travel expenses.

Social Capital

SKILL DEVELOPMENT

Skill development has always been a key area of interest for L&T. In its endeavour to achieve inclusive growth, it provides vocational training courses and other skill building activities to provide uneducated youth with job-earning skills. L&T's Construction Skills Training Institutes (CSTIs) provide free-of-cost training like bar bending, formwork carpentry, masonry, scaffolding, welding and electrical wiring, to rural and urban youth.

With an emphasis on technology and innovation, new technology-based skill-training courses are introduced in Solar PV Technician skills, OFC and CCTV Installation and Maintenance.

Integral elements of all the skill-training deliverables are digital training, digital study material, micro-learning modules on mobile apps, augmented reality and virtual reality training, safety, quality standards and soft skills training. Periodic online assessment is done for all the courses.

Training programmes are conducted at nine CSTIs operational at Kancheepuram and Pulicat in Tamil Nadu, Panvel in Maharashtra, Pilkhuwa in Delhi, Jadcherla in Telangana, Cuttack in Odisha, Attibelle in Karnataka, Chacharwadi in Gujarat and Serampore in West Bengal.

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 become financially independent.

Vocational training for women

L&T introduced vocational training programs in the areas of tailoring, beautician skills, home-nursing and food processing for women from underprivileged communities.

35,522 rural and urban youth, along with women and differently-abled persons from underprivileged communities, are being imparted skills that will improve their employability

17,365

Completed various courses
at the CSTIs

CASE STUDY

Upskilling people and creating livelihoods

Shaik Yaseen from Prakasham district in Andhra Pradesh completed his ITI Civil from Markapuram Government ITI in 2019 and was trying for a job in construction industry. Due to inexperience, he was unable to find the same. His father Shaik Ismail who runs a small cycle repair shop was out of work from March 2020 onwards due to lockdown restrictions. Yaseen heard about CSTI Attibelle's Masonry training programme and support to get initial job placement, from one of his friends. He contacted the institute and decided to take up training in Masonry.

During that time, CSTI was offering 9 weeks on campus and 3 weeks online training for masonry students. He got enrolled in the course and acquired the construction skills related to masonry and bar bending. He was given opportunity to have one week of on-the-job training at Anekal Steel Service Centre. During this training the site manager was impressed with his execution skills and offered him a job at his site to operate the special purpose numerically controlled bar bending machine.



Trainees learning Bar bending skill at CSTI, Serampore

CASE STUDY

Imparting critical training and improving lives

Mr. B Vijay, 22, belonging to a farmer's family, trainee from electrical trade hails from small village, Pavattakudi in Thiruvallur District of Tamil Nadu, has two younger siblings, both are pursuing college at proximity of native town.

To support the family income after completing higher secondary, he joined as a helper electrician and later became full time electrician with a local electrical contractor. With his earnings, he was unable to manage day-to-day family expenses. He realised that without any formal training or qualification, he may not be able to move up the ladder even though he had gained good hands on experience; so he decided to join ITI in electrical trade and learnt the basics. However, his ultimate aim was to get a placement in a reputed organisation. Though he was able to secure a placement offer, the nation-wide lockdown following the pandemic shattered his dreams.

During those lockdown period CSTI, Kanchipuram wanted to extend support to those underprivileged candidates or aspirants who needed job at these difficult times. CSTI started providing online training in different skills by recruiting candidates through online sourcing. Vijay got selected and completed online training and later enrolled at CSTI Kanchipuram.

During his stay at CSTI, he was part of Green team who managed the entire campus maintenance activity. "I have gained professional experience in L&T CSTI that helped me to secure a steady job." says Vijay.

Today Vijay supports his family and is a role model for many aspirants.



Electrical skills training at CSTI



Employee volunteers help underprivileged children to excel in STEM (Science, Technology, Engineering & Maths)

L&TEERING: EMPLOYEE VOLUNTEERING INITIATIVE

L&T has a growing army of employee volunteers or L&Teers who support the Company's CSR programs through its organised employee volunteering program. They partake in initiatives like teaching at community schools to writing examination papers for the visually challenged. L&Teers are passionate, sensitive to social causes, and committed to community development.

L&T has a history of inspiring and assisting volunteering program that includes community development initiatives. L&Teers including CSR key thrust areas also spread their borders to other areas like visiting orphanage and old age centres to spend their day, reach out to kids with special needs, with their requirements, join the relief camps in affected areas, planting trees, organising fundraising activities and volunteering with selected NGOs.

In FY21, regular volunteering programs were adversely impacted as the pandemic and the ensuing lockdown brought restrictions to reach out physically for volunteering opportunities. Regular activities such as teaching children in slums, volunteering at institutions for children came to a halt.

However, L&Teers with the support of CSR teams across locations played a crucial role to get connected through virtual platforms from across geographical locations to reach out to the needy and underprivileged, refusing to be beaten by the pandemic. Maintaining and in fact surpassing the existing momentum was possible by conducting online sessions through WhatsApp/Zoom/other networks, storytelling over phone, recording books, donating time and other aids like food/ration to migrants, phone and study materials to students.

Education

Volunteers assisted students with their academics by conducting online lectures; helped tribal and other vulnerable kids to the English language. Recording stories and audio books for visually impaired continued as a usual activity. Volunteers prepared study materials for underprivileged students they mentored/guided students for their career. During the pandemic, the classes were conducted online.

Volunteers participated in activities like conducting mock interviews for youth; though this was an activity conducted earlier as well, but shifting to an online mode was initially difficult for the aspirants as well as the volunteers.



Volunteering for reading a story to a student in Rural Maharashtra



Volunteers assessing STEM models submitted by students in Chennai

Heath

Volunteers conducted blood donation camps to maintain blood supply especially during COVID emergencies. Volunteers also organised health camps.

Environment

L&Ters also contributes to keep our surrounding safe and clean by conducting tree plantation and cleanliness drive. Despite the pandemic induced movement restrictions, environment clean-up drives were conducted successfully.

The volunteers also conducted awareness sessions on various topics like road safety, right to education.

To maintain the positive spirit of social organisations, L&T conducted their annual events like Daan Utsav, NGO or Diwali Mela virtually where different NGO partners' program and products were shared to the employees through internal networks and connected them with the organisations. Even in these tough times, L&T tried its bit to stand by the existing and new NGO partners and shared good fortune with those who need it most.

Every year CSR team conducts the felicitation event to appreciate and motivate employee volunteers who selflessly devoted their personal time and efforts for the benefit of the underprivileged, through L&T's CSR projects.

Benefit of volunteering: Volunteers learn new skills and capabilities while volunteering. These included hard skills, such as planning and organisational skills, managing people, resources and time, project management and fund-raising, along with soft skills, such as leadership, communications, networking, influencing and motivating others, problem resolution and teamwork. With the community intervention volunteers learned practical skills such as painting, horticulture, and teaching and looking after children. Volunteering helps contributing to their ideas or plans for future studies or careers methods. With this volunteers also help community by providing resources as per requirement, to develop autonomously and build strong civil society.



In FY21, almost 4,400 employee volunteers contributed 27,763 hours and reached over 11,700 beneficiaries

Relationship Capital

Relationships play a very important role in business. Being able to trust and rely on one another is critical, as is staying visible as a leader to all community partners and stakeholders. Ramping up digital communication significantly and being more nimble in the way we work has enabled us to maintain momentum.

We have always put emphasis towards building enduring bonds of trust with our stakeholders. This includes customers, shareholders, employees, bankers, business partners, Central and State Governments and the communities we interact with. We believe that enduring relationships with all stakeholders provide us insights, which help us review and progressively refine our strategies to create long-term value for all.

We have always conducted our business in a fair, transparent and ethical manner, and our engagement with stakeholders is tailored around a multi-pronged approach.

Strategic Objectives

SO3

SE2

SE5



Shareholders and investors

We follow a policy of engaging with all stakeholders regularly and keep them informed of evolving developments in the organisation. Our objective is to take their perspectives, get clarity on 'pain points' and craft a way forward collaboratively. Their faith in our abilities and constant support enables us to tailor our policies in alignment with our market value creation objectives.

Our institutional investors include:

Institutional investors	Holding %
Life Insurance Corporation of India	13.7
HDFC Mutual Fund	2.9
GIC Singapore	2.4
GIC India	1.8
NPS Trust (India)	1.7
Fidelity Investments	1.7
ICICI Prudential Mutual Fund	1.5
SBI Mutual Fund	1.3
ICICI Prudential Life Insurance	1.3
SBI Life Insurance	1.1
Kotak Mutual Fund	1.1
Franklin Templeton Mutual Fund	1.0

₹ 1,467.47 Billion

Value distributed in FY21



Relationship Capital

Customers

Our constant endeavour is to provide our customers with superior experience at every stage of their association with us. Innovation – across products, projects, processes and customer servicing – enables us to create value that can set a benchmark for the industry to emulate. We enjoy long-lasting, time-tested relationships with our customers across all our businesses.

We engage with our customers regularly through various modes of communication to get their feedback, suggestions and understand their requirements. The L&T Info desk infodesk@Larsentoubro.com is a source of information and feedback on the entire spectrum of our offerings.

We collect customer feedback on a scale of 1 to 10 (10 = Excellent, 1 = Poor) quarterly; and this is reviewed during the management review meetings. Corresponding action plans are formulated to improve performance in the areas rated below on an average of 8.0 points. The survey covers various aspects of customer service such as time schedule, product quality, housekeeping, safety standards, response to client's requirements, work methods, communication, work delegation, resource mobilisation and courteousness.

Suppliers and contractors

At L&T, our focus is on maintaining and enhancing our relationships with suppliers, contractors and service providers to drive mutual growth. These include raw material vendors, machine suppliers, and contract workers. We engage with them regularly through partner meets.

We have established an e-procurement model for paperless buying and an e-tendering system is used for information flow and reverse auctioning.

We trained more than 9 Lakh vendors, dealers and sub-contractors in FY21.

Our human rights practices forbid child, forced and compulsory labour, and discrimination based on gender, caste and nationality. In FY20 we have made a separate code of conduct for our vendors. Environmental and Social Code of Conduct include compliance with environmental regulations, health and safety, labour practices, human rights aspects, minimum wages, freedom of association, collective bargaining, prohibition of child labour, forced and compulsory labour, ethical behaviour, transparency in business processes and environment conservation. As on March 31, 2021 more than one lakh vendors have signed the Code of Conduct (CoC). Suppliers are assessed on the basis of their environment and social performance during vendor registration and on-boarding stage. There were no instances of non-compliance during supplier assessments during the year.

9+ Lakh

vendors, dealers and sub-contractors were trained in FY21



Civil trackworks



Government

We work closely with the Government of India as well as local governments during regular course of our operations. We abide by the laws of the land and believe compliance is absolutely non-negotiable. We stay updated on changes in laws and policy initiatives. With several international associations, we participate in national and international policy formulation and economic forums.

We also participate in several government schemes to help enhance the lives of communities we work with.

₹ 108 Billion

Contribution to the exchequer in FY21

Major government programmes we are associated with

Swachh Bharat Abhiyan

Our initiatives

1. Constructed 1,000+ washrooms using local skills and materials
2. Community-based monitoring committees ensured that these villages became open-defecation free
3. L&T provided adequate Water, Sanitation and Hygiene (WASH) infrastructure for 3,000+ children and trained them in using toilets and keeping their schools clean and hygienic

Make in India campaign

1. Local sourcing of products and services
2. Defence business collaborates extensively with the government, thus supporting this initiative
3. In FY21, we have sourced materials from 5,728 MSME suppliers

Digital India campaign

1. More than 11,000 equipment across various project sites are connected to the Asset Insight, streaming real-time equipment data
2. Worker Induction and Skills Application (WISA) is an end-to-end digital solution for smooth onboarding of blue-collar workers into construction sites. Today more than 300,000 workers are onboarded in WISA
3. Embracing Industry 4.0: The Internet of Things for manufacturing has been applied to connect machines, cranes, welding machines and other equipment across various manufacturing plants for remote monitoring and maintenance

Interventions during the year include

National Smart Cities Mission

The SWC business leverages its technical prowess to solve problems through smart, scalable solutions for security, urban services, traffic, transportation, utilities and digital connectivity.

1. Hyderabad City Surveillance and ITMS project
2. Vizag Smart City
3. Prayagraj Smart City
4. Mumbai City Surveillance
5. Raipur Smart City

Defence business

1. Aerospace manufacturing shops for rocket motors for India's space launch vehicles at Powai and Coimbatore
2. Strategic Systems Complex for Weapon and Engineering Systems and sensors at Talegaon near Pune

Financial Capital



Our financial capital helps us create a strong foundation. We have created a strong balance sheet with strong linkages to economic growth that can help India reduce external dependencies and enhance self-reliance. We have judiciously managed capital structure helping us effectively counter risks. Despite our business size, we have been able to maintain growth. Our financial prudence has helped us navigate through the challenging period of the pandemic.

KEY HIGHLIGHTS OF FY21

PAT GROWTH*

21.3%

DOMESTIC ORDER BOOK GROWTH

13.01%

* Includes profit on discontinued operations net of exceptional items ₹ 4,618 Crore

Note: All figures in this chapter are as per the group consolidated data page 55 and 442 of the Annual Report.

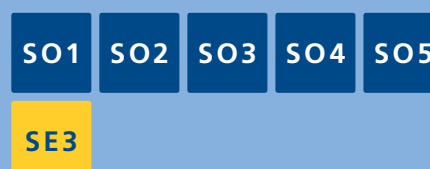
KEY MATERIAL ISSUES IMPACTED

- Project risk management, quality of construction and EPC services
- Natural resource conservation
- Material sourcing
- Talent attraction and retention
- Energy efficiency
- Supply chain management

SDGs IMPACTED



STRATEGIES IMPACTED



Financial Capital

Inputs

ORDER BOOK*

₹ 3,273.54 Billion

NET CURRENT ASSETS*

₹ 575.56 Billion

NET FIXED ASSETS*

₹ 448.20 Billion

GROSS DEBT-TO-EQUITY RATIO*

1.51x

* As on March 31, 2021

Outputs

TURNOVER**

₹ 1,359.79 Billion

GROUP PAT**

₹ 115.83 Billion

DIVIDEND PAID**

₹ 50.56 Billion

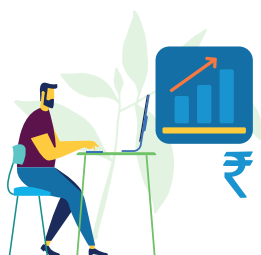
RETURN ON EQUITY**

16.25%

** For FY21



Indian Oil Corporation Limited - Bongaigaon Fluidized Catalytic Cracker Unit



Despite the headwinds in FY21, we reported resilient financial performance. We reported 21.30% growth in Profit After Tax at ₹ 115.83 Billion against the previous year. During the year, we won fresh orders worth ₹ 1,754.97 Billion recording 5.83% de-growth. The order book stood at a robust ₹ 3,273.54 Billion and grew by 7.73% over FY20.

During the year, we further strengthened our presence in Gulf Cooperation Council (GCC) countries, predominantly in the Infrastructure and Hydrocarbon sectors. The unexecuted order book from international markets stood at ₹ 687.73 Billion, contributing 21.01% to the total order book.

The Revenues stood at ₹ 1,359.79 Billion which declined by 6.5% during FY21. Factors such as execution impediments related to the lockdown in the last few weeks of March, delayed clearances, right of way constraints and the review of awarded tenders by a few state governments leading to the stoppage of work in the Infrastructure segment led to lower-than-expected growth in revenue. We continue to engage with India's strategic sectors and critical areas of infrastructure development.

The Board of Directors recommended a dividend of ₹ 18 per share. Additionally, a special dividend of ₹ 18 per share was also issued, totalling upto ₹ 36 per share.

SEGMENTS DRIVING ORDER BOOK IN FY21

Domestic

- Orders related to Infrastructure: High Speed Rail, River Bridges, Rail Tunnels, Transmission lines, Urban power distribution, Rural Water supply, Water distribution, Cement plants, Residential Housing
- EPCC orders for refinery projects
- Key equipment supply for Nuclear Power projects

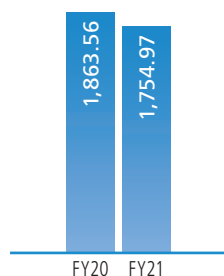
International

- Large orders related to substations and transmission lines, light rail
- Order related to mixed-use facilities, bio-fuel refinery process equipment

FINANCIAL HIGHLIGHTS

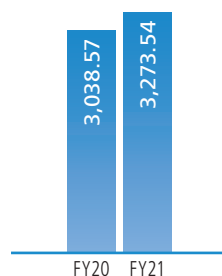
Order inflows

₹ (in Billion)



Order book

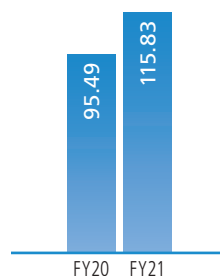
₹ (in Billion)



PAT

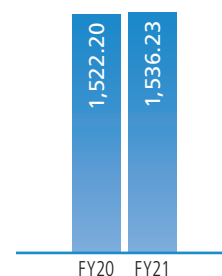
₹ (in Billion)

incl. exceptional items



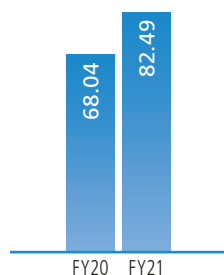
Economic value generated

₹ (in Billion)



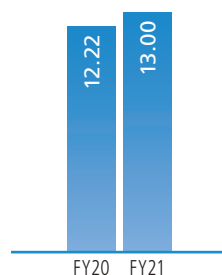
EPS

₹ per share



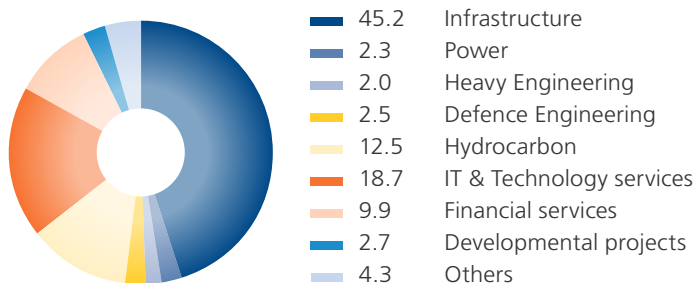
ROCE

%



Sales Composition FY21

%



Financial Capital

ECONOMIC VALUE GENERATED AND DISTRIBUTED

A Value generated

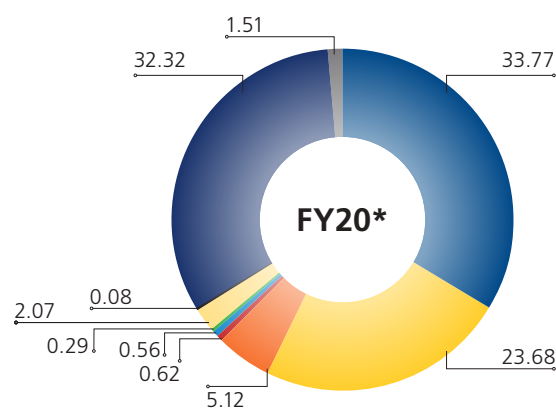
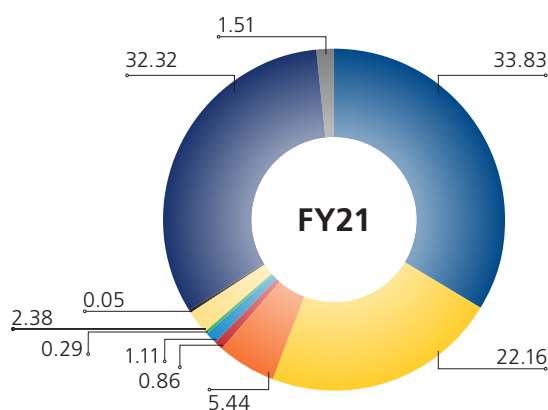
FY21

₹ 1,536.23 Billion

FY20

₹ 1,522.20 Billion

B Value distributed (%)



*The financial works of FY20 are revised

Value retained = A - B

FY21

₹ 68.76 Billion

FY20

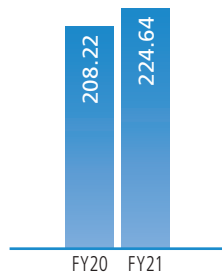
₹ 60.12 Billion

Description	FY21 [bn]	FY20 [bn]
Economic value generated	1,536.23	1,522.20
Manufacturing, construction and operating expenses	1,006.40	1,067.21
Employee wages and benefits	247.40	230.87
Payments to providers of capital		
- Interest	39.13	27.97
- Dividend	50.56	25.27
- Minority Shareholders	13.38	13.45
Payments to exchequer	108.33	93.56
Community investments (CSR spend)	2.27	3.76
Economic Value Distributed	1,467.47	1,462.08
Economic Value Retained	68.76	60.12

EMPLOYEE COST AND BENEFITS

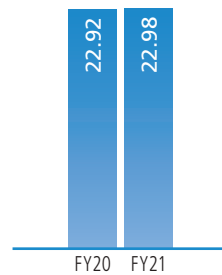
Cost towards wages/ salaries (a)

₹ (in Billion)



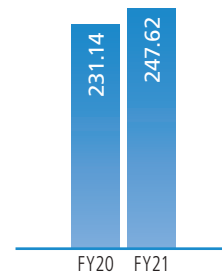
Other benefit costs (b)

₹ (in Billion)



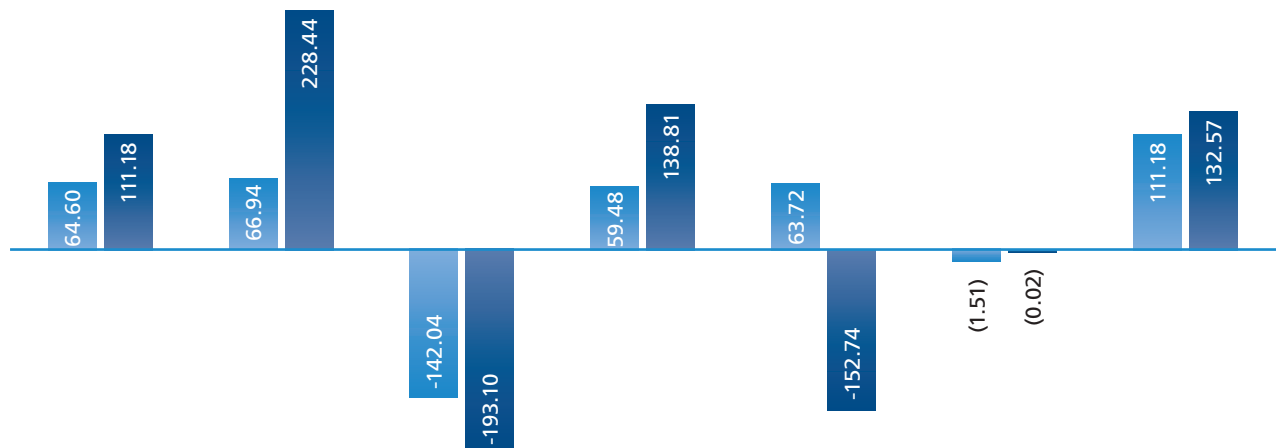
Total personnel cost = (a)+(b)

₹ (in Billion)



LIQUIDITY AND CAPITAL RESOURCES

₹ (in Billion)



CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD	ADD: NET CASH PROVIDED/(USED) BY					DISCONTINUED OPERATIONS	CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD
	OPERATING ACTIVITIES	INVESTING ACTIVITIES	DIVESTMENT PROCEEDS	FINANCING ACTIVITIES			
FY20	66.94	-142.04	59.48	63.72	(1.51)		111.18
FY21	228.44	-193.10	138.81	-152.74	(0.02)		132.57

Please refer Annual Report page 526 (note 53) for details of financial assistance from the government in the reporting year



Financial Capital

Consolidated Balance Sheet

as at March 31, 2021

₹ Crore

Particulars	Note	As at 31-03-2021	As at 31-3-2020
ASSETS:			
Non-current assets			
Property, plant and equipment	2	11,386.29	10,103.79
Capital work-in-progress	2	388.37	3,224.91
Investment property	3	3,646.78	3,714.72
Goodwill	4	8,066.96	8,011.40
Other intangible assets	5	19,197.76	19,596.98
Intangible assets under development	5	112.02	86.18
Right-of-use assets	61(b)(iii)	2,021.53	2,226.49
Financial assets			
Investments in joint ventures and associates	43(e)	2,670.26	2,851.01
Other investments	6	5,945.14	4,496.72
Loans towards financing activities	7	52,631.67	58,589.36
Other loans	8	482.66	1,522.33
Other financial assets	9	1,110.77	638.15
		62,840.50	68,097.57
Deferred tax assets (net)	51(d)	2,697.00	3,846.58
Other non-current assets	10	5,949.67	6,541.62
Current assets			
Inventories	11	5,820.54	5,746.65
Financial assets			
Investments	12	31,011.23	12,699.75
Trade receivables	13	42,229.78	40,731.52
Cash and cash equivalents	14	13,373.52	11,324.57
Other bank balances	15	2,867.98	3,793.21
Loans towards financing activities	16	41,379.03	41,723.42
Other loans	17	648.56	716.00
Other financial assets	18	2,838.47	2,927.87
		134,348.57	113,916.34
Other current assets	19	54,791.48	58,659.69
Group(s) of assets classified as held for sale	45(f)	6.24	4,367.21
Total Assets		311,273.71	308,140.13
EQUITY AND LIABILITIES:			
Equity			
Equity share capital	20	280.91	280.78
Other equity	21	75,587.62	66,442.44
Equity attributable to owners of the Company		75,868.53	66,723.22
Non-controlling interests		12,051.53	9,520.83

Note: The notes referred in the above financials are included in the Annual Report.

