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)**

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

* ▲ ▼ y-o-y
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 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.

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 reality 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) 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
Mr. Anup Sahay
Head Corporate Strategy and Special Initiatives
Larsen & Toubro Limited
Landmark A, 5th Floor, Suren Road, Next to WEH Metro Station, Off WEH, Chakala, Andheri East, Mumbai 400 093, Maharashtra. sustainability-ehs@larsentoubro.com

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.

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

Our third Integrated Report, “Technology for Sustainable Growth” was released across online platforms.

Integrated Report | L&T Corporate
www.lntsustainability.com

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

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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 the 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 worth ₹35 crore to various hospitals in India.

Our construction business has converted many hospitals to Covid Care Centres. We have installed state-of-the-art