₹ Crore

Particulars	Note	As at 31-03-2021	As at 31-3-2020
Liabilities			
Non-current liabilities			
Financial liabilities			
Borrowings	22	82,120.04	82,331.33
Lease liability		1,617.72	1,741.60
Other financial liabilities	23	186.74	901.14
		83,924.50	84,974.07
Provisions	24	773.78	708.67
Deferred tax liabilities (net)	51(d)	1,178.66	1,453.04
Other non-current liabilities	25	68.70	31.09
Current liabilities			
Financial liabilities			
Borrowings	26	27,765.83	35,021.02
Current maturities of long term borrowings	27	22,719.39	23,654.77
Lease liability		406.10	424.95
Trade payables:			
Due to micro enterprises and small enterprises		488.99	479.51
Due to others	28	45,015.62	43,164.42
Other financial liabilities	29	5,569.55	4,923.23
		101,965.48	107,667.90
Other current liabilities	30	31,269.63	30,816.67
Provisions	31	2,998.68	2,750.85
Current tax liabilities (net)		1,171.02	1,509.62
Liabilities associated with group(s) of assets classified as held for sale	45(f)	3.20	1,984.17
TOTAL EQUITY AND LIABILITIES		311,273.71	308,140.13
CONTINGENT LIABILITIES	32		
COMMITMENTS (capital and others)	33		
NOTES FORMING PART OF THE FINANCIAL STATEMENTS	1 to 64		

In terms of our report attached
For DELOITTE HASKINS & SELLS LLP
Chartered Accountants
Firm's Registration No.117366W/W-100018
by the hand of

S. N. SUBRAHMANYAN
Chief Executive Officer & Managing Director
(DIN 02255382)

R. SHANKAR RAMAN
Whole-time Director & Chief Financial Officer
(DIN 00019798)

M. M. CHITALE
Independent Director
(DIN 00101004)

SANJIV V. PILGAONKAR
Partner
Membership No. 39826

SIVARAM NAIR A.
Company Secretary & Compliance Officer
Membership No. FCS3939

Mumbai, May 14, 2021

Note: The notes referred in the above financials are included in the Annual Report.

Financial Capital

Consolidated Statement of Profit and Loss

for the year ended March 31, 2021

₹ Crore

Particulars	Note	2020-21	2019-20
Continuing operations			
INCOME:			
Revenue from operations	34	135,979.03	145,452.36
Other income	35	3,429.35	2,360.90
Total income		139,408.38	147,813.26
EXPENSES:			
Manufacturing, construction and operating expenses:	36		
Cost of raw materials, components consumed		15,571.40	15,548.66
Construction materials consumed		24,558.23	30,316.12
Purchase of stock-in-trade		1,213.58	841.09
Stores, spares and tools consumed		2,023.54	2,184.46
Sub-contracting charges		22,316.18	26,454.05
Changes in inventories of finished goods, work-in-progress, stock-in-trade and property development		343.37	647.70
Other manufacturing, construction and operating expenses		12,983.56	13,328.71
Finance cost of financial services business and finance lease activity		7,691.04	8,041.88
		86,700.90	97,362.67
Employee benefits expense	37	24,762.03	23,114.00
Sales, administration and other expenses	38	8,892.00	8,646.71
Finance costs	39	3,913.44	2,796.66
Depreciation, amortisation, impairment and obsolescence		2,904.21	2,462.27
Total expenses		127,172.58	134,382.31
Profit before exceptional items and tax		12,235.80	13,430.95
Tax expense:	51(a)		
Current tax		3,923.39	3,564.58
Deferred tax (net)		87.43	(301.38)
		4,010.82	3,263.20
Net profit after tax (before exceptional items) from continuing operations		8,224.98	10,167.75
Exceptional items before tax		(3,693.78)	-
Tax expense on exceptional items:	51(a)		
Current tax		48.44	-
Deferred tax		(186.20)	-
		(137.76)	-
Exceptional items (net of tax)	48	(3,556.02)	-
Net profit after tax from continuing operations		4,668.96	10,167.75
Share in profit/(loss) after tax of joint ventures/ associates (net)	43(f)	14.40	71.96
Profit for the year from continuing operations		4,683.36	10,239.71
Discontinued operations			
Profit before tax from discontinued operations	45(a)	10,790.50	883.25
Tax expense of discontinued operations	51(a)	2,552.58	228.68

Note: The notes referred in the above financials are included in the Annual Report.

₹ Crore

Particulars	Note	2020-21	2019-20
Net profit after tax from discontinued operations		8,237.92	654.57
Net profit after tax from continuing operations & discontinued operations		12,921.28	10,894.28
Other comprehensive income			
A Items that will not be reclassified to profit or loss:			
Equity instruments through Other comprehensive income		55.05	(386.05)
Income tax (expenses)/income on equity instruments through Other comprehensive income		-	-
		55.05	(386.05)
Gain/(loss) on remeasurements of the net defined benefit plans		57.40	(205.94)
Income tax (expenses)/income on remeasurements of the net defined benefit plans		(13.69)	50.60
		43.71	(155.34)
Share in Other comprehensive income of joint ventures/associates (net)		(51.76)	27.75
B Items that will be reclassified to profit or loss:			
Debt instruments through Other comprehensive income		123.69	115.22
Income tax (expenses)/income on debt instruments through Other comprehensive income		(31.14)	(19.46)
		92.55	95.76
Exchange differences in translating the financial statements of foreign operations		99.70	43.60
Income tax (expenses)/income on exchange differences in translating the financial statements of foreign operations		(4.42)	4.45
		95.28	48.05
Effective portion of gains/(losses) on hedging instruments in a cash flow hedge		1,717.14	(1,281.83)
Income tax (expenses)/income on effective portion of gains/(losses) on hedging instruments in a cash flow hedge		(479.18)	334.42
		1,237.96	(947.41)
Cost of hedging reserve		11.12	(29.18)
Income tax (expenses)/income on cost of hedging reserve		(2.98)	8.14
		8.14	(21.04)
Share in Other comprehensive income of joint ventures/associates (net)		(26.56)	23.62
Other comprehensive income for the year (net of tax)		1,454.37	(1,314.66)
Total comprehensive income for the year		14,375.65	9,579.62

Note: The notes referred in the above financials are included in the Annual Report.

Financial Capital

Consolidated Statement of Profit and Loss

for the year ended March 31, 2021

₹ Crore

Particulars	Note	2020-21	2019-20
Profit for the year attributable to:			
Owners of the Company		11,582.93	9,549.03
Non-controlling interests		1,338.35	1,345.25
		12,921.28	10,894.28
Other comprehensive income for the year attributable to:			
Owners of the Company		1,129.49	(1,032.83)
Non-controlling interests		324.88	(281.83)
		1,454.37	(1,314.66)
Total comprehensive income for the year attributable to:			
Owners of the Company		12,712.42	8,516.20
Non-controlling interests		1,663.23	1,063.42
		14,375.65	9,579.62
Earnings per share (EPS) of ₹ 2 each from continuing operations:			
Basic earnings per equity share (₹)	55	23.82	63.38
Diluted earnings per equity share (₹)	55	23.80	63.29
Earnings per share (EPS) of ₹ 2 each from discontinued operations:			
Basic earnings per equity share (₹)	55	58.67	4.66
Diluted earnings per equity share (₹)	55	58.61	4.66
Earnings per share (EPS) of ₹ 2 each from continuing operations & discontinued operations:			
Basic earnings per equity share (₹)	55	82.49	68.04
Diluted earnings per equity share (₹)	55	82.41	67.95
Face value per equity share (₹)		2.00	2.00
NOTES FORMING PART OF THE FINANCIAL STATEMENTS	1 to 64		

In terms of our report attached
For DELOITTE HASKINS & SELLS LLP
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Membership No. 39826

SIVARAM NAIR A.
Company Secretary & Compliance Officer
Membership No. FCS3939

Mumbai, May 14, 2021

Note: The notes referred in the above financials are included in the Annual Report.

Consolidated Statement of Cash Flows

for the year ended March 31, 2021

₹ Crore

Particulars	2020-21	2019-20
A. Cash flow from operating activities:		
Profit before tax (excluding exceptional items) from:		
Continuing operations	12,235.80	13,430.95
Discontinued operations	10,790.50	883.25
Profit before tax including discontinued operations (excluding exceptional items)	23,026.30	14,314.20
Adjustments for:		
Dividend received	(28.47)	(101.60)
Depreciation, amortisation, impairment and obsolescence	2,904.21	2,462.27
Exchange difference on items grouped under financing/investing activities	(75.47)	5.69
Effect of exchange rate changes on cash and cash equivalents	74.98	(88.14)
Unrealised (gain)/loss on finance leases	(14.55)	-
Finance costs	3,913.44	2,796.66
Interest income	(1,377.66)	(829.78)
(Profit)/loss on sale of fixed assets (net)	(528.81)	33.28
(Profit)/loss on sale/fair valuation of investments (net)	(1,118.77)	(733.84)
(Gain)/loss on disposal of discontinued operations	(10,707.92)	-
(Gain)/loss on derivatives at fair value through profit or loss	-	(13.19)
Employee stock option-discount forming part of employee benefits expense	137.67	190.84
Non-cash items related to discontinued operations	3.13	49.44
Business combination expenses	-	84.28
Impairment of debt instruments	151.26	350.59
Impairment recognised on non-current assets held for sale	0.23	3.93
(Gain)/loss on de-recognition of lease liability/right-of-use assets	(15.78)	(1.85)
Interest expenses/(income) related to discontinued operations	1.16	1.33
Operating profit before working capital changes	16,344.95	18,524.11
Adjustments for :		
(Increase)/decrease in trade and other receivables	2,783.81	(11,278.12)
(Increase)/decrease in inventories	348.90	353.19
Increase/(decrease) in trade payables and customer advances	2,219.78	3,134.23
Cash generated from operations before financing activities	21,697.44	10,733.41
(Increase)/decrease in loans and advances towards financing activities	4,617.71	6.92
Cash generated from operations	26,315.15	10,740.33
Direct taxes refund/(paid) [net]	(3,471.01)	(4,046.45)
Net cash (used in)/from operating activities	22,844.14	6,693.88

Note: The notes referred in the above financials are included in the Annual Report.

Financial Capital

Consolidated Statement of Cash Flows

for the year ended March 31, 2021

	₹ Crore	
Particulars	2020-21	2019-20
B. Cash flow from investing activities:		
Purchase of fixed assets	(1,807.70)	(3,436.82)
Sale of fixed assets (including advance received)	885.36	137.39
Purchase of non-current investments	(1,873.24)	(1,870.64)
Sale of non-current investments	240.19	2,245.29
(Purchase)/sale of current investments (net)	(16,841.55)	2,065.74
Change in other bank balance and cash not available for immediate use	915.13	1,439.82
Deposits/loans given to associates, joint ventures and third parties	(151.59)	(115.21)
Deposits/loans repaid by associates, joint ventures and third parties	-	17.69
Interest received	1,275.45	837.54
Dividend received from joint ventures/associates	175.05	12.53
Dividend received on other investments	28.47	101.60
Settlement of derivative contracts related to current investments	-	13.19
Consideration received on disposal of subsidiaries (including advance received)	295.78	-
Net proceeds from transfer of discontinued operations (net of tax)	11,530.82	-
Consideration received on disposal of joint venture	-	43.16
Consideration paid on acquisition of subsidiaries	(121.77)	(9,895.93)
Cash and cash equivalents acquired pursuant to acquisition of subsidiaries	7.07	210.72
Cash and cash equivalents (of subsidiaries) classified as held for sale (other than discontinued operations)/reclassified from held for sale	13.69	(14.34)
Consideration paid on acquisition of additional stake in a joint venture	-	(48.00)
Net cash (used in)/from investing activities	(5,428.84)	(8,256.27)
C. Cash flow from financing activities:		
Proceeds from issue of share capital (including share application money) [net]	15.85	17.56
Proceeds from non-current borrowings [Note 50]	35,737.52	42,587.43
Repayment of non-current borrowings [Note 50]	(38,318.78)	(33,685.03)
Proceeds from/(repayment of) other borrowings (net) [Note 50]	(6,151.20)	4,915.20
Payment (to)/from non-controlling interest (net) - including sale proceeds on divestment of part stake in subsidiary companies	796.02	(60.05)
Settlement of derivative contracts related to borrowings	66.73	308.29
Dividends paid	(3,650.89)	(3,929.61)
Additional tax on dividend	-	(621.72)
Repayment of lease liability [Note 50]	(381.64)	(258.03)
Interest paid on lease liability	(203.57)	(162.79)
Interest paid (including cash flows on account of interest rate swaps)	(3,184.42)	(2,739.70)
Net cash (used in)/from financing activities	(15,274.38)	6,371.55
Net (decrease)/increase in cash and cash equivalents (A + B + C)	2,140.92	4,809.16
Cash and cash equivalents at beginning of the year	11,117.95	6,460.23
Cash and cash equivalents for discontinued operations (classified as held for sale)	(1.86)	(151.44)
Cash and cash equivalents at end of the year	13,257.01	11,117.95

Note: The notes referred in the above financials are included in the Annual Report.



₹ Crore

Particulars	2020-21	2019-20
Notes:		
1. Statement of Cash Flows has been prepared under the indirect method as set out in the Indian Accounting Standard (Ind AS) 7 "Statement of Cash Flows" prescribed in the Companies (Indian Accounting Standards) Rules, 2015.		
2. Fixed assets include property, plant and equipment, investment property and intangible assets adjusted for movement of (a) capital work-in-progress for property, plant and equipment and investment property and (b) Intangible assets under development during the year.		
3. Cash and cash equivalents included in the Statement of Cash flows comprise the following:		
(a) Cash and cash equivalents disclosed under current assets [Note 14]	13,373.52	11,324.57
(b) Other bank balances disclosed under current assets [Note 15]	2,867.98	3,793.21
(c) Cash and bank balances disclosed under non-current assets [Note 9]	283.91	273.82
Total cash and cash equivalents as per Balance Sheet	16,525.41	15,391.60
Add: (i) Unrealised exchange (gain)/loss on cash and cash equivalents (reflected in Statement of Profit and loss)	(41.41)	(116.39)
Add: (ii) Unrealised exchange (gain)/loss on cash and cash equivalents (reflected in Other comprehensive income)	(75.10)	(90.23)
Less: (iii) Other bank balances disclosed under current assets [Note 15]	2,867.98	3,793.21
Less: (iv) Cash and bank balances disclosed under non-current assets [Note 9]	283.91	273.82
Total cash and cash equivalents as per Statement of Cash Flows	13,257.01	11,117.95
4. Previous year's figures have been regrouped/reclassified wherever applicable.		

In terms of our report attached
For DELOITTE HASKINS & SELLS LLP
Chartered Accountants
Firm's Registration No. 117366W/W-100018
by the hand of

S. N. SUBRAHMANYAN
Chief Executive Officer & Managing Director
(DIN 02255382)

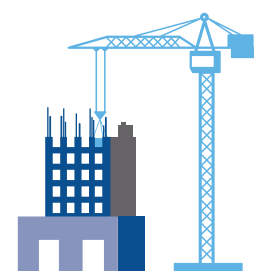
R. SHANKAR RAMAN
Whole-time Director & Chief Financial Officer
(DIN 00019798)

M. M. CHITALE
Independent Director
(DIN 00101004)

SANJIV V. PILGAONKAR
Partner
Membership No. 39826

SIVARAM NAIR A.
Company Secretary & Compliance Officer
Membership No. FCS3939

Mumbai, May 14, 2021



Note: The notes referred in the above financials are included in the Annual Report.

Governance Process

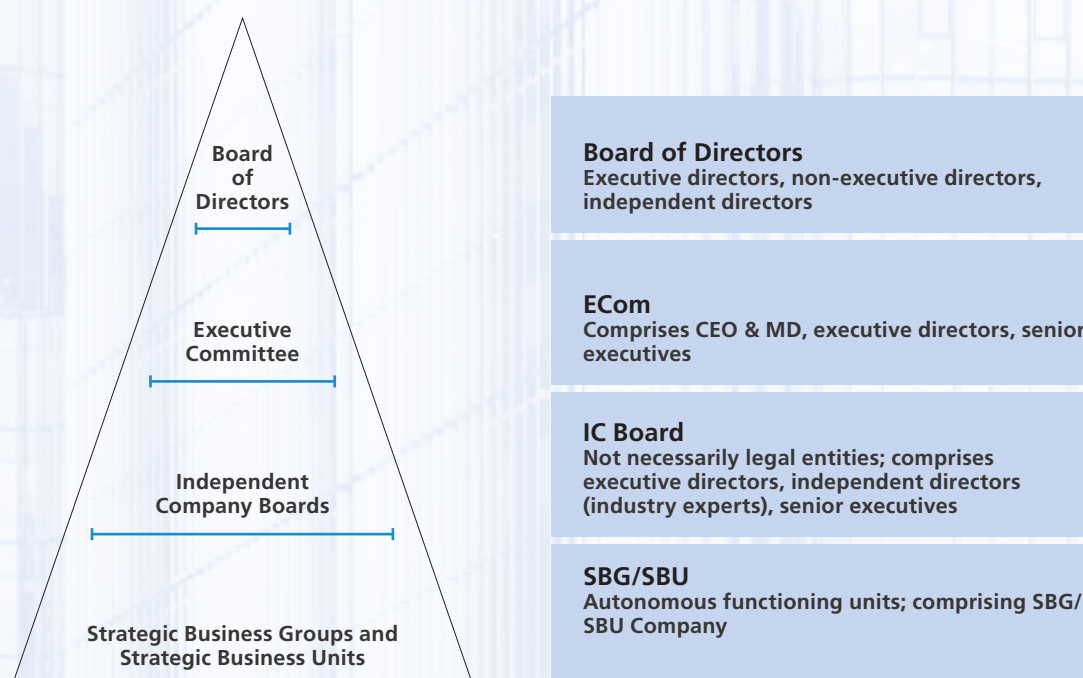
At L&T, our core values revolve around the principles and ideals based on equity, transparency, accountability, responsibility, compliance, ethics and trust. Many governance practices that we follow today were voluntarily adopted before they were mandated by law. Our business is run by professionals with rich expertise in their respective areas of operations – and they are required to continually demonstrate high governance standards.

The widely dispersed nature of L&T's shareholdings as well as the far-reaching impact that the business has on various stakeholders, necessitates strong norms of governance. This is one of the key tenets followed in letter and spirit by the Company in the course of conducting its affairs. A robust governance charter enables the organisation to conduct its affairs in a trustworthy manner, while creating value for all stakeholders.

Governance in the conduct of business is achieved through a formal management structure and a set of policies, procedures and guiding principles that are designed to ensure system-based compliance with governance standards. These governance standards have evolved and matured over time.

Governance architecture

Our Company operates through a 4-tier management structure, which enables functioning of the business in an orderly manner with two-way feedback and communication methods established between different levels. The governance structure helps ensure greater management accountability and credibility, and facilitates enhanced business autonomy, performance discipline and development of business leaders.



Board of Directors

The Board's composition conforms to the provisions of the Companies Act 2013 and SEBI regulations. At this apex level, the Board formulates strategy through a consultative process, and reviews the affairs of the Company regularly – for further details, please refer to the Board Report to the Shareholders of the Company on pages 70 to 181 of the Annual Report.

During FY21, the Board met on eight occasions. It also functions through different Board Committees who oversee specific areas of operations on behalf of the Board - the terms of reference of different committees are either governed by statute or defined by the Board. The Board Committees are chaired by Independent Directors except for the Stakeholders Relationship Committee, which is chaired by a Non-executive Nominee Director of LIC. For further details of Board Committees, please refer pages 98 to 107 of the Annual Report.

The following Board Committees are currently in force:

Name of Board Committee	Number of meetings in FY21
Audit Committee	8
Nomination and Remuneration Committee	5
Stakeholders' Relationship Committee	3
Corporate Social Responsibility & Sustainability Committee	4
Apex Risk Management Committee	3

Executive Committee (ECOM)

This group represents a top management review and decision-making body, which collectively evaluates both strategic and operational functioning of the various businesses. The members usually meet at least once a month, and more frequently in case of matters requiring attention at this level. All important matters including economic, environmental, and social topics requiring collaborative guidance and direction across the enterprise are reviewed by this body.

Independent Company (IC) Boards

These are apex bodies at the business level and primarily focus on strategic, tactical and operational matters related to the business verticals. While most verticals are not legal entities, they are expected to operate in an independent manner so that each business functions in a Board-managed manner. Each IC has a Board comprising Members from the Parent Board, 2 or 3 Independent Members from the Industry and 2-3 Senior Executives of the IC. The IC Board helps the Business Head in bringing outside-in view and assessing the business performance.

Strategic Business Groups (SBG)/Strategic Business Units (SBU)

These represent the fourth tier of the governance structure and are designed to function in an autonomous manner. Each SBG/SBU is expected to function independently and is periodically reviewed for outcomes on all key performance parameters – both financial and non-financial.

Governance Process

Policies, procedures and guiding principles

Formalisation and operation of the governance model is achieved through a wide-ranging set of policies, procedures and process-driven systems that have been institutionalised across the Company

We support, follow and demonstrate our commitment to the following initiatives:

- GRI Sustainability Reporting Standards
- United Nations Global Compact Network India (GCNI)
- Applicable International Labour Organization (ILO) conventions
- The National Voluntary Guidelines (NVG), India
- Sustainable Development Goals (SDGs)
- Other United Nations (UN) directives that comprise:
 - Statutory and regulatory compliance
 - Business ethics
 - Fair and equal opportunity to all employees
 - Employee development through training
 - Labour camps at construction sites
 - Medical facilities at units, offices and project sites
 - Steps to measure, monitor and conserve materials and energy

Anti-Corruption and Anti-Bribery: Covenanted employees undergo mandatory training for anti-corruption and anti-bribery practices. It is also a part of staff rules for covenanted employee staff which is signed annually. Anti-corruption and anti-bribery is a part of tender declaration.

L&T Policies	Pillar
Sustainability Policy	E,S,G
EHS policy	E,S
Green Supply Chain Policy	E
HR Policy	S
CSR Policy	S
Policy for Protection of Women's Rights at Workplace	S
Whistle Blower policy	G
Risk Management Policy	G
Related Party Transactions Policy	G
Quality Policy	G

Noteworthy policies, procedures and directives are summarised below:

Director's familiarisation programme

Our Company has a structured mechanism to familiarise Independent Directors about the fiduciary roles and responsibilities of Directorship.

- Regular communication with Board members takes place through circulation of newsletters and press releases, augmented by site/factory visits that are arranged periodically.
- Presentations are regularly made to the Board as well as the various sub-committees of the Board, where Directors get an opportunity to interact with the senior managers within the Company on relevant matters of business, strategy, performance parameters, policies and processes.
- During FY21, a total of 47 training hours were collectively imparted to Independent Directors.

Board evaluation

Performance evaluation of the Board, Committees, Chairman and the individual Directors is done through a process whereby all Board Members take part in the evaluation procedure using an external third-party IT tool (owned and administered by a specialist external agency).

- The evaluation programme is led by an Independent Director in his capacity as the Chairman of the Nomination and Remuneration Committee.
- Each Director is given relevant feedback and the overall evaluation outcome is discussed at a Board Meeting once every year (refer page 77 of the Annual Report).

Whistle-blower policy

This policy was formulated in 2004 and has matured and evolved, based on experience as well as statutory requirements of the Vigil Mechanism introduced by the Companies Act, 2013.

- Our Company has a Whistle Blower Investigation Committee (WBIC) comprising 5 senior executives (Chief Financial Officer, Company Secretary, Corporate HR Head, Chief Internal Auditor and a senior executive) to manage both identified and anonymous complaints.
- The WBIC is responsible for investigation and resolution of all complaints and uses external agencies with forensic expertise wherever required.
- Under the policy, whistle-blowers are assured of protection from any type of harassment or victimisation.
- During FY21, a total of 48 complaints were received through by the WBIC, of which 46 complaints were resolved through appropriate action, and 2 complaints are in the process of being resolved.
- A separate whistle blower policy has been extended to suppliers and channel partners – these policies are available for download at <https://investors.Larsentoubro.com/CorporateGovernance.aspx>.
- For further details on the whistle blower policy and its implementation, please refer page 78, 79 and 108 of the Annual Report.

Protection of women at the workplace

Our Company has formulated a policy on 'Protection of Women's Rights at Workplace' in line with statutory provisions covering sexual harassment of women at offices and other establishments, where employees are located.

- The policy is administered by two Committees whose jurisdiction is demarcated by geographical areas that the Company operates in.
- Awareness programmes are conducted across the Company to sensitise employees on the importance of treating women colleagues with respect and dignity, and to inculcate awareness about the ambit of the term 'sexual harassment'.
- During FY21 around 13,400 employees had undergone training to programme/workshop on digital platforms.

Governance Process

Code of Conduct

Our Company has a formal Code of Conduct (CoC) applicable to Board members and senior officers (please refer to <https://investors.Larsentoubro.com/CodeOfConduct.aspx>).

- Another detailed CoC applicable to all Supervisors, Executives and Management personnel is in force, which includes a detailed escalation matrix and procedures to deal with breaches of the Code.
- The Code has also been extended to all unlisted Group Companies.
- The CoC incorporates principles of ethical behaviour and all designated people are required to give annual declarations on compliance.
- Periodic training is conducted for relevant stakeholders.
- Our Company is committed to such behaviour that is in consonance with the principles of honourable and fair business practices and affirms that it will not be party to any acts that compromises ethical values.
- Please refer to the Annual Business Responsibility Report on page 26 of the Annual Report for further details.

Code of Conduct for vendors

Our Company has extended a separate CoC for vendors and service providers.

- It covers the need for compliance with environmental regulations, health and safety, labour practices, human rights aspects, minimum wages, freedom of association, collective bargaining, prohibition of child labour, forced and compulsory labour, ethical behaviour, transparency in business processes and environment conservation.
- All new vendors/service providers need to sign this combined COC as part of the initial empanelment process.
- During FY21 29,407 suppliers have signed the Code of Conduct.

Stakeholder engagement

Our Company engages with multiple stakeholders (Shareholders, Customers, Employees, Vendors, Government bodies, Communities, NGOs, Debt Financiers, among others) on an ongoing basis through multiple business/ official channels as well as structured stakeholder engagement programmes.

- The Investor Relations department has a structured process of engaging regularly with capital market participants.
- In FY21, the department engaged in 306 such meetings (covering 497 institutions) through a combination of one-on-one and group meetings in investor conferences, non-deal roadshows, meetings at the Company's offices and through audio-video channels.
- Our Company has consistently won global accolades over the last 10 years consecutively for its best-in-class Investor Relations programme.
- The Company also has a dedicated Corporate Brand Management & Communications department, which facilitates an ongoing dialogue between the Company, media channels and citizens. Further details on communication channels with external and internal stakeholders are elaborated in page 31 of the Annual Report.

Internal controls

The Company has a robust framework of internal controls at the entity level as well as the process level, which is largely designed on the COSO model.

- This framework ensures that adequate safeguards are built into processes through a control system that embeds governance into the multitude of transactions that take place in a decentralised manner across the organisation.
- The framework is documented and covers both operational and financial controls (including IT and Cyber Security controls) and spans the whole range of processes across the organisation.
- Design and efficacy of these controls are regularly tested by the Corporate Audit Services Department, the Corporate Internal Controls Department and the Statutory Auditors.
- Reports on processes, exceptions and remedial measures are placed before the Audit Committee on a quarterly basis.
- Please refer to page 334 and 335 in the Management's Discussion and Analysis portion of the Annual Report for further details.

Prevention of insider trading

The Company complies with guidelines issued by SEBI on the prevention of insider trading.

- This includes systems for orderly disclosure of Unpublished Price Sensitive Information (UPSI) in accordance with statutory regulations.
- Periodic emailers are sent across all units of the Company highlighting the salient features of the SEBI Regulations as well as L&T Securities Dealing Code.
- Internal norms relating to disclosure practices are disseminated to all 'Designated Persons' and appropriate disciplinary action is taken even for minor infractions.
- There were around 183 procedural violations of the L&T Securities Dealing Code by designated employees during 2020-21. These violations were reported to SEBI and penalties amounting to ₹ 10.21 Lakh recovered from the employees were remitted to SEBI Investor Protection & Education Fund (IPEF). In addition, an amount of ₹ 10.02 Lakh was recovered towards profits made from contra-trade and also remitted to SEBI IPEF

Annual Business Responsibility Report (BRR)

The annual BRR, which was introduced through legislation in 2015, embodies the essence of governance practices across the organisation.

- The BRR essentially covers, inter alia, aspects of sustainability and various features of governance including ethics, transparency, accountability, stakeholder grievance redressal mechanisms, well-being of employees and human rights.
- The BRR also affirms that the policies are aligned with the principles of NVG (National Voluntary Guidelines) and conform to international standards of ISO 9001, ISO 14001, OHSAS 18001 and ILO principles.
- For details refer Pages 22 to 43 of the Annual Report.

Governance Process

Related Party Transactions (RPT)

Our Company engages with Related Parties (as defined under different statutes) in the normal course of business.

- To ensure that there is no conflict of interest and such business is conducted on arms-length basis, all such transactions are authorised through formal authorisation matrices designed at an apex level and also documented in line with statutory requirements.
- The Audit Committee gives prior approval for all proposed and probable RPT and subsequently reviews the actuals on a quarterly basis.
- Statutory auditors also comment on RPT compliance in their annual Audit Report.
- The monetary quantum and nature of all RPT (including transactions with Subsidiaries and Joint Ventures) are also disclosed in the annual Financial Statements (please refer Note 47 of the Financial Statements on pages 422 to 439 of the Annual Report for further details).
- The RPT policy is also available for download on the Governance and Compliance section of the Company's website (<https://investors.Larsentoubro.com/CorporateGovernance.aspx>).

Governance certification (CEO/CFO, Independent Auditors), Compliance System

- The CEO and the CFO periodically certify to the Board (on quarterly basis) that both of them jointly accept responsibility for establishing and maintaining Internal Controls on Financial Reporting (ICFR), that no instances of fraud have occurred in the period under reporting, that the Financial Statements do not contain any materially untrue statements and that those statements present a true and fair view of the state of affairs of the Company.
- A similar certification system has been institutionalised and cascaded to all levels where quarterly financial statements that undergo audit/limited review by Statutory Auditors are also signed by Business Heads and Finance Heads.
- The Statutory Auditors also furnish an annual 'Independent Auditors Certificate' on compliance with Governance norms prescribed by SEBI. For details refer Page 120 of the Annual Report.
- The Company has also institutionalised a formal compliance system whereby business heads and heads of corporate departments certify compliance with the various statutes applicable to them.
- A summary of the compliance certifications is also presented to the Board quarterly.

Risk management

Our Company first formulated a Risk Management policy in 2005, following the issuance of statutory amendments to listing agreements prescribed by SEBI.

- The policy has subsequently evolved and matured over the years into a strong framework that cuts across business, operational, financial, geographical, IT and Cyber Security, brand and reputation protection, geopolitical, and talent management risks.
- The Company's risk policy and administration rests within a pyramid comprising a Board Risk Management Committee (a Board level Committee with two Independent Directors and one Non-Executive Director); an Apex Risk Management comprising the CEO, CFO and a Non-Executive Director; a Corporate Risk Department headed by the CRO, and Risk Committees at the Business Vertical (IC) level.
- A feedback mechanism has been institutionalised which extends to the Board level.
- The Company's Corporate Risk Management initiatives have won recognition and accolades in multiple forums over the years.
- Further details on risk management have been elaborated in a separate section of this report.

Review Mechanism

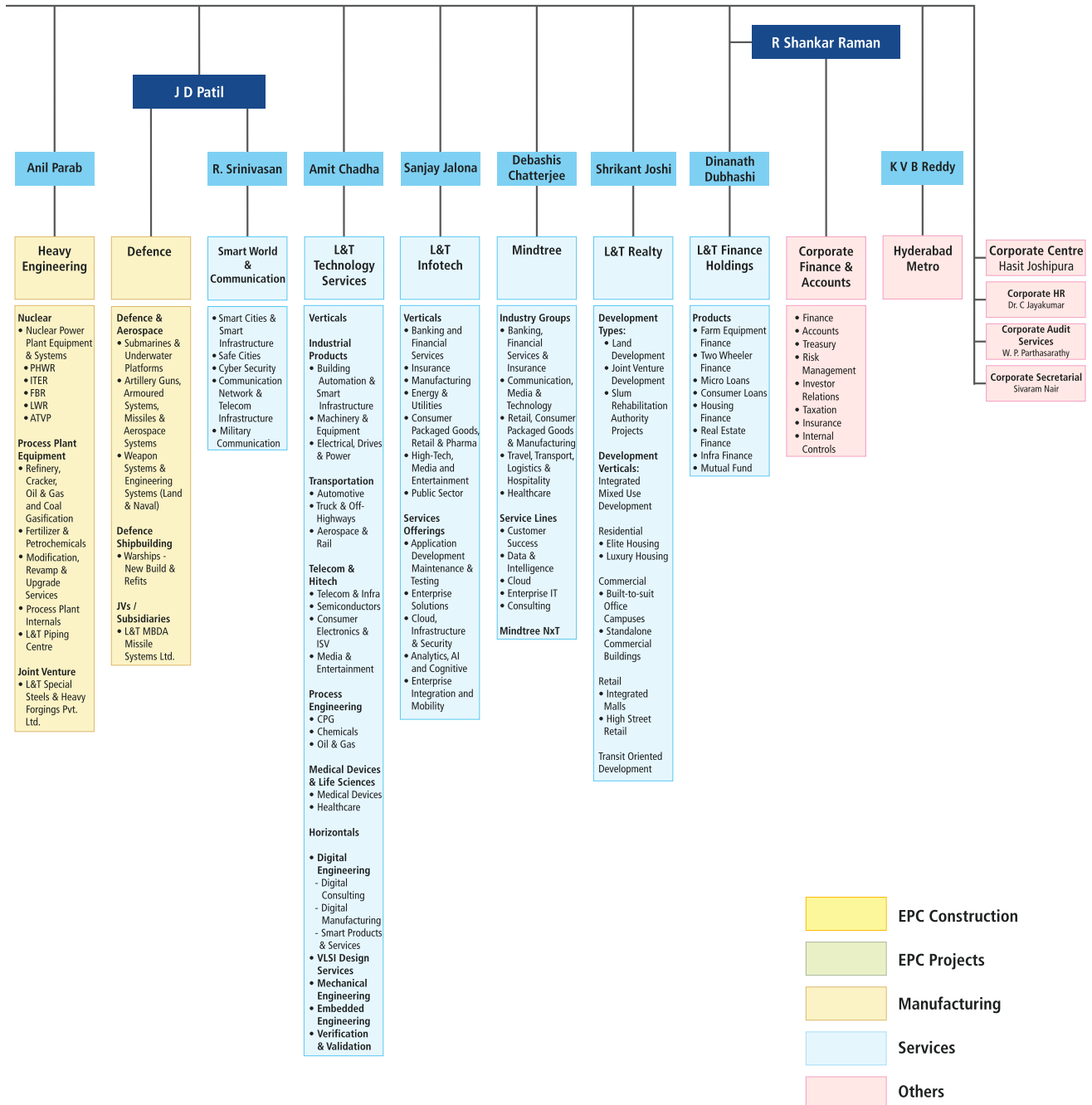
Corporate Reviews

- Compliance reporting
- Quarterly Business Review
- Quarterly EHS council meetings
- Monthly ECom meetings
- Monthly HR council meetings
- Quarterly labour management

Business/IC Reviews

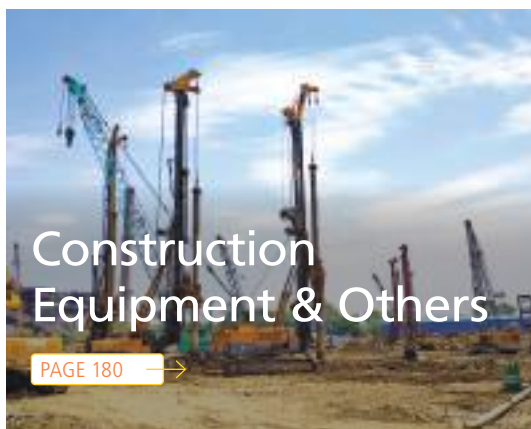
Review area	Scope	Periodicity
Business review	Business	Monthly
PRM	Operations	Monthly
Risk Management	Prebid/execution	As per schedule
CSTI	Budget/financial	Monthly/real time
CSR	Social audit/budget	Monthly/real time
Digital Initiatives	Product launch and enhancements	Monthly
SCM	Online dash boards	Live
Business Segments	Project/progress	Quarterly
HR	Staff details Training	Monthly/real time
Safety	Online, risk etc.	Live/annual
O&M	Project & performance	Quarterly/Monthly/real time
Finance	Progress update	Monthly
Labour Management	Update	Weekly





As on 30.06.2021

Business Review



Construction



Riyadh Metro Line -3 Kingdom of Saudi Arabia

Business Review

Buildings and Factories

We continue to lead in the engineering, procurement and construction (EPC) of airports, hospitals, stadiums, retail spaces, educational institutions, IT parks, office buildings, data centres, residential buildings, high-rise structures, mass housing complexes, cement plants, industrial warehouses and other factory structures in India and other focused international markets. We are recognised across the globe for creating iconic structures and engineering marvels.



ICC Towers, Mumbai

MAJOR ACHIEVEMENTS

Landmark executions

IIT HYDERABAD

Three-dimensional in-situ folded roof slab with huge span varying from 42-56 m was cast in the IIT Hyderabad project

IICC, DWARKA

Erection of roof truss modules weighing 1,000 MT using the new innovative hybrid methodology was executed in 5 stages – 4 modules each weighing 200 MT in IICC, Dwarka project

MAHINDRA, TAMIL NADU

First to build a parabolic asphalt high-speed test track with a unique 44-degree curvature, at Mahindra test track project, Tamil Nadu

Significant Initiatives

- Under **B&F Fast**, a business initiative was undertaken for construction time reduction, using the latest technologies such as DfMA (Design for manufacturing and assembly) and PPVC (Prefabricated, Prefinished Volumetric Construction).
 - Promoted factory-based, off-site construction, reducing the overall timeline of the project and ensures high quality
 - A modular set-up for setting up quick hospital buildings has already been established as a trial
- Developed “L&T Buildings Occupational Standards” (LTBOS) in line with National Occupation Standards (N.O.S) by NSDC to help screen workmen for their designated trade and skill before deployment.

Attempted 3D printing in FY21 and built a single-storey building as a pilot project, in a quest towards the use of high-end technology in the process. Further research enabled to complete India's first 3D printing of a G+1 building with reinforcement. Both the modular facility for hospitals and the 3D printed structure were done at L&T's Kancheepuram facility.



Use of 3D printing in construction

Environment, Health and Safety

The business has been continuously improving safety standards by introducing various training programmes, digital/VR training and awareness sessions. An integrated training module has been rolled out as part of the WISA (Workforce Induction and Skills Application) digital app. The module enables the project teams to identify the training needs for specific trades of workmen, allows effective scheduling of the training, build worker profile, track individual worker competence levels and maintain training records

Human Resources

To nurture the psychological well-being of staff during the COVID-19 crisis, an Online Behavioural Intervention, encompassing anxiety and fear management, the importance of positive thinking and managing change during turbulence, were designed. Employees were also encouraged to attend VILT (virtual instructor-led training) sessions to maintain the pace of learning. About 430 virtual training sessions were conducted during the year. Through these initiatives, four training man-days per staffer were achieved, with coverage of 79% of staff.

430

Virtual training sessions
conducted in FY21

Diagnostically Evolved Site Intervention (DESI) was implemented through Training Need Analysis at the project site level and a tailor-made training session was designed for 18 project sites pan India.

The learning edge platform (LEDGE) was made to improve the engagement of the engineering trainees that are inducted every year by providing them with a structured learning plan and hands-on experience of the various functions involved in a project.

Buildings and Factories digital skill inventory comprises employee's knowledge, experience and skills. A database of profiles of 6,000 staff was built through a digital solution which structures, categorises and stores up-to-date skill information under 40 major skills and 540 sub-skills with proficiency levels from Basic to Role Model.

Business Review

Transportation Infrastructure

It is one of the oldest, largest business of ours. We feature among the most reputed EPC contractors in India in the road, railway and airport sectors. It has two Strategic Business Groups (SBGs), namely, Roads, Runways and Elevated Corridors (RREC) and Railways Business Group (RBG).



A section of Mauritius Metro Project

Significant Initiatives

Further to full range railway system integration projects such as the Dhaka and Mauritius LRTs, the Railway business is gearing up to assimilate newer technology skills to address some of recent projects, such as the RRTS Slab Track and Mumbai Metro LVT Track.

Environment, Health and Safety

- Transportation Infrastructure projects are typically spread across hundreds of kilometres, with a multitude of discrete safety risks that are both location and task-specific, and oversight of adherence to safety norms at each work-front simultaneously poses a major challenge. To overcome this, various initiatives were undertaken to enforce and monitor EHS protocols across all work-fronts.
- Periodic virtual training by means of SPARSH (Standard Precautions using Augmented Reality for Safety and Health) and virtual reality devices at various work locations for workmen have been introduced. In FY21, 27,587 trainings, corresponding to 272,261 man-hours, were conducted across all sites.
- Inspection and verification are done online through a Digital App – RtR (Reverse the Risk) and Dome 360 Degree that allow safety officers to remotely inspect and monitor safety measures and ground conditions before giving the go-ahead for execution.
- The Green Card System is implemented across the business for fitness verification of P&M equipment before deployment through the IB4U digital app.
- The Environment Management System (EMS) has been implemented in the business and various control measures to reduce environmental impact are being followed across sites. Good practices

such as use of fog cannons, water sprinklers for dust suppression, proper disposal of C&G and hazardous wastes and use of renewable energy (solar power) are being followed.

Human Resources

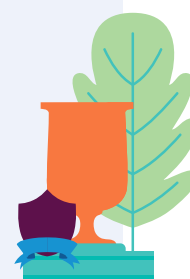
Following the nation-wide lockdown, the HR team proactively started various initiatives to keep the staff motivated and engaged at their homes by conducting various awareness programmes, training programmes, webinars and personal connect to check on their well-being and offer any help required. To keep the staff motivated, the business introduced Hi5 – an online portal for recognising staff members who have done extraordinary work amidst the lockdown.

The business has taken a significant step to enhance the safety culture by instituting the LIFE (Loss and Injury Free Environment) Awards to recognise and reward project teams that demonstrated excellence in safety practices.

To ensure learning and development of the staff, two comprehensive Competency Developmental Programmes were designed and initiated this year – ‘NPL – Nurturing Potential Leaders’ for senior potential leaders and ‘PEDP – Planning Engineers’ Development Programme’ for Planning staff in junior cadres.

Recognised for our efforts

During FY21, the business was conferred 17 international awards, 7 of which were from RoSPA (Royal Society for the Prevention of Accidents) and 10 from the BSC (British Safety Council). The business has also won 3 prestigious safety awards from NSC (National Safety Council), India.



Heavy Civil Infrastructure

L&T enjoys undisputed market leadership in the Heavy Civil Infrastructure (HCI) business with EPC projects across core civil infrastructure segments (metros, special bridges, hydel and tunnels, ports and harbours and defence). We are involved in the construction of metro rail systems in almost all the major Indian cities. We have established a position of leading in bolstering the country's defence. Dedicated design and technical centres, competency cells, specialised training centres, digital project management and a talented pool of employees help us sustain a leading role, attract marquee clients, penetrate new geographies and secure major orders.



Kakrapar Atomic Power Project Package 3 & 4

Significant Initiatives

Digitalisation has become a way of life and integrated into project delivery process. The business digitally monitors, in real-time, productivity of the 3M – Men, Material and Machinery – factors critical to project success. For effective project delivery, the business leverages contemporary digital technologies and drone-based project monitoring, 5D BIM and innovative digital platforms such as WISA (Workmen Induction and Skills Application) for workmen mobilisation and induction and Virtual Reality (VR) based training of workforce in EHS (Environment Health and Safety) aspects.

Environment, Health and Safety

- Committed to the mission of 'Zero Harm' the business clocked 343 Million safe man-hours in the year, and 16 thousand man-hours were invested in EHS awareness and training. The EHS app was launched to ensure compliance with corporate SOPs on restarting projects. The supervisor EHS checklist was developed to ensure activity risk control by the supervisor. The Artificial Intelligence platform was implemented which improves construction safety through hazard spotting at construction stages and suggests the applicable requirements for the hazards identified.
- British Safety Council (BSC)-accredited 1-day BBS (Behaviour Based Safety) awareness certification courses were organised for projects. A total of eight training programmes were conducted during the year.
- The business provides control measures for emission control, wastewater treatment and waste management at construction sites in line with regulatory requirements and ISO 14001 EMS requirement. Wastewater from the labour colonies and site offices is being treated by STP. Bio-toilets are also being used for sewage treatment at project sites.
- Various projects across the business have received EHS awards:
 - Gold Award from RoSPA (The Royal Society for the Prevention of Accidents) – UK, has been conferred upon KKNPP 3 & 4 MPCW projects
 - The Prestigious Golden Peacock Environment Management Award for 2020
 - In October 2020, Kakrapar Atomic Power Project won the 'Sarvashreshtha Suraksha Puraskar Award' (Gold Trophy) from National Safety Council of India (NSCI)
 - Kakrapar Atomic Power Project 3 & 4 bagged the 'Best Safe Contractor Award (Winner) – 2020-21' from NPCIL (Nuclear Power Corporation of India Limited)

Business Review

Human Resources

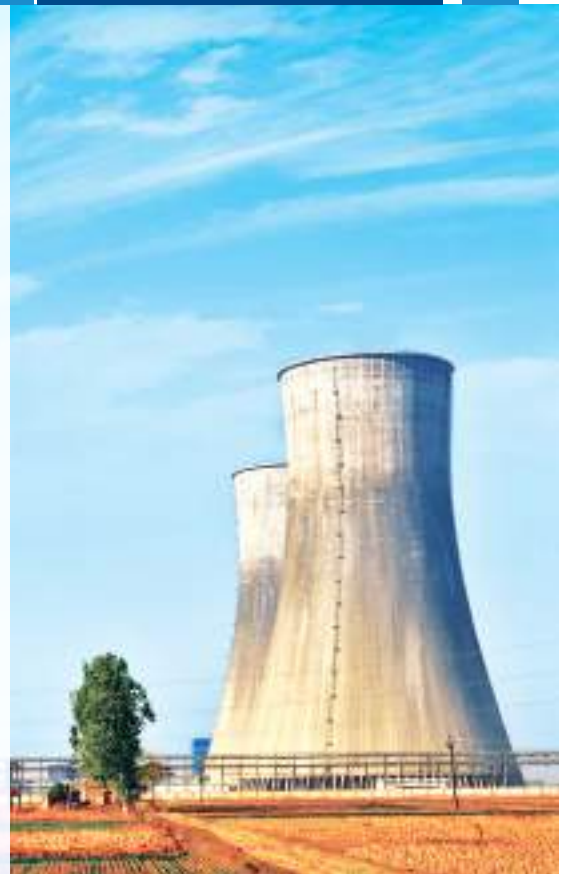
- The business has always been focusing on employees and innovative initiatives towards employee development.
- Leadership interventions such as Global Leadership Development Programme (GLDP), Frontline Leadership Programme (FLLP), and Project Leaders Assessment and development (PLDP) are held regularly.
- The initiative of Trainee Engagement and Development Center (TEDC) for Graduate Engineer Trainees (GETs) is well institutionalised.
- A 360-degree feedback has been introduced for Project Directors, followed by rigorous coaching based on the 'GROW' (Goal, Current Reality, Options and Way Forward) model.
- During the lockdown and thereafter, various employee engagement and well-being programmes such as awareness on COVID-19, mental health, on-line cultural programmes Rock Off and Rave On, talent shows and various competitions were organised, with continuous employee reach-out initiatives.
- The HR Talent Acquisition function has been accredited with ISO 30405 : 2016, endorsing its transparent recruitment process.
- Further, the business has been conferred prestigious awards such as the Golden Peacock HR Excellence Award and ATD Best Award for Talent Development from the internationally acclaimed Association of Talent Development body of USA.



Four-lane road from Krishnagiri to Thopurghat on NH-7 in Tamil Nadu

Power Transmission and Distribution

The Power Transmission & Distribution (PT&D) business vertical is a leading EPC player in the Transmission and Distribution (T&D) and solar energy segments. We offer 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 and fibre optic backbone infrastructure, to solar PV plants, including floating solar, battery energy storage systems and mini-/micro-grid projects. We are present in India as well as in the Middle East, Africa and ASEAN markets.



Rajpura project at the cusp of completion in December 2013

Significant Initiatives

- A specialised team of top-notch experts has been created to develop and deliver smart digital solutions worldwide, leveraging the engineering know-how and integration abilities.
- The first international battery energy storage system order secured in Thailand has achieved substantial progress. The 52 MWh system is meant to provide grid stability in a region with a large, inherently intermittent renewable generation.
- A special thrust was given on Stakeholder Connect, a drive through which the supply chain team reached out to different levels of vendors to deliberate on challenges and mitigation measures.

Environment, Health and Safety

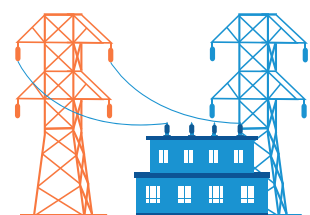
The implementation of 'Vision Zero Harm' related initiatives and enforcing of appropriate SOPs were pursued with vigour and enthusiastic participation. Helmets with in-built Bluetooth devices were deployed to improve communication amongst workmen engaged in height work. The analytics generated through the improvised SHEILD application were helpful in identifying root causes and associated behaviours, thereby enabling implementation of suitable interventions. Various digital and technical initiatives such as One Time Password-based approval for shutdown works, deployment of safety kiosks and biometric access for forklift operation in factories were implemented. More than 2.75 Lakh manhours of training were provided to staff and workmen to enable them to imbibe the safety culture.

2.75 Lakh

Man hours of safety training were provided in FY21

Human Resources

- HR has conducted several awareness sessions for employee health and wellbeing.
- A wide range of virtual learning activities and digitally collaborated tools were created. Several learning opportunities and knowledge-sharing sessions for skill upgradation were provided.
- As part of employee development and talent build-up, the business continues to create a talent pipeline across the levels through bespoke development programmes and coaching.
- A framework named 'REACH' has been rolled out, with year-long activities, designed to elevate employee engagement experience.



Business Review

Water and Effluent Treatment

The Water & Effluent Treatment (WET) business specialises in the water infrastructure construction for efficient usage, conservation and treatment of water. It is a leading player in the domestic market and has significant success globally.



48 MLD Water Treatment Plant, Gadaj, Karanataka

Patents

In a constant endeavour towards achieving self-sufficiency in treatment processes and transforming into a 'Technology Driven EPC', the business has developed, incubated and patented a new technology for domestic wastewater treatment.

Environment, Health and Safety

- Achieved 117 Million safe man-hours for the year
- 600+ Virtual EHS audits conducted to monitor EHS implementation across project sites
- Proactive risk mitigation through patented ViewEHS app for centralised reporting, documentation and EHS performance measurement
- 5.6 Lakh manhours spent on training staff and workmen at project sites. Training modules are tailor-made project-wise for identified hazards that could lead to major incidents
- Development of ATL (Any Time Learning) Modules on ISO 45001:2018 and ISO 14001:2015 Standards for designing and implementing safe, healthy and environmentally friendly workplaces across offices and sites
- EHS Climate Survey to evaluate the maturity level of the EHS culture in the organisation

117 Million

Safe man-hours achieved in FY21

Sustainability Initiatives

- The business works with local communities, NGOs, schools and colleges to enhance green cover and spread awareness about the environment. Over eight Lakh saplings were planted across the country during the year.
- 'Go Green' campaign conducted across project sites to encourage reuse and recycle of waste materials. 12,000 MT of waste was recycled so far.
- 'Ulta Chatha' initiative was curated to facilitate ground water recharge by rainwater harvesting in all project sites.
- Solar panels were installed across project sites to reduce dependence on non-renewable energy sources.

Human Resources

- Thrust on leadership development, competency development and succession planning with focused competency development programmes, coaching programmes and capability building courses
- Employee Recognition Programmes, such as PRAISE and RAVE, to spark the innovative spirit of our employees and ensure continued excellence at work
- Development Week 2020: A unique learning initiative to create awareness about the training and development offerings available for all the employees to upskill themselves
- Learner's Corner: An internal website which serves as an easy-to-access and user-friendly platform to host Learning & Development offerings
- 'WET IC Radio': A new medium of internal communication with employees using podcasts

Metallurgical and Material Handling

The business offers its global clients comprehensive EPC solutions for the metal (ferrous and non-ferrous) sectors. It undertakes end-to-end engineering, procurement, manufacture, supply, construction, erection and commissioning, spanning the complete spectrum from mineral processing to finished metal products.



Blast Furnace, JSW, Dolvi

The comprehensive product solutions includes mineral crushing equipment and plants, surface miners, premium sand plants, material handling equipment (stackers, reclaimers, wagon tipplers, ship unloaders, multipurpose cranes and other mining equipment) as well as steel plant machinery catering to cement, mining, power, construction, steel, fertilisers and chemical plants.

Marquee projects

Marquee projects commissioned/at an advanced stage of completion in FY21 are:

- Slab caster, Bokaro Steel Plant – first slab casted
- Coke oven project, JSW Steel, Dolvi – Completion of first coke push of Battery D
- Blast furnace, JSW Steel, Dolvi – Commencement of stove heating up
- SK Mines PH III – Commissioning of Phase III graphite package
- 12 Surface miners commissioned across India for various clients

MAJOR ACHIEVEMENTS

JSW STEEL, BELLARY

5 MTPA blast furnace and steel melt shop projects for JSW Steel, Bellary

VEDANTA, LANJIGARH

3 MTPA Alumina Refinery project for Vedanta at Lanjigarh

VEDANTA, LANJIGARH

In-house design, development and manufacturing of launching girder for high-speed railway project

Business Review

Significant Initiatives

The business has formed strategic alliances with leading global technologists to offer comprehensive EPC solutions across various sectors of mineral beneficiation, steel processing units and various by-product plants of mega size. Technical collaboration has been strengthened with Kemco, Japan for the addition of new products for the construction industry.

The business has embarked on significant modularised and mechanised construction approaches to improve efficiency and the speed of delivery.

Environment, Health and Safety

The EHS roadmaps were launched based on organisation-wide policies. To combat the COVID-19 pandemic at sites and offices, proactive initiatives were taken, such as strict implementation of SOPs, adequate quarantine/isolation rooms, recording attendance through facial recognition, and webinars/training programmes for resumption of work post lockdown.

Increased implementation of digital technologies helps to regulate safe working conditions. Various digital tools include Virtual Reality (VR) based training modules for 'Safe Material Handling' and the IB4U app for tracking the inspection of various equipment and PPE, EHS Training integrated through the WISA app and Chatbot for health monitoring.

3,700+ EHS Training Programmes were conducted during the year, covering 0.43 Million training man-hours. Various projects and factories received 7 RoSPA Health and Safety awards during the year.

Environmental initiatives undertaken are as follows:

- Recycled plastic plywood extensively deployed along with plastic formwork to reduce the dependence on natural hardwood or treated plywood
- Dust-suppression through bio-based solution implemented at a project site
- Occupancy sensors at office buildings (EWL facility) to optimise power consumption
- Usage of spillage tray implemented at several project sites

Human Resources

Focus was laid on creating a robust talent pipeline by identifying future and potential leaders. The impetus was on all-round development of business leaders by providing challenging opportunities, job rotation, active handholding, and mentoring/grooming by senior leaders. Across the cadres, key high-potential talent is identified right from 'Talent in Cradle' for staff in S&E Band to 'Leaders on the Go' for senior Tier 3 staff. Leaders for senior key positions are identified as part of succession planning. A host of specific competency-based programmes are organised to shape and fine-tune their leadership skills.

Despite the pandemic business continued with talent acquisition activities through virtual mode, right from interviewing until onboarding. For the first time, onboarding and orientation of GET/PGETs was successfully executed using the digital platform. Learning and Development went totally virtual during the lockdown, in view of all SOPs/Covid protocols.

A wide range of technical and behavioural programmes was conducted, ranging from Data Analytics, Construction 4.0, Smart EDMS system, Primavera, Aveva, Building Agile Teams, Creativity and Innovation, Analytical Thinking and Situational Leadership. ATL Next has also played an important role in meeting the training needs of staff members, being an effective virtual mode of imparting training.

During the lockdown, initiatives focused around 'Wellness' of the staff as well as their availability for business through 'Work from Home'. Flexi-time was introduced to make it easy for staff to attend office. Dedicated medical support, doctor on call, counselling sessions through TISS and COVID-19 SPOC across the locations were key interventions to maintain staff health and morale. At sites, as per the SOP, arrangements were made for stay, food and site commute to ensure staff availability and wellness.

A series of Town Hall Leadership Speak sessions for the business, Call to Staff and Joy @ WFH established effective communication channels for clarity amongst staff on the way forward during such challenging times.

Smart World & Communication

L&T's Smart World & Communication (SWC) vertical was created in 2016 to address the emerging need of a safe, smart and digital India.

Smart cities and Smart infrastructure

Safe cities

Communication and Telecom infrastructure



Integrated Command Control Centre for NDMC

Major Achievements

- BharatNet Phase-II Active Electronics in Tamil Nadu, Package-C project through TANFINET
- Real Time Information System through Centre for Railway Information System for Indian Railways

Environment, Health and Safety

- Conducted ~200 EHS campaigns to raise awareness and to engage staff and workmen. ~19 external trainings were conducted through experts and health care professionals to educate on COVID-19, mental stress, personal hygiene, among others. The business completed 4.26 Million safe man-hours during the year. 952 trainings were conducted, clocking over 17,159 training man-hours.
- The inhouse digital application 'VIEW EHS' was effectively utilised to monitor, track and analyse EHS observations, safe execution cards, trainings, audits, inspections, forms and other activities, resulting in an incident free year.

4.26 Million

Safe man-hours in FY21

Human Resources

- The business continues to attract expert technical talent and industry leaders in the areas of Safe, Smart and Communication domains.
- Inducted young technical talent from leading campuses, such as IITs and NITs. 'Udaan' – the entry-level training and mentoring programme, has played a pivotal role in getting fresh graduate engineers ready to perform in diverse functional roles
- The 'Covid Heroes' programme showcased some of the star employees whose stellar contributions supported local and state governments in monitoring and managing the COVID-19 crisis, while ensuring the safety and well-being of staff.
- Digitalisation provided an excellent opportunity, during the lockdown period, for employees to invest in their skill development. Experts across the Company shared their expertise through daily technical webinars on topics such as Cloud, Data Centre, Surveillance, Cyber, Network Security, GIS, Broadband, TETRA, Platform, among others. As part of development plans, over 150 employees achieved technical certifications in areas such as Cyber Security, Cloud Computing, Networking, Data Science, Project Management. Leadership mentors helped shape careers and provide developmental opportunities for high-potential talent.



Piling work at Panki, Kanpur

Construction Equipment & Others

The Construction Equipment & Others (CE&O) business pertains to manufacturing and marketing of construction equipment, mining equipment and equipment for tyre industry, broadly segregated into two business segments - Construction & Mining Machinery (CMM) and Rubber Processing Machinery (RPM). Also, in this entity is a Product Development Centre (PDC), based at Coimbatore, that renders engineering and product development support for the businesses under CMM and RPM. Further CMM comprises Construction & Mining Equipment business unit (CMB) and L&T Construction Equipment Limited (LTCEL), a wholly owned subsidiary of L&T.

Construction and Mining Equipment Business Unit (CMB)

CMB focuses on distribution and after-sales service for hydraulic excavators and dump trucks manufactured by Komatsu India Private Limited (KIPL) and other mining and construction equipment manufactured by Komatsu worldwide. It is also responsible for the distribution and providing after-sales support for a range of construction equipment including wheel loaders, compactors and hydraulic excavators manufactured by LTCEL and Mining Tipper Trucks manufactured by Scania India.



Stacker-Reclaimer

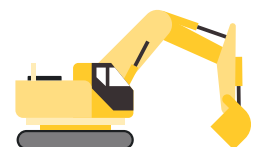
In addition, the division handles distribution and after sales support for the equipment viz. sand plants, surface miners, mobile crushers and apron feeders manufactured by L&T's Metallurgical & Material Handling business (MMH), Kansbahal, Odisha.

CMB has sold 55,000+ machines with an active machine population at around 30,000. CMB with six state-of-the-art service centres across the country with a contemporary central warehouse at Nagpur, provides maintenance contract support currently to 160+ sites PAN India. Besides this infrastructure, there are additionally about 130 service support locations and dealer touchpoints, thus providing comprehensive solutions for the construction and mining sector customers.

MAJOR ACHIEVEMENTS

- Four units of 250 Ton 16 CuM largest Komatsu Electric Shovel PC3000 commissioned in India at SECL site
- Timely supply, erection and commissioning of 43 units of various machines at Coal India subsidiaries during the pandemic
- Komatsu PC210-M0 excavator became the fastest selling model in the industry to reach 1,000 in number
- 1st HD785 dump truck deployed at Tata Steel crossed 60,000 hours of usage with 94% availability
- Major single order won from Tata Steel for indirect supply of dump trucks with maintenance contract
- L&T's Crushers enjoy 90% market share in cement sector
- Highest-ever sales of L&T's Surface Miners in coal sector

L&T's Crushers enjoy 90% market share in cement sector



Business Review

Significant Initiatives

Innovative initiatives were launched under Machine Care Program (MCP) during the year.

- Suraksha-10000: a unique MCP with value-added services and Extended Power Train Warranty (Covering Engine, Hydraulic Pump, Control Valve, Swing Machinery, Swing Motor, Final Drive and Track Motors) for a period of 4 years/10,000 hrs, for Komatsu PC210/PC210LC-M0, PC300LC-8M0 and PC350LC-8M0 models
- Suraksha-Kavach: an enhanced MCP with Suraksha-10000 and Kavach-7500/WEW-7500 (Work Equipment Warranty) covering Boom, Arm, Revolving Frame and H-Frame for a period of 3 years/7,500 hrs, for Komatsu PC210/PC210LC-10M0 models

New machine attachments such as super long front arm with reach upto 21 m, tunnelling attachment, pile driving attachment, breaker booms, mining breakers among others were also introduced.

Safety Initiatives and Awards

- The business has continuously and successfully implemented EHS initiatives and moving towards 'Zero reportable accident' and 'Zero loss of man-days'.
- CMB's EHS programs comprise – PPP - (P)roduct Safety, (P)eople Safety and (P)lace Safety at service centres and customer sites.
- Suraksha Mithra and other such safety awards from Corporates like Tata Steel, Ambuja Cements and Ultratech Cement.

Training and Skill development initiatives

- CMB's Central Training Centre (CTC) completes 25 years of operations
- Innovative technologies deployed for training, viz., VR simulators
- Partnering with State Governments for training initiatives (MoU with DTET Odisha and NAC Hyderabad)
- Best IESC training partner – Yellow Dot award for five consecutive years
 - Last 5 years: 2,700+ training programs; 48,000+ participants
 - Women empowerment – operators and mechanics



Stacker cum Reclaimer – 22 Mtr. – JSW- Dolvi, Maharashtra

L&T Construction Equipment Limited (LTCEL)

LTCEL, located in Doddaballapura, near Bengaluru, manufactures vibratory compactors, wheel loaders, hydraulic excavators, asphalt paver finishers, pneumatic tyred rollers, skid steer loaders, hydraulic power packs, cylinders, pumps and other components. The construction equipment and road building machinery manufactured by LTCEL are marketed and distributed exclusively by L&T's CMB, while the marketing of the hydraulic components and systems is taken care by the sales team at Hydraulics Works in LTCEL.



Komatsu PC210-10M0 Hydraulic Excavator – the truly efficient and fastest selling equipment in the construction segment in India

The plant, spread over 62,400 Sq. mts., is accredited with Environment Management system ISO 14001:2015, Occupational Health & Safety Management System ISO 45001:2018 and Quality Management system ISO 9001:2015.

The construction equipment sector had witnessed a huge contraction across all segments and the Wheel Loader segment had been impacted by about 28% and Compactor segment had been impacted by about 7%. Despite such market conditions, the Company has been able to maintain its market share across all its products. The Company has undertaken several cost control measures and optimised the inventory during the year under review.

Major Product Developments in FY21

- Product developed with CEV IV Emission Norm compliant Engines
- Products with safety features as per CMVR rules
- Introduced contemporary design Asphalt Compactor Model L&T 990 HFi
- Introduced attachments such as slope compactors and rock splitter for use on Excavators

Environment, Health and Safety

- Achieved greater than 500 accident-free days of operation in one of the production units of the factory
- Conducted tree plantation on World Environment Day
- Zero discharge factory
- Distributed groceries, PPE kit for the neighbouring villages as part of CSR activities
- Customised COVID-19 protection kit for operators of equipment being supplied

Business Review

Human Resources

During COVID-19 pandemic, the health of its employees, their families and all other stakeholders were closely monitored for business continuity.

- Task force constituted for COVID-19 Case management and prevention
- Programs on awareness on COVID-19 to all stakeholders
- Vaccination drive at workplace for all employees and their families
- Work from home during full/partial lockdown.
- Regular interaction with employees for monitoring the wellbeing
- Received CII best practice award for COVID-19 management

Awards & Accolades

In this financial year, the Company has won the following awards

- Gold Award for Morale Boosting Innovative HR practices during COVID-19' from CII Institute of Quality
- Gold Award in Quality Circle competition from QCFC – Bangalore Chapter
- Pi awards presented by L&T- Centre of Excellence for its Project on Productivity improvement



Rubber Processing Machinery Business Unit (RPM)

L&T's RPM division, located in Kancheepuram near Chennai, is a leading market player with five decades of experience, manufacturing and marketing rubber processing machinery, i.e. mechanical and hydraulic tyre curing presses, tyre building machines, conveyor systems and tyre automation systems for the tyre industry globally.



Rubber Processing

The factory spans about 19.28 acres and houses facility for research and development, manufacturing including fabrication, machining and assembly, with an electronic panel building shop.

The R&D facility that is recognised by DSIR focusses on innovation and backed by decades of industry expertise to offer continuously improved machinery to tyre majors around the world. The RPM plant is a zero-discharge unit and conforms to ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018.

MAJOR ACHIEVEMENTS

Some of the initiatives introduced by the business are:

- A "Technology Centre initiatives" cell has been set up to discuss and initiate actions towards cost reduction, process and product improvements for the tyre industry. 20 such initiatives were launched during the year
- Implemented a B2B commerce platform "e-RPM" for handling customer enquiries and offers online
- Development of Induction type Platen Heating System in tyre curing presses towards commitment to the environment, is likely to see good customer acceptance

Business Review

Major Product Developments

Significant achievements were accomplished in bringing out new products in Hydraulic Tyre Curing Presses and Tyre Building Machines segments. Some notable introductions were in the following product segments – New generation Truck and Bus Hydraulic Tyre Curing Presses, Floor mounted Hydraulic Tyre Curing Presses for Passenger Car Radial, New range Off Highway Tyre (OHT) building machines including both first and second stages.

Intellectual Property Generation

RPM Business Unit has a very strong process in place for registering and protecting its intellectual property. 32 applications for grant of patents are in various stages of being processed across India, USA and Thailand markets.

Environment, Health and Safety

- The business unit has successfully implemented safety initiatives that result in zero loss of man-days during the year
- Scrupulous Covid safety protocol (SOP) implementation with social distancing at every place in the unit including offices, shop floor, canteens and meeting places, and ensured business continuity. All meetings were conducted through virtual teleconference tools
- Continued focus on tree plantation and increased in green cover by adding 51 trees and increased the cover to 1,425 trees till end-March 2021
- Reduced water consumption by biologically recycling wastewater for use in the lawns and garden in the factory estate

Human Resources

- Employee health, their well-being and COVID safe practices were prioritised this year
- ATL (Any Time Learning) training programs have provided good opportunities for the employees to grow their knowledge and improve their technical skills to become more effective and efficient in the workplace
- Various improvement initiatives were conducted through virtual mode to engage and motivate employees

Training & Skill development initiatives

RPM is supportive of the National Employability Enhancement Scheme, a pioneering initiative of Government of India, wherein it provides an opportunity for learning various skills on the job for many students immediately after their curriculum completion. This helps the nation at large in developing employable skilled workforce. RPM has provided such opportunities to more than 100 students to receive on the job training during the year.



Power

L&T is one of the leading EPC players in the power plant business in India. We are trusted for delivering complete turnkey business solutions from concept to commissioning for the thermal power industry.

Our strong competency has made us a dominant player in emerging technologies such as Flue Gas Desulphurisation (FGD) in the thermal power plant industry and now have a sizeable presence in the FGD business.

Ultra-supercritical/supercritical turbine manufacturing facility at Hazira, Gujarat

Business Review

MAJOR ACHIEVEMENTS

- Completion of facilities of India's first ultra supercritical power project for Central Utility in Madhya Pradesh
- Final take-over of 2nd Unit in a project in Rajasthan for a state utility
- Received provisional acceptance for a gas project in Bangladesh
- Performance guarantee test of a gas project in Bangladesh
- Commercial operation of a central utility project in Uttar Pradesh where the supercritical boilers are supplied by boiler JV
- A dominant player in the FGD market, with over 20% of the market share

Significant Initiatives

The business is strategically focusing on new energy areas having significant potential such as energy storage, carbon capture, among others. It is working on a business plan for technology selection and finalisation of Go-To Market strategy.

It continues to focus cost reduction initiatives on procurement, manufacturing, logistics, value engineering, overheads, among others to improve competitive edge. The business also enhanced its focus on initiatives to achieve quality and EHS excellence and expand its global footprint.

It is strengthening its business development efforts to expand its international footprint.

Environment, Health and Safety

- Liaison/tie-ups with nearby COVID-19 treatment hospitals/facilities
- Augmenting medical facilities and resources to take care of the employees
- Regular sanitisation of all facilities and vehicles
- Provision of isolation facilities and conducting of regular inspections of labour colony and bachelor accommodation
- Continuous health monitoring (temperature as well as SpO2) of all employees
- Regular training/counselling of all employees regarding precautions. Provided essential supplies in labour colony during lockdown.

The business continues to focus on safety awareness weekly and monthly initiatives. Specialised external trainings were conducted in welding and gas cutting operations, safe usage of PPEs and a demo on work-at-height rescue, fire safety and fire-fighting techniques at all project sites. An external virtual training programme was conducted on 'Scaffolding and Lifting and Rigging' for various sites for frontline engineers, contractor supervisors, foreman and scaffolders and riggers. Detailed sessions regarding implementation of the EHS Council's 'Mission Zero Harm' roll-out plan for each site were organised.

Leveraging digitalisation for safe work environment:

- Developed and implemented Online App STARRT (Safety Task Analysis Risk Reduction Talk) card for multiple or simultaneous or multi-level activities
- Cameras installed across sites/facilities for real-time monitoring and capturing of unsafe acts/conditions and communicating the same to site safety personnel for immediate and long-term corrective action
- Conducted six monthly online Internal EHS audits on the Teams platform with a virtual tour of site operations and interviewing of contractor and operations' employees

20%

Market share in the FGD market



Heavy Engineering

The business ranks among the top-three global fabricators to supply engineered-to-order critical equipment, piping and systems for core sector industries which includes critical revamp and upgradation projects.

MRU - HEML Bhatinda Turnaround

Business Review

MAJOR ACHIEVEMENTS

- Secured breakthrough orders of acrylic acid reactors for Indian refineries, breaking the monopoly of European manufacturers
- Received an order for supply of titanium heat exchangers for IOCL's PTA plant
- World's heaviest LC-MAX reactor, weighing 2,313 MT, was dispatched to HPCL's Vizag Refinery
- Secured orders for the supply of 11 hydro processing reactors for renewable diesel projects in the EU and the USA
- In the Petrochemical sector, secured four PO reactors from Thyssenkrupp Industrial Solutions, a VAM reactor from Sheng Hong, China and an ethylene oxide reactor from Sibur, Russia
- Ensured uninterrupted customer supplies throughout the pandemic year by dispatch of four ARDS reactors to Takreer, Abu Dhabi; four coke drums to DUQM, Oman; two EO reactors to Lianyungang, China and the ITER top lid assemblies to France
- In the Nuclear business, good performance in the execution of the ITER cryostat was rewarded with a contract for assembly integration work of the vacuum vessel at Cadarache, France. The business team flagged off the most complex and final assembly of the cryostat, the world's largest stainless-steel, high-vacuum pressure chamber
- Secured an order for 12 Steam Generators (SGs) from NPCIL for the prestigious 3 x 700 MWe Pressurised Heavy Water Reactor (PHWR)
- Created a new global benchmark in nuclear manufacturing by delivering the first out of four 700 MWe steam generators for the Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) 1 & 2 project in 36 months (12 months in advance) and also dispatched three Ti steam generators for ATVP (three months in advance of the schedule)
- LTSSHF JV has received orders for the supply of steam generator forgings for six units, end shield plates for four units and forgings for pressuriser and bleed cooler for four units, to be set up in fleet mode. In the Defence sector, the JV has been certified as the only indigenous producer of large and heavy forgings and thick plates for the prestigious submarine programs



LC-Max Reactor



Significant Initiatives

- Weathered the challenges posed by the pandemic by adopting safe working practices, encouraging work from home, increasing virtual meetings, virtual audits and inspections, online approvals, etc
- Launched the 'Knowledge Management' initiative with the aim of being a 'one stop solution' for young engineers seeking information on core product, process and functional knowledge
- The Mentoring Wave III initiative was launched, wherein senior colleagues help in competency development of young colleagues through their guidance and support
- The Quality at Root initiative was embarked upon by the business to reduce the cycle time of manufacturing by eliminating duplicate activities
- The business was named the 'Most Digitally Enabled Manufacturing Plant in L&T' amongst non-construction businesses. Initiatives include IOT-enabled smart welding stations in welding and overlay operations
- Digitalisation in office areas includes automation of design & procurement, supply chain management and estimation system. Other digital initiatives such as virtual 3D layout simulation and Digi-Eye – for real-time project progress monitoring were taken
- In the MRU area, the digital initiatives include coke drum life cycle management using IOT stations, remote safety surveillance using IOT cameras, remote welding monitoring, manpower tracking in confined spaces, detection of hazardous gases in confined spaces, VR bases execution and safety training

32 Million+

Safe man-hours achieved in FY21

Environment, Health and Safety

The business has developed and implemented SOPs complying with COVID-19 protocols for social distancing, PPEs and hygiene.

As a part of the energy conservation drive, installation of magnetic resonators in all furnaces was carried out. Magnetic resonators maximise the specific contact area between fuel molecules and inlet air for complete combustion, which results in less consumption of input gas.

Safety is monitored with both 'proactive' indicators – Reported Safety Concerns (RSCs), near miss reporting – and 'reactive' indicators – dangerous occurrences, lost-time injuries and fatalities. The business launched a major initiative, the Behavior Based Safety programme (BBS) to internalise the concept of a safe workplace as a core value.

The business team achieved 3,207,932 safe man hours in last year. During the year, 49 webinars on various safety modules were organised by the Safety Innovation School, Hazira.

Human Resources

The business was quick in adopting digital platforms for use during the lockdown period to upskill the talent pool. It effectively utilised Facebook at Workplace to keep employees engaged during lockdowns and reduce pandemic fatigue. 'Baatchet' sessions were organised to strengthen connect and communication with female employees. Digitalisation of the entire talent acquisition processes – from sourcing to hiring and onboarding to placement – was implemented, resulting in process efficiencies, and realising virtual hiring. Cultural transformation programmes, designed with the help of internal and external experts, focus on driving the culture of Seven Core Values, i.e. Safety, Quality, Customer-centricity, Trust, Transparency, Action Orientation and Boundaryless Team. The 'Abhivyakti' platform is used for regular interaction with young engineers.

Business Review



Modular Bridging System

Defence

L&T has been associated with the Defence Research and Development Organisation (DRDO) and Naval Indigenisation programmes since the '80s, much before the sector was opened for private participation. Its integrated portfolio comprises technologies, products, systems, platforms and solutions. L&T Defence today offers solutions across the project lifecycle. It is not engaged in the manufacture of any explosives or ammunition.

The business does not manufacture any explosives or ammunition of any kind, including cluster munitions or anti-personnel landmines or nuclear weapons. The business also does not customise any delivery systems for such munitions.

MAJOR ACHIEVEMENTS

- New benchmarks set up by work centres in terms of deliveries of OPVs, K9 Vajra-T, Combat Engineering Systems, to name few, and maintenance of safety operations aided by digitalisation and automation
- Delivery of 45, K9 Vajra-T self-propelled howitzers during the year and completing the contract for 100 Nos. All the howitzers were delivered ahead of schedule with zero non-conformities
- Successful delivery of multiple land and naval weapon launch systems, engineering systems and missile systems to the Indian Armed forces
- Delivery of three interceptor boats to the Indian Coast Guard, all ahead of contracted schedule, completing the contract of 54 Nos. Delivered OPV-6 to the Indian Coast Guard. With this, L&T-built Coast Guard Vessels account for ~40% of Indian Coast Guard's operational fleet.
- The R&D and Design and Engineering teams have developed a range of new technologies, products and solutions with a focus on emerging technologies, such as unmanned systems across domains, Augmented reality (AR) and Virtual Reality (VR), emphasising on the uniqueness of offerings, innovation and presence across the value chain.

Significant Initiatives

The business has identified and signed MoUs/ agreements with strategic partners to enhance business opportunities both in domestic and international markets. The business continues to invest in R&D to develop new-age technologies and products such as unmanned systems (all four domains), robotics, additive manufacturing and Artificial Intelligence.

It has been building a strong position in digital design since the mid-90s and has attained proficiency in the elements of Industry 4.0 in its multiple R&D, Design & Engineering centres and Production work centres that extend from equipment and systems to the building of complete platforms, such as warships and submarines.

The business resorted to digital inspection for the first time and institutionalising the same in the Indian defence industry to overcome the pandemic challenges. To achieve business continuity and meet key deadlines, innovative digital technologies and processes were adopted to provide through life support, training, digital Quality Assurance, trial evaluation and acceptance.

Environment, Health and Safety

The safety track record across work centres, customer locations, and business partners' premises continued to be exemplary. The business implemented RFID-based tracking especially in confined spaces e.g. submarines and warships, as well as tagging of assets for online tracking for workmen tracking.

It has achieved significant y-o-y reduction in water and energy consumption, in line with L&T's sustainability focus.

The Shipbuilding team has received the prestigious Award of Honour 2021 from National Safety Council of India, Tamil Nadu Chapter. The Coimbatore facility excelled in very high percentage usage (>80%) of green energy in operations.

Human Resources

The HR initiatives have been aligned to identify and grooming high-potential talent, critical for maintaining a competitive advantage, through various management and technology leadership programmes. The business has implemented unique initiatives, such as Lead Next and D-mentors, for the young talent at the middle management level. Attention to leadership and talent development continues as a business imperative.

The business has also received the HR SCORE Award 2021 conferred by FICCI in association with IIM, Trichy. Further, with renewed emphasis, the business has embarked upon employee engagement initiatives to retain and grow talent and continue to be an employer of choice.

Change in Segment Reporting

The Military Communication Business of Defence Engineering Segment has been transferred with effect from April 1, 2020 to Smart World and Communication business and reclassified to the 'Others Segment'.

Business Review

Hydrocarbon

L&T Hydrocarbon Engineering Limited (LTHE) is a wholly-owned subsidiary of L&T and provides integrated 'design-to-build' turnkey solutions for the hydrocarbon industry globally.



Saudi Aramco Gas Production Deck Module (PDM)

Significant Initiatives

- LTHE has taken a three-pronged approach to better handle the COVID-19 pandemic together with many business challenges, such as oil price volatility, reduced investment cycle, energy transition. Christened the PIO (Protect-Innovate-Opportunist) programs – there are three pillars to sustain long-term growth initiatives and identified as ‘SHIELD’, ‘DREAMS’ and ‘DHOW’.
- Program ‘SHIELD’ is aimed at protecting the existing business, prioritising its products and services currently on offer and identifying products and services that can be quickly developed and scaled to satisfy the transforming market. It aims to attract new customers and geographies with innovative ideas and deep focus on stepping-up the business development activities, and develop localisation plans in the countries which are core to LTHE’s growth agenda by offering smart solutions.
- Program ‘DREAMS’ focuses on efficiency and speed in operations. The most significant action under DREAMS is the initiative called SESA (Simplify, Eliminate, Standardise and Automate) which drives digital solutions, productivity enhancement measures at fabrication yards and construction sites and knowledge management and capability development.
- LTHE continues to focus on Smart Collaboration & Augmented Reality, Industrial Internet of Things, Enterprise-wide Project Lifecycle Management program (EPSILON) and Predictive Analytics to enhance efficiency in operations.
- It has embraced the culture of productivity and quality enhancement at yards as well as construction sites. These include automated welding, extensive use of jigs and fixtures as well as assembly line concept, full kitting, and serial production technique for fabricating multiple jackets concurrently, which helped in the fabrication of a jacket in a record time of just 98 days at the Sohar Fabrication Facility.
- As part of improving safety and productivity, LTHE is maximising work on the ground rather than at a height for the fabrication of modules. To address construction challenges for onshore projects that are at remote locations or at congested plants, LTHE is maximising the modularisation at yards.
- Program ‘DHOW’ focuses on transforming the organisation to attract clients to support their efforts in the upcoming energy transition in areas such as green hydrogen, decarbonisation, biofuels and the circular economy. Digitally-enabled O&M is also identified as an adjacency to its existing business capability to be one of the future growth engines.
- LTHE is also actively engaging with various R&D Centres and start-up companies to develop emerging technologies and create differentiated solutions.

Environment, Health and Safety

LTHE had taken preventive control measures to overcome the effect of COVID-19 and safely delivered more than 32 Million man-hours at a stretch across various projects in domestic and international markets, including the modular fabrication yards.

For effective implementation of the HSE management system uniformly across the business verticals and strengthening the safety culture, LTHE consolidated all its operations under a single ISO Certification for ISO 14001 and 45001.

Digital platform is used to facilitate online incident reporting and investigation, pilot electronic permit to work at four locations and remote HSE assurance audit.

To strengthen compliance to the HSE system and raise awareness, LTHE conducted management walkthroughs, both virtual and physical, to emphasise monitoring performance at fabrication yards and project sites, HSE audit reporting, mock drills, safety meetings, continuous training in HSE practices and webinars.

Human Resources

L&T Hydrocarbon Engineering focuses on acquiring and grooming a unique and diverse set of talent, with the right attitude.

LTHE has initiated a career planning architecture for the sustainable growth of its employees, with more emphasis on the top talent. Specific programs for Resident Construction Managers (RCM) and Young Fabrication Professionals (YFP) are designed to develop construction and yard professionals. As a commitment to create a highly engaged workforce, LTHE actively communicates through multiple forums such as Town Hall sessions and Fireside chats. LTHE always tries to inculcate a culture of appreciation through various reward and recognition interventions. The ‘I-TOO’ recognition framework, annual ICONS, Long Service Awards, Talent Champions, counselling and well-being support, and a bouquet of custom-designed calendared interventions are cascaded across the organisation to the most remote sites with the aim of enhancing employee motivation. LTHE is committed to improve the gender balance across all functions and levels.

As the COVID-19 pandemic brought uncertainties and extra stress in both personal and professional lives of employees, LTHE engaged with employees at various levels by frequent interventions from senior leadership and CEO and across leadership strata to ensure engagement. LTHE ensured medical assistance on 24x7 basis by arranging doctors and ambulances for about 25,000 staff and workmen. Also, LTHE made arrangements in co-ordination with Government departments and embassies to evacuate employees stranded in foreign countries.

Business Review



Cryogenic Valves

L&T Valves

Leverages six decades of manufacturing excellence, L&T Valves serves key sectors nationally and internationally. The business offers products for oil & gas, defence, nuclear and aerospace, power, petrochemicals, chemicals, water and pharmaceuticals across the globe.

The vast product portfolio includes gate, globe, check, ball, butterfly, plug and control valves, as well as automation solutions. The business also runs a global after-market business to support its installed base with service and spares needs.

MAJOR ACHIEVEMENTS

- Kuwait Oil Company's 11 pattern project from SHBC
- Mabrouk North East Development Project from Petrofac
- Kandla Gorakhpur Pipeline Project from IHB (JV of IOCL, HPCL and BPCL)
- Remotely-operated shut-off valves, tank farm terminals, IOCL
- Hawiyah Unayzah Gas Reservoir Storage Project from ARAMCO



Significant Initiatives

- Taskforce formed for liquidation of overdue orders and improved on-time delivery
- Introduction of lean concepts to improve machine utilisation and productivity
- Vendor consolidation in casting supplies to implement kitting strategy plan
- Vendor development for special castings and gear box to realise cost benefits
- Geographical diversification of supply chain with focus on cost and quality

Environment, Health and Safety

The business has successfully implemented initiatives in health, safety and environment, continuing to achieve a 'zero man-days lost' record during the year.

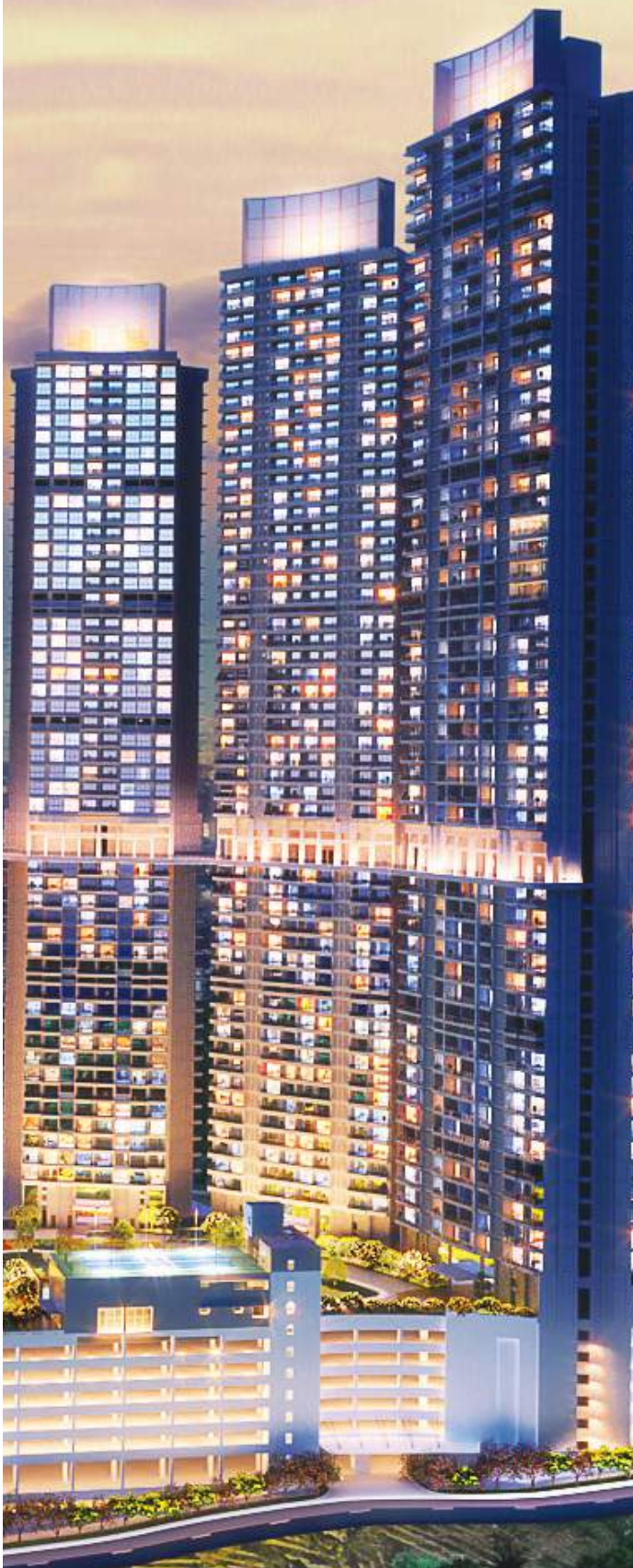
- Tree plantation drive at Coimbatore plant and 100 trees planted in the plant area
- Reduction of water consumption in the plant by utilising biologically-treated domestic waste-water for gardening

Human Resources

Employee health, well-being and safety were priorities, along with training and development during this year. The business has evolved its competency building programmes and focused on soft skills and leadership development.

Various engagement initiatives were undertaken during the lockdown to motivate the employees and maintain a healthy work-life balance when they were in remote working mode. The change management flagship programme 'DISHA' strives to make the organisation a better place to work in and improve the effectiveness of the employees at the workplace. Developmental initiatives through training, mentoring and coaching programmes were organised to upskill high-potential employees.

Business Review



Crescent Bay, Mumbai

L&T Realty

L&T remains one of the renowned real estate players. L&T's edge is derived from a mix of out-of-the-box designs, advanced technologies and industry leading project management.

MAJOR ACHIEVEMENTS

- Launched new phase at Seawoods Residences in November '20 and sold over 80% of the inventory
- Workplace merges with home, large-size units gained momentum. Traction is seen in large format premium units in Crescent Bay, Parel, placing the business amongst the most-sold projects in the premium South Mumbai market
- Completion of an iconic digitally advanced office space tower
- Completed sale of commercial space through transactions with Blackstone Group and Max Life

Human Resources

Appropriate measures were taken during business resumption to ensure employees' health and safety within the site and at the office premises. The business makes every effort to generate a never-ending desire to collaborate, learn and build a talent pool to stay relevant to customers' needs at all times. The business is focused on creating a young and vibrant organisation. With emphasis on gender diversity, L&T Realty has one of the highest percentage of women employees in the Indian real estate sector.

The Company has been providing avenues for capability building and continuous learning, and this year the business clocked 7,552 man-hours of dedicated personnel training.



L&T Innovative Campus, Chennai

Awards

Corporate

- I. L&T was conferred the prestigious HR Excellence Award by The Economic Times' HRWorld.
- II. L&T's Integrated Report has been declared a winner in the Best Integrated Report category by the Social and Business Enterprise Responsible Awards (SABERA), supported by Grant Thornton Bharat.
- III. L&T was conferred the prestigious CSR Shining Star Award in the 'Skills' category by Wockhardt Foundation.

Business & Factories (B&F)

- I. Narendra Modi Cricket Stadium, Motera was awarded as the Overall Excellence Award Winner (First Place) by ACI India Chapter in Infrastructure Category.
- II. GCA Cricket Stadium, Motera received 'ICI- Outstanding Concrete structure Award 2020'.
- III. Emerald Isle Phase -2 project awarded Best Residential Luxury Project of the Year at ET NOW Real Estate Awards 2020.
- IV. AIIMS, Gorakhpur was awarded by ICI (Varanasi) - Ultratech Outstanding Concrete structure Award 2020 for Best Architect and Structural Engineers.
- V. Wipro IT SEZ Project, Bengaluru was awarded 'ACI Excellence in Concrete Construction Awards 2020'.
- VI. Prestige Song of the South Project, Bengaluru was awarded 'ACI Excellence in Concrete Construction Awards 2020'.
- VII. Prestige Song of the South Project, Bengaluru has been awarded 'ACCE (I) BILLIMORIA AWARD- Excellence in Construction in High Rise Category'.
- VIII. FORD Global Technology and Business Centre was awarded Best Use of Technology and Best Project Management by The Estatesmen.
- IX. FORD Global Technology & Business Centre has been awarded Best Architect – Shared spaces/Co working/Co living award by The Estatesmen.

Water & Effluent Treatment (WET)

- I. AEC Excellence Award from Autodesk for an advanced water treatment plant at Chandrawal, Delhi.
- II. Received 15 awards from Construction Industry Development Council under the categories of Corona Warriors and EHS Implementation.
- III. Received 12 Awards from British Safety Council and 11 CII Awards for Safety, Health and Environment.
- IV. Received 10 Water Digest Awards including Best Water Company and Best Complete Domestic Water Solutions provider.

Power Transmission & Distribution (PT&D)

- I. Power transmission & distribution projects in KSA and UAE bagged four Middle East Economic Digest (MEED) awards in different categories. Received the Dossier Award for the Best Contractor for Infrastructure Projects for the 400/132 kV Al Qabel project.
- II. The transmission line tower manufacturing facility at Kancheepuram won the DL Shah Quality Award, the Quality System Excellence Award from FICCI and the EHS Excellence Award from CII Southern Region.
- III. The transmission line tower factory at Pithampur was awarded the Golden Peacock Award for Occupational Health & Safety performance.
- IV. Our 11 projects emerged as winners, each for National Safety Council of India Awards 2020 and British Safety Council International Awards 2021.

Smart World & Communication

- I. Received the Golden Peacock Award 2020 for Innovation in recognition of the Artificial Intelligence based Crowd Management solution implemented in Prayagraj Smart City.
- II. Nagpur Smart City Communications Technologies and Physical Security bagged FICCI Smart Urban Innovation Award.
- III. Two RoSPA Gold Awards for Telecommunication Systems for Gujarat Metro Rail Corporation Limited and Allahabad Smart City.
- IV. Positioned as a runner up for ISGF Innovation Awards 2021.
- V. Won Digital Award 2020 in SWC BU for developing NMS-Incident Management System.



Hydrocarbon Engineering Limited (LTHE)

- I. Ranked second among the top 30 EPC Contractors by the Oil & Gas Middle East magazine for securing large contracts from Saudi Aramco as part of its 'long-term agreement'.
- II. Received the 'EPC-Company of the Year' award by Federation of Indian Petroleum Industry (FIPI).

Power

- I. Special award for Best Safety Practice received from NTPC by Tandasite.
- II. Client Project Safety Award received from NPCIL by RAPP, Kotasite for FY20.
- III. L&T Power IC Won 8th FICCI Quality System Excellence Award for Quality System Excellence in Construction.
- IV. L&T Power IC Won CII Customer Obsession Award 2020 for Customer Centricity.

Heavy Engineering

- I. Mr. Pemmaraju Raghavendra has been accorded with National NDT Award for "International Recognition in the field of NDT" by Indian Society for Non-Destructive Testing (ISNT) at National NDE conference.
- II. Won three Awards in Gujarat Rajya Shram Purashkar.
- III. Two Anubhuti teams from Hazira won Awards at Surat Chapter's Virtual e- Convention on Quality Circles and Other Allied Quality Concepts.
- IV. The Southern Gujarat Chamber of Commerce and Industry (SGCCI) has awarded L&T Heavy Engg., Hazira for outstanding contribution in Productivity, Safety and Quality Improvements.

Defence

- I. Teams from L&T Defence Won Gold Trophy-Highest Category Award and one "Best of Best" Award In the state level Chapter Convention on Quality Concepts (CCQC 2020-21).
- II. L&T Defence Teams won Par-Excellence, Excellence and Distinguished Awards in National Convention on Quality Concepts (NCQC 2020-21).
- III. L&T Defence received "Special Award" from The Southern Gujarat Chamber of Commerce & Industry (SGCCI), Golden Jubilee Memorial Trust.
- IV. L&T Defence secured Innovative Digital Award 2020 in Vizag on Dynamic Weight Measurement of Marine Platform.

Realty

- I. Winner of 'Swatch Bharat Mission' by Navi Mumbai Municipal Corporation for Seawoods Residences.
- II. Royal Society for the Prevention of Accidents (ROSPA) Gold award for Emerald Isle, Powai and AM Naik Tower.
- III. Raintree Boulevard Project received Birla Super Endowment award presented by ICI (Bengaluru Centre).




HCI


- I. ICI 'Outstanding Concrete Structure of Telangana-2020' Award for Durgam Cheruvu.
- II. KAPP 3 & 4 - Excellence in Concrete Construction Award Infrastructure 2020 - Indian Chapter of ACI.

Sustainability Development Goals (SDGs)

SDGs define global priorities and aspirations for 2030, with objectives to achieve conservation and ecological balance.

The following demonstrate our alignment with SDGs and our initiatives towards climate change mitigation, environmental conservation and corporate social responsibility.





Goals	Initiatives	Page number(s)
 <p>End poverty in all its forms</p>	<ul style="list-style-type: none"> - Skilling programmes for youth and migrant labour enables higher wage earning capacity - Vocational, life-skills training and job placements for skilled youth, women and differently abled - Encouraging entrepreneurship among youth, women and differently abled through training and promoting Self help groups (SHG) - Increased agricultural income and multi-cropping due to water adequacy - Created agro-based livelihood, increasing household incomes - Formation of farmer groups and market linkages for better crop prices 	PAGE 123-143 →
 <p>End hunger, achieve food security, improve nutrition and sustainable agriculture</p>	<ul style="list-style-type: none"> - Training communities in better nutrition practices - Promoting families to grow and use vegetables from kitchen gardens and revival of traditional foods including millets - Encouraging sustainable agricultural practices by use of zero budget natural farming, drip irrigation, indigenous pesticides, seed treatment, balanced dose of fertilisers, discouraging plantation of water-intensive crops, and introducing horticulture through farm field schools and demonstrations - Nutrition awareness campaign and counselling for women, pre-school teachers and school children from the community - Addressing malnutrition among children by providing services related to Prevention, education to mothers, early detection and treatment in ICDP areas - Daily distribution of multi-vitamins/milk at Anganwadis/schools - Livestock management and training in dairy and poultry business - Provide food and ration in disasters and crisis situations 	PAGE 123-143 →
 <p>Ensure healthy lives and promote wellbeing of people of all ages</p>	<ul style="list-style-type: none"> - Multi-specialty community health centres providing access to maternal, family welfare, paediatric and general healthcare - Health centres offering mental health services, child guidance clinic and counselling - Mobile health vans and camps for school children, women and elderly from underprivileged communities - Health awareness for adolescents - Care and counselling programmes for differently-abled children - Blood donation camps - Training of frontline healthcare workers - Infrastructure support to Anganwadis, PHCs and hospitals - Integration with national health programs - Health infrastructure strengthening during COVID-19 - Welfare teams at the workplace 	PAGE 123-143 →

Goals	Initiatives	Page number(s)
 <p>Ensure inclusive and quality education, and promote lifelong learning opportunities for all</p>	<ul style="list-style-type: none"> - School infrastructure development for creating conducive learning environment, including construction of school sanitation facilities - Making schools accessible by providing bicycles for students staying in remote tribal areas - Technology enabled education (e-learning facilities) in Government schools - Miniature science centres and laboratories to develop interest in scientific subjects - Introducing and strengthening STEM (Science, Technology, Engineering and Math) Education programme in Government schools to unlock scientific and technological potential of children and encourage their curiosity, scientific vigour and creativity - Teacher training programme to impart effective pedagogy - Enhancing curriculum and impacting classroom learning through nurturing talent - Promoting girl child education - Life skills and extra-curricular activities for overall development of students - Community-based learning centres with parent involvement to prevent dropouts and prepare children for board exams - Specific interventions to integrate children at risk of dropping out and out of school children into school - Prepare indigenous students for admission to various public schools - Mitigating digital divide by either providing the gadgets to the underprivileged children or visiting students at their homes to provide study material in print form 	<p>PAGE 123-143 →</p>






Sustainability Development Goals (SDGs)

Goals	Initiatives	Page number(s)
 <p>Achieve gender equality and empower all women and girls</p>	<ul style="list-style-type: none"> - Making water available to doorstep and drudgery reduction activities - Awareness on women's health and menstrual hygiene - Toilet facilities in schools for girls - Motivate parents to encourage girls to participate in STEM activities and exposure visits - Creating livelihood opportunities and encouraging entrepreneurship among women through skill development, vocational training programs and market linkages - Formation of women's Self-help Groups (SHGs), ensuring participation and decision making in development and school management committees across villages - Increasing women employees in the organisation 	<p>PAGE 123-143 →</p>
 <p>Ensure availability and sustainable water management and sanitation for all</p>	<ul style="list-style-type: none"> - Achieving water adequacy for drinking, sanitation and agriculture through watershed projects, as part of Integrated Community Development (ICD) programmes - Supplementing water bodies to increase ground water level with participation from communities - Constructing water harvesting structures with contribution from the community and ensuring their maintenance - Developing community-based groups like Village Development Committees, Farmers groups for maintaining the water structures, judicious use of common water resources and ensuring the villages remain open defecation free - Demonstration of rainwater harvesting system in schools and households - Training farmer groups in water estimation and budgeting, and to measure water levels and in GIS based water management - Sanitation awareness campaigns followed with construction of Household toilets and school toilets, to make rural India 'open defecation-free' - Supporting Swachh Bharat Abhiyan 	<p>PAGE 123-143 →</p>
 <p>Ensure access to affordable, reliable, sustainable energy for all</p>	<ul style="list-style-type: none"> - Providing solar lamps to the underprivileged communities and off-grid solar system with back-up for communities and schools - Increasing renewable energy use within campuses and project sites - Green products and services portfolio for customers - Demonstration of Solar Agricultural Fences in villages - Demonstration of Bio-Gas Plants 	<p>PAGE 51, 58-60, 64, 71 →</p>
 <p>Promote inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	<ul style="list-style-type: none"> - Employable skill training and placements for youth from underprivileged communities, physically and mentally challenged persons - Construction Skills Training Institutes for skilling youth - Transform fresh ITI candidates to multi-skilled workers - Skilling youth through training institutes - Certified computer courses for students - Television and digital media workshops for youth empowerment - Empowering workforce through learning, development and welfare initiatives - Training rural youth in ethno-veterinary care and Natural Resource Management 	<p>PAGE 111, 125 →</p>



Goals	Initiatives	Page number(s)
 <p>Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation</p>	<ul style="list-style-type: none"> - Embolden automation with focus on application for patents/Intellectual Property Rights (IPR) to inspire innovation - Resilient infrastructure creation and sustainable industrialisation for our clients, through our offerings – green products and service portfolio - Focus on 'Make in India' initiatives to create employment opportunities and import substitution 	<p>PAGE 18, 51, 64, 71, 95, 143 →</p>
 <p>Reduce inequality within and among countries</p>	<ul style="list-style-type: none"> - Merit-based hiring with emphasis on equal opportunities - Established policies to empower employees irrespective of gender, age, disability, race and religion - Encouraging participation of vulnerable groups like women and the deprived, in rural development committees of developmental projects supported - Fairness in distribution of resources within villages under ICDP to circulate the benefit to the most needy and vulnerable in the community - Prioritise needs of marginal and poor farmers in rural development programs 	<p>PAGE 115-116, 124-127 →</p>
 <p>Make cities and human settlements inclusive, safe, resilient and sustainable</p>	<ul style="list-style-type: none"> - Create comprehensive and smart technology solutions for critical infrastructure, spanning airports, power plants, metro rails and IT parks - Offer specialised turnkey GIS-based network management solutions for city surveillance, traffic monitoring and analysis - Road barriers and guards to control traffic areas at project sites, especially busy junctions in the city, along with road safety awareness campaigns - Garden maintenance in cities and flood relief interventions - ICD program for water-stressed rural settlements 	<p>PAGE 30, 71, 79, 109 →</p>
 <p>Ensure sustainable consumption and production patterns</p>	<ul style="list-style-type: none"> - Implement material conservation initiatives, energy efficiency advancement projects and sustainable production practices - Our cumulative energy conservation over the years is more than 128 Mn KWH. - We proactively utilise Fly Ash, Granular Blast Furnace Slag and Crushed sand in our construction projects and recycled steel and zinc wherever permissible. - Discouraging plantation of water-intensive crops, use of indigenous pesticides, seed treatment, balanced dose of fertilisers - Multi cropping among farmers on increase 	<p>PAGE 58-69 →</p>

Sustainability Development Goals (SDGs)

Goals	Initiatives	Page number(s)
 <p>Take urgent action to combat climate change and its impacts</p>	<ul style="list-style-type: none"> - Climate change mitigation and adaptation initiatives: GHG intensity reduction projects, promoting the use of renewable energy, green buildings and tree plantation - Measurable targets for reducing energy and carbon intensity - Carbon footprint mapping at the organisational level - Discourage overexploitation of ground water - Alignment with National Action Plan on Climate Change (NAPCC), Government of India 	<p>PAGE 58-69 →</p>
 <p>Conserve the oceans, seas and marine resources for sustainable development</p>	<ul style="list-style-type: none"> - Evaluate business process risk to ensure that negative impacts are avoided/minimised/controlled 	<p>PAGE 62, 67, 127-131 →</p>
 <p>Protect, restore and promote sustainable use of terrestrial ecosystems, manage forests, combat desertification, and halt land degradation and biodiversity loss</p>	<ul style="list-style-type: none"> - Building soil conservation to prevent soil erosion in the ICD programme - Village level committee to regulate the use of common resources - Rainwater harvesting in schools and Households - Lake clean-up and reserve forest clean-up drives alongside de-silting of water bodies - Planted 800,000+ saplings in FY21 and many fully-grown trees are nurtured across major campuses - Sustaining Miyawaki forest in 6 Locations with 65,000+ saplings - In-house guidelines on scientific tree plantation and maintenance - Felicitation of guests with a Tree Certificate, instead of a floral bouquet - Optimising the use of natural resources - Aforestation by creating fast growing sustainable forest 	<p>PAGE 62, 65, 127, 131, 176 →</p>
 <p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective institutions at all levels</p>	<ul style="list-style-type: none"> - Village level committee and democratic process formulated for maintenance, usage and monitoring the sustainability of ICDP interventions - Encourage democratic functioning and financial transparency in conduct of SHG business - Associating with industry forums like <ul style="list-style-type: none"> • Confederation of Indian Industry – Centre of Excellence for Sustainable Development (CII-CESD) • CII – Green Business Centre (GBC) and Government bodies for promoting sustainable development 	<p>PAGE 34-36 →</p>
 <p>Strengthen the means of implementation and revitalise global associations for sustainable development</p>	<ul style="list-style-type: none"> - Collaboration and partnership with state and national Governments, NGOs and ITIs. - In keeping with the United Nations Global Compact, and following GRI Sustainability Reporting Standards - Sharing best practices with stakeholders 	<p>PAGE 122-133, 160, 207-214 →</p>

GRI Content Index



This report has been prepared in accordance with the GRI Standards 'Comprehensive' option.

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GRI 102: GENERAL DISCLOSURES 2016				
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For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.

GRI Content Index

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GRI 200: ECONOMIC				
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	144	
	103-2	The management approach and its components	144	
	103-3	Evaluation of the management approach	144	
GRI 201: ECONOMIC PERFORMANCE 2016	201-1	Direct economic value generated and distributed	146-157	
	201-2	Financial implications and other risks and opportunities due to climate change	45	
	201-3	Defined benefit plan obligations and other retirement plans	148	
	201-4	Financial assistance received from government	149	



GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	124-125	
	103-2	The management approach and its components	124-125	
	103-3	Evaluation of the management approach	124-125	
GRI 203: INDIRECT ECONOMIC IMPACTS 2016	203-1	Infrastructure investments and services supported	124-143	
	203-2	Significant indirect economic impacts	124-143	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	142, 146-149	
	103-2	The management approach and its components	142, 146-149	
	103-3	Evaluation of the management approach	142, 146-149	
GRI 204: PROCUREMENT PRACTICES 2016	204-1	Proportion of spending on local suppliers	142, 146-149	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	160	
	103-2	The management approach and its components	160	
	103-3	Evaluation of the management approach	160	
GRI 205: ANTI-CORRUPTION 2016	205-1	Operations assessed for risks related to corruption	160, Annual Report 32-33	
	205-2	Communication and training about anti-corruption policies and procedures	Annual Report 32-33	
	205-3	Confirmed incidents of corruption and actions taken	Annual Report 32-33	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	160	
	103-2	The management approach and its components	160	
	103-3	Evaluation of the management approach	160	
GRI 206: ANTI-COMPETITIVE BEHAVIOR 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	160, Annual Report 48-49	
GRI 300: ENVIRONMENT				
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	63	
	103-2	The management approach and its components	63	
	103-3	Evaluation of the management approach	63	
GRI 301: MATERIALS 2016	301-1	Materials used by weight or volume	63	
	301-2	Recycled input materials	63	
	301-3	Reclaimed products and their packaging materials	-	Not applicable; since we are a technology and engineering company, there are no packaging or product recall related issues

GRI Content Index

GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	59-60	
	103-2	The management approach and its components	59-60	
	103-3	Evaluation of the management approach	59-60	
GRI 302: ENERGY 2016	302-1	Energy consumption within the organisation	59	
	302-2	Energy consumption outside of the organisation	59	
	302-3	Energy intensity	60	
	302-4	Reduction of energy consumption	60	
	302-5	Reductions in energy requirements of products and services	60	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	62	
	103-2	The management approach and its components	62	
	103-3	Evaluation of the management approach	62	
GRI 303: WATER AND EFFLUENTS 2018	303-1	Interactions with water as a shared resource	62	
	303-2	Management of water discharge-related impacts	62	
	303-3	Water withdrawal	62	
	303-4	Water discharge	62	
	303-5	Water consumption	62	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	65	
	103-2	The management approach and its components	65	
	103-3	Evaluation of the management approach	65	
GRI 304: BIODIVERSITY 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	65, 68-69	
	304-2	Significant impacts of activities, products, and services on biodiversity	65, 68-69	
	304-3	Habitats protected or restored	65, 68-69	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	65, 68-69	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	61	
	103-2	The management approach and its components	61	
	103-3	Evaluation of the management approach	61	
GRI 305: EMISSIONS 2016	305-1	Direct (Scope 1) GHG emissions	61	
	305-2	Energy indirect (Scope 2) GHG emissions	61	
	305-3	Other indirect (Scope 3) GHG emissions	61	
	305-4	GHG emissions intensity	61	
	305-5	Reduction of GHG emissions	61	
	305-6	Emissions of ozone-depleting substances (ODS)	61	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	61	



GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	62	
	103-2	The management approach and its components	62	
	103-3	Evaluation of the management approach	62	
GRI 306: EFFLUENTS AND WASTE 2016	306-1	Waste generation and significant waste-related impacts	62-63	
	306-2	Waste by type and disposal method	62-63	
	306-3	Significant spills	62-63	
	306-4	Transport of hazardous waste	62-63	
	306-5	Waste directed to disposal	62-63	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	63	
	103-2	The management approach and its components	63	
	103-3	Evaluation of the management approach	63	
GRI 307: ENVIRONMENTAL COMPLIANCE 2016	307-1	Non-compliance with environmental laws and regulations	63	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	142	
	103-2	The management approach and its components	142	
	103-3	Evaluation of the management approach	142	
GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016	308-1	New suppliers that were screened using environmental criteria	142	
	308-2	Negative environmental impacts in the supply chain and actions taken	No negative impacts came to notice in 2019-20	
GRI 400: SOCIAL				
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	112-121	
	103-2	The management approach and its components	112-121	
	103-3	Evaluation of the management approach	112-121	
GRI 401: EMPLOYMENT 2016	401-1	New employee hires and employee turnover	116	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	112-121	
	401-3	Parental leave	116	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	110-121	
	103-2	The management approach and its components	110-121	
	103-3	Evaluation of the management approach	110-121	
GRI 402: LABOR/ MANAGEMENT RELATIONS 2016	402-1	Minimum notice periods regarding operational changes	110-121	

GRI Content Index

GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	117-121	
	103-2	The management approach and its components	117-121	
	103-3	Evaluation of the management approach	117-121	
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018	403-1	Occupational health and safety management system	117-121	
	403-2	Hazard identification, risk assessment, and incident investigation	117-121	
	403-3	Occupational health services	117-121	
	403-4	Worker participation, consultation, and communication on occupational health and safety	117-121	
	403-5	Worker training on occupational health and safety	117-121	
	403-6	Promotion of worker health	117-121	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	117-121	
	403-8	Workers covered by an occupational health and safety management system	117-121	
	403-9	Work-related injuries	117-121	
	403-10	Work-related ill health	117-121	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	112-117	
	103-2	The management approach and its components	112-117	
	103-3	Evaluation of the management approach	112-117	
GRI 404: TRAINING AND EDUCATION 2016	404-1	Average hours of training per year per employee	111	
	404-2	Programs for upgrading employee skills and transition assistance programs	112-117	
	404-3	Percentage of employees receiving regular performance and career development reviews	100%	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	115	
	103-2	The management approach and its components	115	
	103-3	Evaluation of the management approach	115	
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016	405-1	Diversity of governance bodies and employees	115	
	405-2	Ratio of basic salary and remuneration of women to men	116	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	115	
	103-2	The management approach and its components	115	
	103-3	Evaluation of the management approach	115	
GRI 406: NON-DISCRIMINATION 2016	406-1	Incidents of discrimination and corrective actions taken	115	



GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	142, 161-163	
	103-2	The management approach and its components	142, 161-163	
	103-3	Evaluation of the management approach	142, 161-163	
GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	142, 161-163	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	161-163	
	103-2	The management approach and its components	161-163	
	103-3	Evaluation of the management approach	161-163	
GRI 408: CHILD LABOR 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	161-163	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	161-163	
	103-2	The management approach and its components	161-163	
	103-3	Evaluation of the management approach	161-163	
GRI 409: FORCED OR COMPULSORY LABOR 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	161-163	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	115	
	103-2	The management approach and its components	115	
	103-3	Evaluation of the management approach	115	
GRI 410: SECURITY PRACTICES 2016	410-1	Security personnel trained in human rights policies or procedures	115	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	6-7	
	103-2	The management approach and its components	6-7	
	103-3	Evaluation of the management approach	6-7	
GRI 411: RIGHTS OF INDIGENOUS PEOPLES 2016	411-1	Incidents of violations involving rights of indigenous peoples	7, no such incidents have occurred in FY21	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	161-163	
	103-2	The management approach and its components	161-163	
	103-3	Evaluation of the management approach	161-163	
GRI 412: HUMAN RIGHTS ASSESSMENT 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	Annual Report 32	
	412-2	Employee training on human rights policies or procedures	115	
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	161-163	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	122-139	
	103-2	The management approach and its components	122-139	
	103-3	Evaluation of the management approach	122-139	
GRI 413: LOCAL COMMUNITIES 2016	413-1	Operations with local community engagement, impact assessments, and development programmes	122-139	

GRI Content Index

GRI Standard	Disclosure	Description	Page Numbers/ Reference Link	Reason for Omission
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	142	
	103-2	The management approach and its components	142	
	103-3	Evaluation of the management approach	142	
GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016	414-1	New suppliers that were screened using social criteria	142	
	414-2	Negative social impacts in the supply chain and actions taken	142	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	Annual Report 41, 430	
	103-2	The management approach and its components	Annual Report 41, 430	
	103-3	Evaluation of the management approach	Annual Report 41, 430	
GRI 415: PUBLIC POLICY 2016	415-1	Political contributions	Annual Report 430	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	Since we are an engineering and construction company, our product or services do not have direct impact on customer health and safety; however, through our focus on developing green portfolio, we ensure public well-being	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 416: CUSTOMER HEALTH AND SAFETY 2016	416-1	Assessment of the health and safety impacts of product and service categories 7	There were no incidents of non-compliance concerning products, service, information, labeling and marketing communication	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	There were no incidents of non-compliance concerning products, service, information, labeling and marketing communication	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 417: MARKETING AND LABELING 2016	417-1	Requirements for product and service information and labeling	There were no incidents of non-compliance concerning products, service, information, labeling and marketing communication	
	417-2	Incidents of non-compliance concerning product and service information and labeling		
	417-3	Incidents of non-compliance concerning marketing communications		
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	161	
	103-2	The management approach and its components	161	
	103-3	Evaluation of the management approach	161	
GRI 418: CUSTOMER PRIVACY 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	161	
GRI 103: MANAGEMENT APPROACH 2016	103-1	Explanation of the material topic and its Boundary	124	
	103-2	The management approach and its components	124	
	103-3	Evaluation of the management approach	124	
GRI 419: SOCIO-ECONOMIC COMPLIANCE 2016	419-1	Non-compliance with laws and regulations in the social and economic area	164	

Assurance Statement



INDEPENDENT ASSURANCE STATEMENT

Introduction and objectives of work

BUREAU VERITAS has been engaged by Larsen & Toubro Limited (L&T) to conduct an independent assurance of its Integrated Report ("the report") for the year 2020-21. This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the Integrated Report 2020-21 are the sole responsibility of the management of L&T. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

Scope of work

The assurance process was conducted based on the requirements of the International Standard for Assurance Engagements (ISAE 3000) for 'Limited' assurance and the AA 1000 Assurance Standard¹ for 'Type 2 Moderate' assurance. The scope of work included:

- Data and information included in Integrated Report 2020-21 for the reporting period 1st April 2020 to 31st March 2021.
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyse and review the information reported.

Methodology

As part of its independent assurance, Bureau Veritas undertook the following activities:

1. Remotely visited all site below selected locations of L&T and interviewed through MS teams relevant personnel of L&T
 - Heavy Engineering, Hazira
 - Defence, Hazira, Talegaon and Coimbatore
 - L&T Hydrocarbon MFF, Hazira
 - L&T Hydrocarbon Engineering Construction, Mumbai
 - L&T Hydrocarbon Engineering, Offshore
 - Buildings & Factories, Chennai
 - Heavy Civil Infrastructure, Chennai
 - Power Transmission & Distribution, Chennai
 - Smart World Communication, Chennai
 - Water & Effluent Treatment, Chennai
 - Metallurgical & Material Handling, Kolkata
 - Power & Knowledge City, Vadodara
 - Transportation Infrastructure, Mumbai
 - L&T Valves, Coimbatore & Kanchipuram
 - L&T Realty, Mumbai
 - LDA, Lonavala
 - L & T, Kattupalli

The assurance process involved carrying out an assessment by assessors from Bureau Veritas with experience in Environment, Health, Safety, Social Accountability and Sustainability. We interviewed Project and Plant Operations & Maintenance, managerial and supervisory personnel at various locations. The Sustainability & CSR team of L&T at Powai was also interviewed.

¹ Published by Accountability: The Institute of Social and Ethical Accountability <http://www.accountability.org.uk> (AA 1000 AS version 3 is the latest version of the assurance standard)

Assurance Statement

2. L&T had submitted performance data on reported GRI indicators for year 2020-21. The data pertaining to various IC locations, remotely visited & audited by Bureau Veritas through the process above described. The credibility of the reported data was confirmed by Bureau Veritas assessors through a comparison with data management platforms maintained by L&T such as SoFi, ERP, Success Factor, LMS platform, EIP, MIS & HR portals. Where necessary, relevant documentary records were also reviewed to confirm data trails up to reporting.
3. Each IC related data was verified on a random sampling basis. After samples verifications, It was confirmed that the same verified data for all locations went into preparation of the final data within the Integrated Report 2020-21.
4. Bureau Veritas reviewed relevant stakeholder engagement activities that had been undertaken by L & T prior to the preparation of the Integrated Report. Supplier's assessment portal have well developed considering of environmental conservation criteria. The Stakeholder Engagement process was reviewed. Various records of the stakeholder engagement activities were reviewed to confirm how aspects material to L&T stakeholders had been determined. L&T has evaluated 4747 no. of suppliers for EHS and Quality from different ICs. L&T have added 29407 new suppliers on boarding by specially designed methodology of supplier's selection.
5. Our work was conducted against Bureau Veritas' standard procedures and guidelines for external assurance of Integrated Report, based on current best practices in the independent assurance.

Reporting boundary

The reporting boundary of L&T's Integrated Report 2020-21 covers only the business activities of **Larsen & Toubro Ltd.** (standalone) and two of its main subsidiaries, viz., **L&T Hydrocarbon Engineering Ltd.** and **L&T Valves** and the assurance provided by us is limited to L&T's business operations within the reporting boundary during the reporting period.

Reporting criteria

1. The reporting criteria for L&T's Integrated Report 2020-21 is the **International Integrated Reporting Council (IIRC) <IR> Framework²**
2. The reporting criteria for the Integrated Report 2020-21 is also the **Global Reporting Initiative (GRI) Standards³**
 - GRI 101 Foundation Standard
 - GRI 102 General Disclosures Standard
 - GRI 103 Management Approach Standard
 - GRI 200 Economic Disclosures Standards Series
 - GRI 300 Environment Disclosures Standards Series
 - GRI 400 Social Disclosures Standards Series

Evaluation against the defined reporting criteria

Bureau Veritas undertook an evaluation of the L&T Integrated Report 2020-21 against the **International Integrated Reporting Council (IIRC) <IR> Framework** and the current versions of the **GRI Standards**. This included

- 1) The report was evaluated against the 7 guiding principles of the <IR> Framework
 - a. *Strategic Focus and future orientation*
 - b. *Connectivity of information*
 - c. *Stakeholder relationships*
 - d. *Materiality*
 - e. *Conciseness*
 - f. *Reliability and Completeness*
 - g. *Consistency and Comparability*

² The <IR> Framework is published by IIRC and can be downloaded from <http://integratedreporting.org/the-iirc-2/>

³ The GRI Standards are issued by the Global Sustainability Standards Board (GSSB) and can be downloaded at www.globalreporting.org/standards



- 2) The report content was evaluated against the 8 content elements defined in the <IR> Framework
 - a Organisational overview and external environment
 - b Governance
 - c Business model
 - d Risks and Opportunities
 - e Strategy and resource allocation
 - f Performance
 - g Outlook
 - h Basis of presentation
- 3) The report was also evaluated for conformance to the current versions of the GRI Standards by cross-checking the GRI index table in the report against all the reference documents to provide an opinion on the self-declared GRI reporting option.

Based on our work, it is our opinion that the Integrated Report 2020-21 is aligned with the above mentioned 7 guiding Principles and 8 content elements of the <IR> Framework and meets the self-declared "In accordance-Comprehensive" reporting option of the GRI Sustainability Reporting Standards including appropriate consideration of the reporting principles and necessary indicators. The report is also aligned with principles of AA1000 Assurance Standard⁴ version 3.

Our findings

We summarise our key findings on the disclosures made by L&T regarding the various capitals impacted as a result of its business activities during the reporting period.

Financial Capital

The company's financial performance resulted in economic growth. EPCC contract awarded till date in the country in the refining and petrochemical sector and bagged two large value contracts, one each in onshore and offshore segments. Group revenues and Profit after Tax have registered increases over the preceding financial year. The company's current order book position seems to indicate revenue opportunities for the future year also.

Human Capital

The company has policies in place to develop the capabilities of its employees and reports more than 7 million in training hours spent. Workers health and safety committee developed for collective bargaining at each IC location. Safety campaign & daily safety meetings methods adopted. SPARSH (Standard Precautions using Augmented Reality for Safety and Health) and Virtual Reality devices at various work locations for workmen have been introduced.

Manufactured Capital

The business activities of the company have resulted in the creation of infrastructure such as roads, railway tracks, electricity transmission lines, and water pipelines. The other products manufactured by the company also have added to its manufactured capital base. "Sustainable Sites" is the focus followed at projects and manufacturing facilities.

Intellectual Capital

L&T has invested in R&D activities. Invested on structural parametric studies on Light weight aggregate concrete using sintered fly ash & structural design optimization of Tall and mid-rise buildings using genetic algorithm technique. 3 Patents are filed. Digital front scheme started at L&T. L&T has also invested in value engineering projects. New Energy' and 'Operations & Maintenance' are gearing up quickly to capitalize on emerging opportunities. Number of collaborations had with global majors and universities/technical institutes. L&T have started few initiatives e.g. Digitally Advance Design Process, Man Hours Booking System Automation, EHS Audit and Inspection platform, LTMSL IT-Security Monitoring, Robotic process automation & e-File Note etc

⁴ Published by Accountability: The Institute of Social and Ethical Accountability <http://www.accountability.org.uk> (AA 1000 AS version 3 is the latest version of the assurance standard)

Assurance Statement

Social & Relationship Capital

The CSR initiatives in environment, education, health, water, sanitation have impacted the lives and livelihoods of a large number of intended beneficiaries. 122 CSR projects well completed in reporting year in PAN India. Various CSR partners maintained. NGO are deployed for operational and execution of CSR activities. Engagement with shareholders, investors, employees, customers, suppliers & contractors, media, government bodies and communities was in evidence as an on-going activity. Global investments in clean energy transition exceeded half a trillion dollars in 2020. During the assurance verification's seems that initiatives started like volunteering activities, quarterly review of integrated community development projects, continuous engagement with village panchayats and local authorities

Natural Capital

Various initiatives were found to be taken for the conservation of natural resources and reducing impacts on the environment such as "Mission zero harm", green building concept, energy savings, recycling of materials, water conservation and reduction of GHG emissions. The company has a green products and services portfolio. L&T have focussed on Water consumption, Energy consumption from Non-renewable sources, Energy Used from Renewable sources, Spend on environment, Materials consumed etc

Our assessment was directed at arriving at an understanding of L&T's business model, its internal processes and framework and resulting outputs and their impact on the six capitals hereinabove described.

Our opinion

On the basis of our methodology and the activities described above, it is our opinion that

- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are inaccurate and the information included therein is not fairly stated;:
- We have not come across anything that indicates that the information and data included in L&T's Integrated Report is not accurate, not reliable or not free from material mistake or misstatement;
- There is no instance to indicate that the Report has not provided a fair representation of L&T's activities over the reporting period;
- The information within the Report is presented in a clear, understandable and accessible manner, and allows readers to form a balanced opinion over L&T's performance and status during the reporting period (F.Y. 2019-20);
- L&T has established appropriate systems for the collection, aggregation and analysis of relevant information;
- L&T has processes in place for consulting and engaging with its key stakeholders.
- The report provides a basis to understand the value creation by L&T in terms of the various capitals used by its business model and the resulting output and their effects on the capital.

Limitations and Exclusions

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period stated hereinabove;
- Positional statements (expressions of opinion, belief, aim or future intention) by L&T and statements of future commitment;
- Competitive claims in L&T's report of being "first in India", "first time in India", "first of its kind", "first in the industry" and such other claims
- Claims of campus "water positivity" or 'zero waste water discharge' in the report
- The number of people claimed by the report to have benefited from L&T's community development efforts
- Our assurance does not extend to the activities and operations of L&T outside of the scope and geographical boundaries mentioned in the report as well as the operations undertaken by any other remaining subsidiaries, associates or joint ventures of the Company.
- Our assurance on the financial indicators and financial performance of L&T during the reporting period is drawn from and is based entirely on the performance reported in the audited annual accounts⁵ of L&T for F.Y. 2020-21 and we have not conducted any separate assessment for the same.

⁵ The Annual Report of Larsen & Toubro Ltd. which contains information on L&T's financial performance for the financial year 2020-21 can be accessed at the web site <https://investors.larsentoubro.com/AnnualReports.aspx>

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist within the Report.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, and Social and Environmental management with almost 180 years history in providing independent assurance services.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

No member of the assurance team has a business relationship with L&T, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health & safety information, systems and processes an excellent understanding of Bureau Veritas standard methodology for the Assurance of Integrated Reports.



Mahesh Gharat
Lead Assurer
Bureau Veritas (India) Pvt. Ltd.



Sanjay Patankar
Technical Reviewer
Sustainability Scheme Lead-ICC
Bureau Veritas (India) Pvt. Ltd.

Date: 03/08/2021

Place: Mumbai



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United Nations Global Compact

Communication on progress

Principle	Category	Description	Page
1	Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights.	38, 39, 69, 115, 143, 162
2	Human Rights	Businesses should make sure that they are not complicit in human rights abuses.	38, 39, 69, 115, 143, 162
3	Labour	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	142, 162
4	Labour	Businesses should uphold the elimination of all forms of forced and compulsory labour.	38-39, 142, 160, 162
5	Labour	Businesses should uphold the effective abolition of child labour	38-39, 142, 160, 162
6	Labour	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	38-39, 115, 142, 160, 162
7	Environment	Businesses should support a precautionary approach to environmental challenges	56-69
8	Environment	Businesses should undertake initiatives to promote greater environmental responsibility	56-69
9	Environment	Businesses should encourage the development and diffusion of environmentally friendly technologies.	56-69
10	Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery	160

Case Studies



Manufactured Capital

Multi-functional Remote system to operate Individual Hoist Locally in Ship-lift Platform

The multi-functional remote system plays a major role when Individual hoists of the ship-lift platform need to be operated locally for various activities like Bottom Sheave removal, Wire rope NDT checks, Rope replacement, Maintenance activities, position adjustment, etc. This device has drastically reduced component failure and manpower requirement.

The Objective

Our task was to develop a system to reduce manpower requirement and component failure.

Initiatives Undertaken

- Developed new method for the system operation Improved operational accuracy Avoided components failure & damages
- Maintained the panel cooler efficiency and thereby avoided causes of drive failure
- Ramp Up/Down & direction selections are made simple with the multi-stage selector switch
- Ignored direct interactions with the VFD, Contactors & live wires inside the VFD panel

Key Benefits

- Using this kit, damage of electronic components is reduced. Thereby maintenance costs and components wastage are drastically reduced.
- Easy accessibility, portable & complete safe operation with emergency stop
 - Need for highly skilled electrical technician to operate system is avoided. The same operator can operate both the Hoist system & Wire rope reeling drum

Achievements

92 man-days

Saved per year of skilled technical manpower

₹ 141,200

Cost savings per year in components replacement

Suspended platform for pile cap construction in water mode

The construction of pile cap underwater requires watertight access and shutter. A suspended platform emerging from the pile can be

The Objective

Developing methods for minimising cycle time and cost, as well as optimising labour and machines for pile cap construction in the underwater mode, with 700 CUM of pile cap concrete and 85 MT of rebar.

Initiatives Undertaken

For effective construction of pile cap underwater, we suspended a platform from the trestles emerging from the piles, which is held by stress bars. The system is made waterproof using rubber packing and bitumen seal

Benefits Derived

- The system resulted significant saving in material and labour Improved productivity, safety and ease of handling
- Elimination of liner/sheet pile driving in deep river, thus saving assembly and dismantling time
- No sacrificial structural element involved, thus no wastage
- Dewatering system eliminated

Achievements

Time cycle reduced by

20 days

for pile cap construction

500 MT

Structural steel saved

₹ 6 Crore

Savings in value

Case Studies



Manufactured Capital

C-Value, pump performance and hydrotesting of pipeline for west segment projects-LWS-1

C-Value & Hydrotesting of pipeline are very critical activity from the design, Execution, and testing points of view. In general, we depend on external agency for carried out of C -Value testing of water pipeline.

The Objective

Designing of C-Value and Hydro setting pipeline for energy and cost savings.

Initiatives Undertaken

We took initiatives to formulate Procedures and formats to get approvals from Customer and Project Consultant, Knowledge sharing conducted, demonstrated testing at site and Training effectiveness measured.

Benefits Derived

- Time saved for testing arrangements, reworks, water cost etc. intangible benefits for best practices.
- Direct Saving of 10,400 KW-Hrs for sectional hydrotesting of pipeline subjected to passing of pipeline in 1st attempt.
- Employees earned knowledge through training programme.
- Total cost saving was ₹ 52 Lakh for FY21.

Achievements

10,400 KW-Hrs

Energy saved

₹ 52 Lakh

Cost savings

Reinforcement bar scrap using in House Service Connection Slab RCC

The Objective

Our objective was to conserve energy by utilising reinforcement bar scrap for cost savings which also reduces CO2 emissions.

Initiatives Undertaken

The reinforcement bar scrap that was being left after concreting in major structures like OHSR and WTP were utilised in minor structures such as House Service Connections (HSCs) which require bars of lengths up to 0.6 m only for project Satna MVRWSS.

Benefits Derived

Considerable reduction in steel consumption leading to reductions of CO2 emissions, energy consumption and waste generation helping to keep up with sustainable development goals.

Steel, energy as well as manpower saving thereby saving in costs.

Achievements

- Total 4.5 MT steel saved
- More than 180 manhours saved
- 90GJ of energy saved

Total savings up to now

9 Lakh

for 10,000 HSCs

Potential savings up to

2.7 Crore

for 3 Lakh HSCs

Reduction of CO₂

9,000 kg



Developed an App (INMS-Incident Management System)

It is very tough and difficult to monitor Field Engineers and devices. Take those difficulties into account in prior, Project Director discussed with Digital Team and decided to make a Digital platform. Project team and Digital team joined together formulated an APP, named as INMS (Incident Management System).

The Objective

To develop an app which can help us identify and rectify any issues in the devices we installed in different schools of Tamil Nadu.

Initiatives Undertaken

We have implemented Hi-Tech labs project in Tamil Nadu which is Installation of server, thin clients, projector, printer, IP Phone and UPS and internet connectivity in 6,029 schools in 38 districts of Tamil Nadu wherein we deployed 76 Field for O&M activities.

Benefits Derived

With the help of that we can easily monitor the attendance of Field Engineers and their daily school visits with Lat/Long details. Moreover, we can easily monitor, rectify and replace the defective devices.

In INMS app, once FE raised any ticket about device failure, it will automatically be routed to OEM team. If the OEM is not attended within the stipulated time, it will be automatically escalated to their higher Officials. In addition to that, we can store numerous data in cloud storage for future review purpose with downloadable feature.

Achievements

5,937

incidents raised in the app, of which 5,717 were resolved

₹ 96.29%

Efficiency of the system for closing raised tickets

Case Studies



Manufactured Capital

Bihar Campus Wi-Fi Project

Campus Wi-Fi Project is one of the dream project of Hon'ble CM of Bihar under Viksit Bihar Ke Saat Nischay. Project had been awarded to Larsen & Toubro Construction -SWC BU by BSEDC dated August 16, 2016. Department of IT.

The Objective

The aim is to provide internet facility using free Wi-Fi network in the campuses of government universities and its constituent colleges of the state of Bihar to give impulse to the digital India project & to facilitate & encourage students about "Digital India Initiative."

The objective of this exercise is to provide Campus wide Wi-Fi so that the students, faculty and administrative staff of the university can access NKN and thus get connected to the internal resources such as MOOCs courses, NDL and Internet.

Initiatives Undertaken

We ensured the following operational excellence and best practices in Bihar Campus:

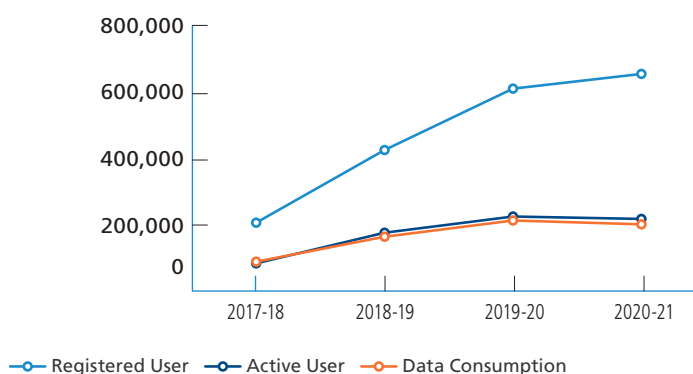
- Uninterrupted internet connectivity
- Video conferencing
- CCTV surveillance
- Biometric attendance system
- Online classes & admission system
- Live webinars

Project Benefits

Learning beyond the classroom walls

- Increased engagement
- Admin work
- Digital initiatives
- Multimedia study guides
- Personalised instruction
- Group study sessions
- Pocket library
- Easier collaboration

Wi-Fi Network Usage





Natural Capital

(Defence engineering)

Successful recycling of wooden scrap

Recycling the scrap wooden boxes conserves natural resources and saves cost. We were able utilise wooden scrap material by recycling and dispatching the recycled boxes through packing agency.

The Objective and the Challenge

Our objective was to conserve and reduce the usage of new wooden boxes for every component at Hazira. For that, we required to recycle the scrap boxes for reuse.

Benefits Derived

The activity led to conserving natural capital thereby savings cost. Around 80% of the boxes were recycled from scrap.

Achievements

₹ 18.15 Lakh

Saved from recycling of wooden scrap

Initiatives Undertaken

During FY21, our team refurbished around total 200 boxes of various dimensions, totalling 300 CBM (cubic meter) of boxes.

Saving electricity cost and enabling renewable energy through solar power

Installing solar power plant offers several benefits such as saving electricity consumption bill, reduces carbon emission, noise reduction, etc.

The Objective

Our task was to reduce the electricity energy consumption bill by using solar energy at CSTI Campus, Hyderabad.

Benefits Derived

After installation of the Solar Power Plant, electricity energy consumption bill has reduced to 40%.

Achievements

121,748 KWH

Energy saved per year

113,956 kg

CO₂ emission control per year

₹ 9.5 Lakh

Savings in electricity cost

Initiatives Undertaken

- To reduce the electricity energy consumption bill, 113.9 kW Solar Power Plant was installed
- Plant was constructed with different types of modules, like 54 kW polycrystalline modules, 32.3 kW thin film modules, 27.6. kW mono crystalline modules
- The periodical preventive maintenance is carried out; hence the Solar Power Plant is working in good condition
- Net meter is provided, thereby excess power is exporting to the grid, which resulted in financial savings

Case Studies



Natural Capital

Reuse of concrete cubes discarded from QA/QC

Cost saving by reusing discarded concrete cubes for temporary boundary wall and other small concrete projects.

The Objective

To reduce wastage of material (discarded concrete cubes)

Initiatives Undertaken

Every day approx. 90-98 concrete cubes are discarded by QA/QC department after load bearing test. We reuse the cubes for floor making, temporary boundary wall, barrier along the sewage drain.

Key Benefits

Saved cost by using discarded concrete cubes instead of PPC for different projects and saving in transportation cost

₹ 207,000

Savings in total cost

Sustainability in oil and gas industry through fuel monitoring system

Using smart fuel oil monitoring system could result substantial overall fuel oil consumption figures in hydrocarbon engineering projects, Powai, Mumbai.

The Objective

Our task was to implement a smart fuel monitoring system for efficient fuel consumption.

Initiatives Undertaken

- Monitoring of construction barge LTB300 was done
- IoT based Digital Solution 'Real Time Vessel Fuel Monitoring System' was implemented to automate the entire process

Achievements

650 KJ

Saving in energy (direct/indirect)

Saving of potable water

Initiatives Undertaken

In laboratory, during COD, Distillation process etc water is running to cool down the distillation column which is wasted to the drain. 1 bucket is filled, and a small cooler pump is installed which will be the inlet of distillation column and the hot water is sprayed in last bucket through which water is conveyed to the first bucket with series of more bucket in between. During the process water is cooled down to room temperature.

Achievements

90,000 litres

water saved per month

~1,095 KL

water saved per annum



Intellectual Capital

Operational excellence and best practices in first Integrated Nagpur Safe & Smart City

A 6-Km 'Smart Strip' from Japanese Garden Square to Orange City Hospital Square is an avant-garde endeavour to showcase all the smart solutions which will be controlled by state-of-the-art-Command & Control Centre.

The Objective

The objective was to make Nagpur a safer, smarter and more connected city to live in, equipped with a whole gamut of smart solutions ranging from surveillance cameras to environmental sensors, smart traffic to smart lighting, variable messaging systems to smart bins, Wi-Fi hot zones to smart kiosks.

Initiatives Undertaken

We implemented various operational excellence and best practices in the first Integrated Nagpur Safe & Smart City in the following aspects:

- Surveillance
- Fiber Rollout
- New Technologies
- Software's
- EHS
- Quality

Benefits Derived From

- The efforts are very useful in monitoring and maintaining Law & Order in the city using CCTV footages for effective investigation
- Online access to various citizens services
- Effective monitoring of emergency situations through special smart surveillance solutions like Drones
- Integrated GIS for monitoring the availability of Hospital bends, RTPCR testing centres, Primary Health Centres during COVID

Key Benefits

- More than 1,300 offences were resolved using CCTV surveillance feeds
- ~ ₹ 11 Cr e-challan generated from traffic violations till data
- 46% energy saved due to smart lighting system
- 28,000 citizens benefitted from free Wi-Fi facility per month

Case Studies



Intellectual Capital

Solid waste management through IoT solutions

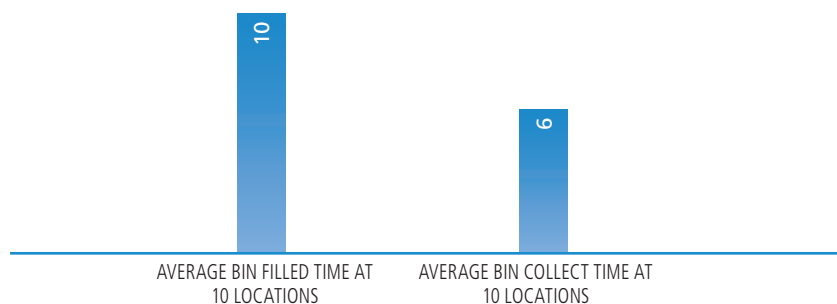
IoT-based solid waste management system offer smart solutions for smart cities. The system ensures proper dumping of wastes, real time tracking of compactor, field staff attendance monitoring using biometric solution, bin volume sensor for bin level monitoring, etc.

The Objective

Our task was to set up a smart system that ensure proper management of bins through volume sensor installed & real time bin fill status at control room.

Smart Bin Analysis Report

In Hours



Initiatives Undertaken

We developed a mobile app through which driver and personnel can get the information (location, bin fill status) along with the fuel consumption of the vehicle to track real time data.

Benefits Derived

Monitoring & Tracking of one vehicle and real time management of 10 garbage collection points enabled with two smart bins sensors per location. Through this solution garbage fill status is monitored from central location and drivers are directed accordingly through SMS, Email & alert in mobile application.



Intellectual Capital

Artificial Intelligence based Crowd Management system

The Objective

To develop a AI based system for crowd management.

Initiatives Undertaken

We developed a AI-based global crowd management system that proactively interprets crowd dynamics and provides timely alerts by taking into account head count and people density at mega events

Benefits Derived

- Real-time video analysis for crowd management along with detection and alert algorithm in overcrowding circumstances through thresholds and benchmarking
- Identification of uni/bi-directional wrong-way movements and movements in restricted areas
- Dashboard for crowd management with graphical representation of crowd levels of the areas under coverage, trend analysis for peak and off-peak days, alerts for excessive crowds etc.
- Out of 112,926 calls attended, 70,340 calls have been resolved on COVID-19 awareness, ration, food, doctors, utility services during the pandemic.

Achievements

₹ 4,156,700

Penalty collected for red-light violation detection during FY 2020-21

126,588

Challans generated

73

Traffic incidents resolved/recorded

Awards

- ISAC Awards 2021 – Top 5
- ISGF Innovation Awards 2021 – Runner up
- Excellence e-governance initiative at 'FICCI'

Best Smart Solutions (India) of the Year

Prayagraj Smart City is North India's first Integrated Smart City project which leverages Artificial Intelligence based Crowd Management technology to ensure enhanced safety and facilitate city administrators to seamlessly manage the mega religious convergence, the largest gathering of its kind across the world held during Kumbh Mela 2019 event at one of the four sacred cities, Prayagraj.

The Objective

To provide smart solutions for the first integrated smart city project of North India (Prayagraj).

Initiatives Undertaken

- Developed AI-based global crowd management system.
- Developed adaptive traffic management systems
- Implemented integrated surveillance system
- Smart solid waste management system with GPS tracking system
- 1,920 numbers of 24x7 contact centre for better pilgrimage experience

Benefits Derived

Reduced traffic congestions and waiting time. Proper channelisation of solid waste through smart dustbin facilities.

Awards

- ISAC Awards 2021 – Top 5
- ISGF Innovation Awards 2021 – Runner up
- Excellence e-governance initiative at 'FICCI'

Achievements

1,000+ cameras

installed at more than 250+ locations in Prayagraj city

500 dustbins

with GPS tracking system at 48 dumping locations

Case Studies



Intellectual Capital

Travel time saving in Adaptive Traffic Control System

Deployment of Adaptive Traffic Control System help the citizen of Raipur to save the travel time. ATCS uses VAC (Vehicle Actuated Controller) mode which generally works on real time basis and as long as there is any vehicle movement it will keep the green light on and if it doesn't detect any vehicle, it will terminate the green light immediately with a constraint of maximum and minimum time.

The Objective

Initiatives Undertaken

24x7 real time monitoring of city junctions and sensitive locations.

- 144 - violation monitoring
- Over crowd monitoring
- Surveillance over supplies of nonpermitted items to individuals like alcohol
- Sanitisation area monitoring across the cities
- Raipur CCC turned out to be COVID-19 Control Centre and has attended 16,984 calls of the general public from March 28, 2020 to December 31, 2020
- Key notices or messages precisely communicated across the city through the Variable Messaging Displays/Billboards.
- Audio messages from city administrations announced through the Public address systems to provide awareness regarding preventive measures to be followed during COVID-19

Benefits Derived

Column 1	Max. Time (Sec.)	Phase Utilisation (Sec.)	Time Saved (Sec.)
1st Cycle	136	80	56
2nd Cycle	136	89	47
3rd Cycle	136	104	32
4th Cycle	136	104	32
5th Cycle	136	99	37
6th Cycle	136	113	23
7th Cycle	136	122	14
8th Cycle	136	129	7
9th Cycle	136	89	47
10th Cycle	136	107	29
Total	1,360	1,036	324

Achievements

At least 24% of time is being saved for commuters by using VAC mode over fixed time mode.

6,696 challans

generated for stop line violations

17,506 challans

generated for wrong way violation

15,303

COVID-related calls addressed



Intellectual Capital

Crime investigation using the smart surveillance system

By using the smart surveillance system police personnel of Raipur are solving many cases day by day, which is giving the citizen of Raipur a safe and crime free environment.

The Objective

To deploy smart surveillance system for police personnel of Raipur.

Initiatives Undertaken

Deployed smart surveillance system for police personnel for investigation and resolution of crimes.

Achievements

Total no. of cases solved using the surveillance system are 214 (Mar-20 to Mar-21). Cases like Theft, Snatching, Fighting, Accidents, Kidnapping, Murder, Missing baggage/mobile were solved.

In one of the kidnapping cases, the kidnappers demanded a ransom of 25 Crore and the police department were able to catch the kidnapper without giving a single penny as ransom. The case was closed within 14 days.

Benefits Derived

Sr. No.	Locations observed with poor AQI >200	Time Period
1.	Railway Station	January, September, October, November, December
2.	Pachpedi Naka	January, October, December
3.	Inter State Bus Stand	January, November, December
4.	NH6 VIP Road, Saheed Smarak, RMC Garden, Telibandha Marine Drive, Nalanada Parisar	January, December

Securing IT Infrastructure

TNSDC is one of the backbones of entire IT Infrastructure of Government of Tamil Nadu, ensuring cyber security through integration of back bone network.

The Objective

To ensure the maximum cyber security for IT infrastructure of Tamil Nadu Government.

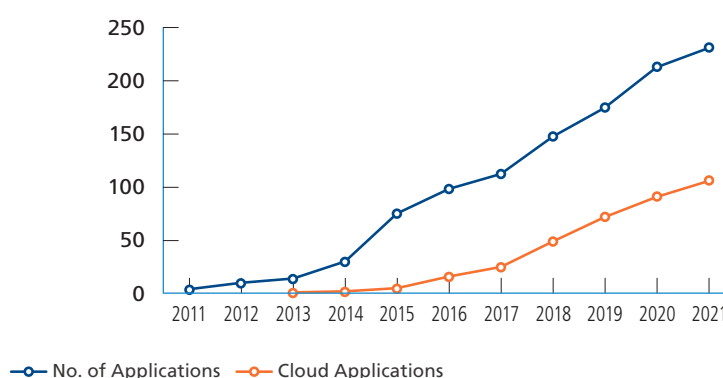
Initiatives Undertaken

- Citizen service is fully available with 24 X 7
- Integration of back bone network
- Compliance related to Backup, SSL certificate and Security Audit during hosting

Achievements

230
IT-applications
are live and running 24 X 7 X 365 at TNSDC Perungudi

Applications Hosting Trend



Case Studies



Intellectual Capital

Forecasting of seasonal diseases - Vizag Smart City

A seasonal disease forecasting algorithm can help the government to take proactive action in health risk mitigation. Number of cases from Jun 2020 to Dec 2021 (month and ward wise) is forecasted by the algorithm.

The Objective

Forecast outbreak of seasonal diseases in the city of Visakhapatnam for proactive implementation of preventive measures.

Initiatives Undertaken

- We collected historical data with respect to 3 Seasonal
 - Diseases viz. Dengue, Malaria and Chikungunya from Public health department GVMC. The collected data ranges from Jan 2016 to May 2020 for a total 77 wards (Ward1-Ward 72, Anakapalli, Bheemili, Rail, Naval, NT).
- An algorithm was built based on the historic data from Jan 2016 to May 2020
- A web application with data was developed and designed for viewing accessing the data

Benefits Derived

- Predicted number of cases ward wise for the year of 2020 and 2021 for proactive implementation of preventive measures
- High risk areas plotted on Geo view for prioritisation and management. This has enabled the city administration in effective handling of the seasonal diseases
- Average air quality index observed – 102
- Total data consumed – 270.55 TB
- On an average 300+ calls received through ECB
- Smart waste management –on an average 50+ bin full alerts addressed

Achievements

180

incidents solved using CCTV surveillance

₹ 47,900

Logins per month on e-governance application



Human Capital

Sensitising of employees on safety

The Objective

To sensitise employees on work-related hazards and risks.

Initiatives Undertaken

- **Immersive Learning:**
EHS team developed and implemented state-of-the-art VR (Virtual Reality) based Safety Induction modules on "Critical to Safety" themes to sensitise employees about work-related hazards and risks.
- **Realistic Learning:**
Conducted theme-based skits demonstrating hazards and associated risks and safety measures to be followed through plays involving Staff & Contractor Workmen at project sites.

Benefits Derived

- Workmen were able to visualise degrees of risk, site conditions, etc. and the consequences of doing things unsafely.
- Employees can better understand the hazards and easily assimilate the safety measures in a practical way. They can explore the risk associated without risk to themselves or equipment.

WINSPIRE

Our corporate HR has been working to channelise its efforts to further the Diversity & Inclusion (D&I) agenda in L&T. WINSPIRE is one such initiative that was recently launched. It is a collection of various interventions to celebrate the contribution of L&T's women employees.

Women employees at various career stages shared their challenges and experiences through a series of interviews & panel discussions. Corporate HR collaborated with the Corporate Brand Management & Communications team to bring out a short movie titled 'Celebrating the Daughters who build the Motherland' and a coffee table book showcasing stories revolving around the various facets of professional and personal lives of L&T's Women employees. Both of these were unveiled on March 8th (International Women's Day) by our CEO & M.D. Mr. S. N. Subrahmanyam.

The WINSPIRE initiative will be growing into a full-fledged D&I initiative in FY22

Case Studies



Social and Relationship Capital

Plantation of Fruit Saplings at Talasari and Jawhar

This green initiative is a step ahead for creating an alternate but sustainable source of income to the deserving families, launched with the support of L&TPCT and Vrutti as implementing agency

Objective

The objective is to provide 2,000 families in Talasari and Jawhar block of Palghar district in Maharashtra with additional source of income.

Initiatives

The families covered under this initiative were with 3-7 saplings of Mango and 4 varieties of Cashew. Around 8,769 pits were dug and plants planted.

Impact

Our focused guidance helped the farmers during this six month

as they are now aware about the plantation of the orchards, nurturing of the horticulture plants, preparation of bio input, indigenous type of fencing and management practices to keep the plants healthy among others. We also gave them periodic direct and indirect information on how to planting saplings, how to dig the pits, what material should be placed to fill the pits, how frequently watering to the plants, which input fertiliser to give and how to protect the plants with fencing among others.

Achievements

2,000

Families benefitted with additional income

Creating livelihood opportunity during the pandemic

In the difficult pandemic circumstances, LTPCT came forward to provide livelihood for more than 55 SHG members of Talasari through mask making activity.

Objective

The objective was to motivate SHG members and producer group members to make masks in the lockdown period to support their livelihoods and help provide safety equipment during the pandemic.

Impact

The programme helped generate livelihood opportunity for 55 families with total revenue from mask making reaching around ₹ 14 Lakh. The PGs have been developed as professional entrepreneurs. It has helped in increased communication and coordination skill of all members.

Achievements

₹ 12 Lakh

Worth of order received for 1.5 Lakh masks



Social and Relationship Capital

Migrant labours returning home to farming livelihood

Providing livelihood to migrant labours returning to their homeland.

Objective

Provide solar based lift irrigation system to help farmers who never grew vegetables during the summertime.

Impact

- For the first time, the farmers cultivated tomato, lady's finger, bottle gourd and brinjal
- LTPCT helped form a farmers' group, open a collective bank account and register the group. Every month, each farmer contributes ₹ 100 to the bank account. Repairs and maintenance of the irrigation system is met through the collected money

Achievements

50 acres

Land came under irrigation covering 62 farmers

Helping a hamlet with water distribution system

Constructing a water distribution to the water starved area.

Objective

Providing respite to 50 families through the construction of the water distribution system.

Impact

- All households have water available close to the house
- The five stand posts provided the nearby with water twice a day
- A committee have been formed to manage, maintain and repair the system, an amount of ₹ 50 per month have been decided per household for this purpose

Case Studies



Social and Relationship Capital

Promoting poultry farms in project intervention areas

Promoting poultry for 10 selected beneficiaries with an aim of increasing the beneficiaries' household income by selling male birds, increasing the share of protein consumption in their diet, promoting the sale of eggs, and expanding the range of demo activities.

Objective

Project Uddyam has sought to promote backyard poultry by setting up demo farms in the tribal community of Talasari. 100-day-old chicks of dual-purpose birds were then distributed to the beneficiaries.

Impact

- Of the 1,000 birds initially given, 532 are alive. Out of these 521, 44 have been self-consumed by the beneficiaries, and 167 sold in local and nearby markets.
- The rate at which the birds are sold ranges between ₹ 100 to 200, the average rate is ₹ 162 per bird

Achievements

₹ 24,120

Total revenue generated by all 10 beneficiaries

Creating linkage between farmer produce and big brands

Promoting Local Mango Flavour Through Project Uddyam.

Objective

One of the key objectives of Project Uddyam is to create robust linkages with the big brands for increasing the price margin received by farmers. In this regard, the CMS team has worked on backward and forward linkages.

Impact

- The team helped in procuring mangoes from the farmers
- By selling through the procurement centre to Big Basket, these 11 farmers got a premium of ₹ 17.39 per kg as compared to if they had sold locally through middlemen.

Achievements

3.3 tonnes

Mangoes were procured from 11 farmers

ESG Performance of Listed group subsidiary companies

Larsen and Toubro Group's listed subsidiary companies include Mindtree Limited, Larsen & Toubro Infotech Limited (LTI), L&T Technology Services Limited (LTTS) and L&T Finance Holdings Limited (LTFH). The combined carbon emissions of these companies has reduced by 35% y-o-y and water consumption has reduced by 45% y-o-y. In addition, Mindtree, LTI, LTTS and LTFH have contributed ₹ 80 Crore towards CSR for FY21.

Larsen & Toubro Infotech Limited (LTI)

Larsen & Toubro Infotech Limited (LTI) headquartered in Mumbai, India was founded in 1997 as a wholly owned subsidiary of Larsen & Toubro Limited. L&T Infotech (LTI) is a global technology consulting and digital solutions company helping over 400 clients succeed in a converging world. With operations in 31 countries, we go the extra mile for our clients and accelerate their digital transformation. LTI crossed the 34,000-employee mark in FY21.

“

For your Company, it has been a year of persevering and adapting. We continued to build on our solid fundamentals, drive growth momentum and reinforced our partnerships – to help clients recover.

Mr. Sanjay Jalona
CEO & MD



Our Product Offerings



Digital Consulting

Cloud

Data & Analytics

Application Management

Enterprise Solutions

RPA

IoT

Our Service Offerings



ADM and Testing

Infrastructure Management Services

Enterprises Integration & Mobility

Enterprise Solutions

Analytics, AI and Cognitive

Platform-based Solutions

Our Sustainability Framework



Business Right

- Client Centricity and Operational Excellence
- Disclosures and Transparency
- Ethics and Code of Conduct
- Risk Management



Planet Right

- Resource Efficiency
- Adopting a Low Carbon Strategy
- Green Cover
- Green Products and Services



People Right

- Stakeholder Engagement
- Employee Wellbeing
- Diversity and Inclusion
- Human Rights
- CSR
- Volunteerism

Awards and Accolades

- Certificate of Membership by FTSE4Good
- AA rating by MSCI ESG Ratings
- LTI, Mumbai, Maharashtra received LEED PLATINUM by the US Green Building Council for operations and maintenance
- LTI, Bengaluru, Karnataka received PLATINUM rating for achieving Green Building Standards by IGBC
- Topped the list of 'IT Services Challenger 2021' in Everest Group's PEAK Matrix Service Provider of the Year Awards
- Ranked among the top 50 companies (Rating 'A') in the BW Business World India rankings for Most Sustainable Companies 2020
- Won IGBC Performance Challenge Award 2020 for Green Built Environment for Powai HQ
- Signatory to UN Women Empowerment Principles
- CDP supporter 2021

ESG Highlights

Environment: Green Buildings, Renewable Energy, Green Weeks, Energy Conservation and Tree Plantations are major steps in our Carbon Neutrality 2030 roadmap.

- Electricity consumption reduced by 63.2%
- Renewable Energy share increased to 26.4%.
- Emissions due to travel reduced by 92.8%
- Mitigated 4,116 tons CO₂ through energy conservation and green power procurement
- 2,000 acres of land irrigated through water conservation programs
- 70% of office area covered under green building norms.
- 9.65 ML water recycled
- 180 farm ponds constructed
- Planted 152,025 trees

Social

- Workforce – 35,000+; Attrition Rate reduced to 12.77% in FY20-21 from 16.55% in FY19-20
- 30.23% women representation in workforce with 12.5 % women representation in senior management
- 2,500+ Learning programs and 344+ Competency-based programs
- Reached 126,649 beneficiaries, including women, children and youth from low income communities and special abilities
- 51% beneficiaries of our CSR programs are women
- 14,000+ children received happiness kits comprising nutritional food, immunity-boosting items, and hygiene-related goods and stationery
- Zero work-related accidents

Governance

Type of Grievance	Recd in FY21	Resolved in FY21	Pending
Whistle Blower	6	4	2
Sexual Harassment	2	2	0

CASE STUDY

Solar Power Plant

At our campus in Bengaluru, we have installed an off-grid 100 kWp Rooftop Solar Power plant. We conducted Feasibility study along with Load Bearing test to determine capacity of solar power plant according to Space and Feasibility Study. The initiative has reduced CO2 emission by average 400 Units Per Day (121 tons of CO2 reduced per annum) and also reduced cost to zero for generated units. We have a similar off-grid 10 kWp Plant at another leased space in Airoli in Navi Mumbai.



CASE STUDY

Green Buildings

We have undertaken significant steps towards developing and designing offices adhering to Green building standards, implementing measures to ensure energy efficiency, green power and water conservation besides enabling daylighting and steps for waste reduction. LTI Headquarters at Powai is a Platinum rated Green Building by USGBC and was awarded the 'Excellence Award' by IGBC in the 'Performance Challenge 2020 for Green Built environment'. Our Bangalore campus is an IGBC Platinum rated Green Building.



CASE STUDY

Energy Conservation Initiatives

The Energy Conservation Initiative reduces campus-wide energy consumption and helps your India operation to meet the target goal of carbon neutrality by 2030. Some of the initiatives undertaken during FY21 are:

- Heating, Ventilation and Air-Conditioning (HVAC) system optimization
- Reducing main Chiller operations by alternative low energy sources during non-peak hours
- Replacement of Old Equipment with newer energy-efficient chillers with newer technologies
- Uninterrupted Power System (UPS) Optimization
- Reducing losses within a UPS system by managing connected load and reducing the no. of devices
- Replacement of old and obsolete equipment with efficient modular UPS systems and lesser losses at lower loads
- Replacement of Conventional Lighting Systems
- Initial focus on fittings with fastest payback (CFL to LED). We are gradually moving older T5 fittings to LED which has marginally longer payback
- Sweating of Assets
- At our Pune Office, we have started to use resources of one location to meet the requirement of other locations by bearing only the logistics cost



L&T Technology Services

L&T Technology Services Limited (LTTS) is a leading global pure-play Engineering Research & Development (ER&D) services company. It offers consultancy, design, development and testing services across the product and process development life cycle. LTTS provides services and solutions in the areas of product software, mechanical and manufacturing engineering, embedded systems, engineering analytics and plant engineering.

Our technologists work with global firms to offer smart solutions and services that can accelerate new product development, facilitate remote asset management and enable virtual product design and prototyping. The key differentiators for LTTS' business are its customer-centric industry innovations, domain expertise and multi-vertical presence spanning major industry segments.



The world needs sustainable solutions, and it needs them now. At LTTS, we are driving the creation of a cleaner, greener, and more prosperous future through our focus on 6 strategic areas – Electric, Autonomous and Connected Vehicles (EACV), 5G, MedTech, Digital Manufacturing, AI/ML-driven Smart Offerings, and Sustainability.

Mr. Amit Chadha
CEO & MD



Our ER&D services offered

Products

- Mechanical Design
- Security
- Cloud & Analytics
- DevOps
- Immersive Experiences
- Embedded System
- VLSI
- Testing and Validation
- Wearables Engineering

Manufacturing

- Plant Engineering
- Digital Factory
- Line Expansions and Transfer
- Asset Care
- Accelerated Operations
- Mfg Automation
- Agile Supply Chain
- Smart PLM

Operations

- Sourcing
- Robotic Process Automation
- Intelligent Building Management
- Integrated Content Management
- Connected Service Support

Consultancy

- Industry 4.0
- Smart Factory
- Product Strategy
- Security

Achievements

A leading global pure play engineering services company

306

Global Clients

69

R&D Innovations

16,400+

Employees

Top 25

Best Employees Globally

650

Patents

17

Global Design Centers

25+

Countries

53 of Global 100

R&D Spenders as clients

Our client coverage

Plant engineering

7 of top 10

Medical and life sciences

3 of top 5

Industrial products

7 of top 10

HI-tech

8 of top 10

Transportation

8 of top 10

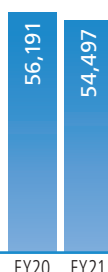
Media & entertainment

4 of top 5

*Data as of March 31, 2021

Performance Highlights

Revenue ₹ (in Million)



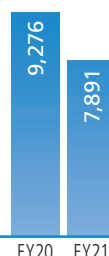
Cost of Sales ₹ (in Million)



EBITDA ₹ (in Million)



EBIT ₹ (in Million)



Net Income ₹ (in Million)



Awards and Accolades

- Most Innovative Tech Company of the Year 2020
- Most Exemplary Employer (COVID Response Category)
- Awarded the Gold Stevie for Brand Experience of the Year 2020
- Awarded the Golden Peacock National Quality Award
- Brandon Hall HCM Award 2020 for Excellence in Best Advance in Employee Engagement
- LTTS' Chest rAI & i-BEMS recognized with the 2021 BIG Innovation Award
- India Digital Enabler Awards 2020 in "Best Technology for Healthcare"
- Frost & Sullivan Global Customer Value Leadership Award 2020 for i-BEMS
- "Highly Commended" by 2020 Transform Awards Nordics
- Best Company for Excellence & Innovation in Digital Engineering Services by Dataquest

ESG Highlights

Environment

- We installed solar panels for public street lightening and helped optimize HVAC with VRF and occupancy sensors.
- Besides enabling STP and rainwater harvesting, we installed pressmatic taps and aerators to reduce water usage at our facilities.
- Significant energy savings were achieved during FY21.

Energy savings during FY21

Comparison	FY21	FY20
Unit Consumed per Annum (in KWH)	1,340,508	2,643,108
Saving in terms of power consumption (KWH)	1,754,692	68,223
AVG per unit rate per Annum in INR	9.49	7.90
Savings in terms of INR (₹ Lakhs)	123.6	5.4



Social

- CSR spend (FY1): ₹ 157.19 Million as against a budget of ₹ 156 million.
- 22,359 elderly people were benefited from our Mobile Health Unit (MHU).
- 8,550 students of all ages were covered under various educational programmes.
- 307 rural youth benefited from our skill development projects.
- **Corporate Volunteering Programme (CVP):** 1,221 hours towards volunteering work across LTTS locations during the year.
 - Various employee well-being and equal opportunity programs viz., Accelerated Leadership Program (ALP), Young Leadership Program (YLP), CEO Club, Gladiate, Illuminate, Glocal, Prism, and Global Engineering Academy were implemented during the year.

Governance

- All major policies such as whistle-blower, POSH, anti-bribery, and anti-corruption policy have been implemented
- Women employees comprises 21% of our total workforce as on March 31, 2021.
- LTTS has created an online platform 'Ethics Line' as a part of its whistle blower mechanism. Ethics Line offers an independent, multi-channel interface for employees to report unethical conduct/malpractice they may see around them, which are then addressed by the competent authority. Complete anonymity is ensured by the management of those who raise concerns.

	During FY 21	Resolved during FY21
POSH	3	3
Whistle-Blower mechanism via Ethics Line	5	5

CSR performance at a glance

Environment

488

people benefited from our solar project

51

cyclone-resistant houses handed over to beneficiaries

35,000

sq. ft of space maintained

28,886

kgs of (dry + wet) waste collected

Water

1,068

people benefited from various socio-economic programs

4,635

agro forestry saplings planted

4,634

cubic metre of clearance channel constructed

Health

22,359

healthcare treatments provided

446

places primary care was given

Education

8,550

students benefited from our education programs

Infrastructure support provided to women research scholars

Skill Development

247

youth benefited from digital literacy courses

60

youth benefited from office assistantship training

CASE STUDY

Withstanding Nature's Fury with Disaster-Resistant Homes

Dangerous and unpredictable natural disasters affect millions of people every year. Events such as cyclones and floods can completely destroy thousands of houses and force people to evacuate their homes. According to the UNICEF, about 25 million people around the world were displaced due to natural disasters in 2019.

Building cyclone-resistant homes in Puri, Odisha with Habitat for Humanity, India

When Cyclone Fani made landfall on India's eastern coastline on 03 May 2019, Odisha faced the brunt of the impact. Although more than a million people were evacuated from the state's vulnerable coastal areas, 64 people died due to this natural disaster which wreaked INR 5.25 billion worth of infrastructural damage.*

The cyclone had ravaged several thousands of homes in Odisha's Puri district. In response to this crisis, LTTS launched Project Neelachala – an initiative to provide disaster-resilient homes to 150 affected families in Puri. As part of this initiative, we are working with Habitat for Humanity, India and the Government of Odisha

to rebuild the lost homes of those affected by the destructive cyclone.

As of March 2021, we have built and handed over 51 cyclone- resident houses. Although the COVID-19 pandemic has played its part in delaying construction activities, the progress of this project has been quite remarkable. After the government relaxed its lockdown restrictions, the shortage of labor was compensated with locals who were not able to go out for their regular employment. This helped the locals to earn a livelihood and ensured that the project activities were carried on without any major delays.

Moreover, considering Odisha lies in a cyclone prone area, we have also undertaken disaster management and survival trainings for the local communities. This has helped provide the people with the means and knowledge to protect themselves during any future calamities.

*<https://www.hindustantimes.com/india-news/cyclone-fani-caused-rs-525-crore-infrastructure-damage-says-odisha-government/story-BVt5V5R8c0xvyvhvqHRU0I.html#:~:text=The%20Housing%20and%20Urban%20Development,267%20culverts%20have%20been%20damaged>

CASE STUDY

Beautifying Public Spaces, Creating Sustainable Urban Oases

As part of the green ethos objective, LTTS has been undertaking various green and clean initiatives in many parts of the country. These projects focus on improving the environmental sustainability of public places and making them eco-friendly.

A road median project on Thane-Belapur Road, Navi Mumbai with Meta Design

Since 2018, LTTS collaborated with Meta Design to develop and maintain a road median project between Koperkhairane and Rabale. The project covered an area of about 6 ½ kilometers on Thane-Belapur Road, Navi Mumbai.

As part of this project, the road median was populated with flowering plants, shrubs, and creepers to absorb carbon dioxide and aid in cleansing the air. The LTTS and Meta Design teams also installed signage poles, solar lamps, and spike lights. Besides this, the railings along the road divider were painted in VIBGYOR themes with social messages.

During the last year, the pandemic prevented us from engaging in any labor-intensive activities. However, the project continued with strict adherence to government norms. This included conducting non-labor-intensive activities such as basic maintenance and plant watering throughout the year.

42,365 flowering plants, shrubs and creepers maintained

100 signage poles, **50** solar mashals and **76** spike lights maintained

180 warli paintings and **535** social messages maintained

Involved a mixed use of tanker water and drip irrigation



Mindtree Ltd.

About the company

Mindtree, a global technology solutions and consulting Company with 21 years of legacy in the space of Information Technology. The company is part of L&T Group since mid-2019. Mindtree delivers digital transformation and technology services from ideation to execution, enabling Global 2,000 clients to outperform the competition. "Born digital," Mindtree takes an agile, collaborative approach to creating customized solutions across the digital value chain. The company's deep expertise in infrastructure and applications management turns IT into a strategic asset.

Across global operations, the company helps the world's leading Companies use cutting-edge digital and IT solutions as a competitive advantage and get them to the future ahead of schedule. Leveraging emerging technologies, the company has garnered immense client trust by redefining their success to higher levels. Mindtree has 270 enterprise clients across 24 countries in the world. This is enabled by a strong 23,814 entrepreneurial, collaborative and dedicated 'Mindtree Minds'.



Keeping the short, medium, and long-term sustainability risks and opportunities in mind, our strategy continues to pursue people engagement, resource conservation, renewables, and community care, focusing on the material aspects identified by us. FY21 has been a year of transformation for us in many ways—to realize our resilience and have it validated is heartening.

Mr. Debashis Chatterjee
CEO & MD



Industry Groups

- Retail, CPG and Manufacturing (RCM)
- Banking, Financial Services and Insurance (BFSI)
- Travel and Hospitality (TH)
- Communications, Media and Technology (CMT)

Service Lines

- Customer Success
- Data & Intelligence
- Cloud and Enterprise IT

Geographies

- North America
- UK & Ireland
- Continental Europe
- APAC & Middle East

Awards and Accolades

- Winner of **1st NHRDN People First Ace Awards 2020** in the category 'Workforce Planning & Staffing Solutions'
- **First Runner up in NHRDN People First Ace Awards 2020** in the category 'Organization Design'
- In L&T Annual HR Excellence Award (AHA) - **1st prize in "Young Achievers," 2nd prize in "Making a Difference," 3rd prize in "Leading Change"**
- Winner - **ATD Best Award 2021** in "Learning & Development"
- Winner of **SHRM HR Excellence Awards 2020** in the category "Excellence in HR Analytics"
- Winner of **"Business World People HR Excellence Awards 2021"** under the category "Employee Welfare Initiatives"
- **Second Runner up in ASSOCHAM Diversity & Inclusion Excellence Awards & Conclave 2020** in the category "Best Employer for Women"

ESG Highlights

We are committed to creating long-term value for our stakeholders through ESG practices that minimize our environmental impact and promote the well-being and prosperity of Mindtree Minds and our communities. Aligned with sustainability vision, Mindtree has embarked on its own sustainability journey, adopting the global best practices and, in turn, augment long-term value creation for all its stakeholders. Expectations of our internal and external stakeholders are factored into our sustainability strategy, which is also aligned with the UN SDGs. ESG parameters are integrated into all our business decisions.

Driving growth together

Environment	Social	Governance
<ul style="list-style-type: none"> - Energy efficiency and Scope 1,2,3 emissions reductions - Optimal water and wastewater management - Green Tech Innovation 	<ul style="list-style-type: none"> - Supporting education and growing digital talent - Community empowerment (Disability, Livelihood) - Work ethos and culture 	<ul style="list-style-type: none"> - Diverse and inclusive (employees and Board) - Strong corporate ethics and risk management policies - Data privacy and security

Some of the highlights include

Environment

198,965 kWh

of energy saved through battery optimization, VFD installation, UPS optimization, Split AC installation, LED lights etc.

74.8%

Renewable Energy component in our total mix

2,745 KL

of water saved pan India

Waste recycling has improved from 80% in 2014-15 to

94.6% in 2020-21 by reducing incineration and landfills.

The artificial lake we have constructed at our Kalinga campus fed our construction requirement on the site with 6,695 kl water from the pond.



Go green

Digitisation of processes

iProcure, our supplier portal launched at the end of FY20, has evolved this year and is globally spreading its reach, bringing complete supplier visibility. The traction was accentuated by the pandemic, and we are already witnessing the early benefits in terms of time and efficiencies.

ALL PO invoice transactions are now virtual globally under our Supplier360 Portal and we have achieved our 'Go Green' concept through this initiative.



Social

INR 80 Million

CSR spent

- 23 high potential children supported to pursue their ambitions
- 1,000 computers donated by Mindtree Minds to domestic helpers' children
- 7,350 prison inmates benefitted through radio stations supported at the Central Prison. Promoted prisoners' talents, creating positivity through storytelling
- 1,417 beneficiaries supported in education
- 979 beneficiaries skilled from rural/urban India
- 18,087 - Beneficiaries of CSR projects
- Young Leaders Program with 320 participants and average learner rating of 4.32



CSR - Volunteering – Mindtree Minds volunteered under the guidance of Mindtree Foundation Team in creating study play & learn materials for Nalli Kalli children of Gubbachi Project.

- 6.05/7 – Customer satisfaction survey score
- Women in the workforce have grown from 16% in 2004 to 32% in 2020
- Vision 40x30 (FY30): We aim to have 40% of women representation



CSR – Education - Mindtree Foundation's Gubbachi Project – who work with Migrant children, where they do bridge course as they are from different states and enroll them to Govt., and continue to work with them through Nalli Kalli (1st to 3rd standard) on Fundamental Numeracy, Literacy and Basic English

Governance

- Board level review on ESG compliance at regular intervals
- All major policies such as Anti-bribery and Anti-corruption Policy in place
- The ERM framework has been designed by aligning with leading risk management frameworks/standards including COSO, ISO 31000 and the IRM Risk Management Standard
- 97% - Average attendance rate in Board meetings
- Compliance to policies:

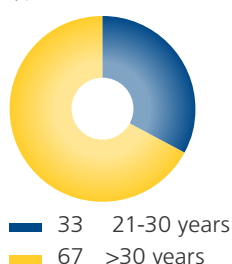
	Opening no. of Cases as of April 1, 2020	No. of New Cases Registered during the Year	No. of Cases Resolved during the Year	Outstanding Cases as of March 31, 2021
Whistleblower	4	12	14	2
POSH	0	0	0	0

Board Balance Chart

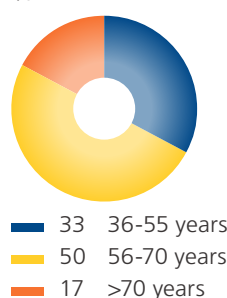
- Non-Executive Director: **03**
 - Independent Directors (Including 2 women Directors): **06**
 - Executive Directors: **03**
-
- Median Director age: **63**
 - Average tenure of Independent Directors: **3**
 - Average attendance in Board meeting: **97%**

Board demographics

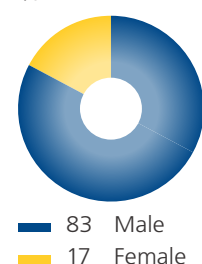
Board Experience %



Board age profile %



Board diversity %





L&T Finance Holdings Ltd.

About the company

L&T Finance Holdings (LTFH) is the holding company for the Larsen & Toubro Group's financial services business headquartered in Mumbai. The Company has 111 lakh+ customers across India and highest credit rating for an NBFC -AAA- by four rating agencies. LTFH is regarded as one of India's leading and well-diversified NBFCs with a strong presence across lending and investment management business. L&T Finance Holdings was incorporated in 2008, and in 2011, it went on to become a publicly listed company (BSE & NSE). It is registered with the RBI as a Non-Banking Financial Company and Core Investment Company (NBFC-CIC).

For India, a sustainable future is contingent upon financial inclusion, and NBFCs like LTFH have a crucial role to play in this mission.

Mr. Dinanath Dubhashi
CEO & MD



Services offered by the company

Types of Business

Lending Business:

Rural Finance

Farm Equipment Finance	Two-Wheeler Finance
Micro Loans	Consumer Loans

Housing Finance

Home Loans	Loan Agent Property
Real Estate Finance	

Infrastructure Finance

Infra Finance	Infra Debt Fund
---------------	-----------------

Non-Lending Business:

Investment Management

Awards and Accolades

In February 2021, L&T Finance Holdings received on ESG Risk Rating of 28.2 and was assessed by Sustainalytics to be at MEDIUM risk of experiencing material financial impacts from ESG factor

In 2020, L&T Finance Holdings received a rating of A (on a scale of AAA - CCC) in the MSCI ESG Ratings assessment

FTSE Russell confirms that **L&T Finance Holdings** has been independently assessed according to the FTSE4Good criteria, and has become a constituent of the FTSE4Good Index Series.

In July 2020, L&T Finance Holdings received Renewable Energy Acquisition Financing Deal of the Year & Utility Deal of the Year by Asia Infrastructure Awards

In 2020, L&T Finance Holdings received IDC Digital Transformation Award by IDC DX Awards

LTFH ESG Journey: A Sustained Commitment

2018	2019	2020	2021
May <ul style="list-style-type: none"> Gap Assessment Sustainability readiness Sep <ul style="list-style-type: none"> Sustainability task force Oct <ul style="list-style-type: none"> 1st Materiality Assessment 	May <ul style="list-style-type: none"> 1st Sustainability Report Jul <ul style="list-style-type: none"> S&P Global Corporate Sustainability assessment invitation 	Apr <ul style="list-style-type: none"> ESG Targets adopted Jun <ul style="list-style-type: none"> Certified FSTE4Good indices Jul <ul style="list-style-type: none"> 2nd Sustainability Report (IIRC framework) External assurance by E&Y Dec <ul style="list-style-type: none"> Inclusion in CDP ratings 	Apr <ul style="list-style-type: none"> Setting up of Board level ESG Committee Jun <ul style="list-style-type: none"> Certified for FTSE4Good indices for second consecutive year Jul <ul style="list-style-type: none"> 3rd Sustainability Report (IIRC framework) External assurance by E&Y

Financial Performance Highlights

₹ 94,013 Cr	₹ 1,155 Cr	7.35%	₹ 2,999 Cr	₹ 15,629 Cr	'AAA'
Lending Portfolio	PAT Before Exceptional Items	RoE Before Exceptional Items	Capital raised through rights issue	Raised long-term borrowing	rating reaffirmed by CRISIL, ICRA, CARE and India Ratings

ESG Highlights:

LTFH is committed to delivering long-term stakeholder value and accordingly, it focuses on future proofing and embedding sustainability in service of its people, business and community. The business bounce back that LTFH witnessed in the second half of the year, despite the pandemic led crisis, reflects the success of the sustainable business model.

Environment: Committed to financing India's energy transformation, both at the business as well as entity level

- Financed 1,560 MW of green energy in FY21 through Renewable Finance business
- 49 Lakh+ tonnes of CO₂e GHG emissions avoided in financed portfolio
- Received LEED-Gold Certification for LTFH's Corporate HQw
- Introduced several technological solutions to save electricity and increase efficiency

Social: Facilitating Financial Inclusion and Individual Prosperity especially in unserved and under-served segments

- Serve over 59 Lakh+ Micro Loan customers
- Empowering Women in Rural Communities through Digital literacy: Cadre of over 860 'Digital Sakhis' and up-skilled 4,500 women entrepreneurs
- 13.79 Lakh+ community members reached through CSR efforts
- CSR spent ₹ 23.15 Crore
- Committed to Employee Care: Initiatives for people who lost lives due to COVID-19

- Ex-gratia payment - ₹ 2 Lakhs
- Financial support by paying 2 years salary
- Sponsorship of education of children till graduation
- Spouse's education assistance till graduation for enhancing employability

Governance: Institutionalised structures and guide rails for adherence to ethical codes of behaviour

- Diversified Board – Expertise, Skills and Gender
- Mr. Shailesh Haribhakti, Non - Executive Chairman (Independent Director) conferred the Global Competent Boards Designation (GCBD).
- Stakeholder Relationship Committee addresses shareholder's concerns and grievances and reviews policies and procedures to ensure their speedy disposal
- Ensuring continued operations to support customers, many of whom depend on our services for their livelihoods such as Farm Equipment loan; especially in under-served segments



CASE STUDY

Digital sakhi seva kendra

One More Milestone of Tanuja's Life

Mrs. Tanuja Jawale was amongst the initial set of Digital Sakhis who had joined LTFH Digital Sakhi Maharashtra programme in 2017.

During her three-years tenure as a Digital Sakhi, she was ever enthusiastic about talking digital finance through her regular door to door visits and campus in and around her village.

On successful completion of two years of programme, she underwent an aspirational exercise conducted by LTFH to ensure sustainability of the program. Mrs. Tanuja was keen on helping the larger community and more precisely in the domain of digital finance and government entitlement schemes. This was the beginning of her journey of running a Digital Sakhi Seva Kendra. She underwent a specialised training on usage of government gateways like Aaple Sarkar, different online applications and a three-month state government authorised computer literacy programme.

Digital Sakhis like Mrs. Tanuja were supported by LTFH with a partly funded seed capital to start her own Digital Sakhi Seva Kendra which served as a hub of digital finance related services in the villages.



CASE STUDY

Product Co-creation with Stakeholders

Co-created 'sabse khas loan' with business stakeholders (dealers) in two-wheeler finance business

An outcome of LTFH's regular dealer interaction to crowd source ideas and gather feedback on various aspects of the business.

A first in the industry, the scheme not only provides hassle-free and low-cost finance for two-wheelers, but also eliminates the need for hypothecation of vehicles to the financier over the tenure of the loan. The borrowers can choose from 3 different EMI tenures — 6, 12 and 18 months — with interest rates between 7.99% and 8.99%. Currently, two-wheeler financiers transfer the title of the vehicle to the customer only when the entire loan amount is repaid. This leads to additional paperwork and puts financial burden on the customer.



Positive outcome/Benefits:

- Removes the financier's charge on the vehicle, thereby saving time, effort and money of the customer.
- Appreciate and reward borrowers who are financially responsible and spend their money wisely. They not only receive hassle-free and quick disbursements of the loan, but also get lower interest rates and save on fees.
- The aim is simple, make their experience seamless. Like we say, 'Your bike, your papers, your pride.'
- Algorithm-based credit decisioning, paperless on-boarding and fast turnaround time have been key differentiators for LTFH's Two-Wheeler Finance business.

CASE STUDY

Flexible Coupon

L&T IDF has developed a product referred to as 'flexible coupon and self-adjustable redemption premium' where the coupon of the project is aligned to the road traffic

L&T IDF provides coupons with a floor of 5% and ceiling of 10%. The actual coupon in any year would be higher or lower based on the project's ability to pay i.e., cash flows. L&T IDF gets a fixed yield which is a combination of the coupon and redemption premium. As the coupon moves up and down every year, the premium also gets adjusted accordingly.

This product was developed in consultation with a customer (Global Infrastructure Partners), one of the largest global funds which has become an infrastructure project developer in India.

Positive outcome/benefits:

- Evidence of enhanced project viability through higher debt service coverage ratios.
- Upgradation in credit ratings of the project.
- Lower cost of debt for the project due to higher credit rating.
- Repeat business for L&T IDF from the client.



Notes

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Notes

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Notes

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Sustainability Policy

L&T is committed to seek sustainable growth by integrating environment, social and governance (ESG) principles with its businesses.

Guiding Principles

Towards this, we will -

- Incorporate environment and social considerations in our business operations and strategies and build a culture of sustainability.
- Engage with stakeholders to develop sustainability strategies with short-term and long-term goals.
- Conserve and augment scarce resources and contribute towards a cleaner, greener and sustainable planet.
- Promote the development of green portfolio of businesses, thus contributing to low-carbon economy.
- Mitigate all risks to sustainability including climate risks in our area of operations and services.
- Follow the highest standards of governance and transparency in all business practices and in our engagement with various stakeholders.
- Provide safe and healthy workplace for all employees and workforce across all locations.
- Provide equal opportunities to all for development and growth based on merit and performance.
- Work with communities in targeted thrust areas, to improve their quality of life.
- Ensure that the reporting of our performance is in alignment with applicable national and international frameworks and principles including Sustainable Development Goals (SDGs).

Date: 1st July, 2021



LARSEN & TOUBRO

It's all about Imagineering


S N SUBRAHMANYAM
Chief Executive Officer
& Managing Director



Headquarters

Head Corporate Strategy and Special Initiatives
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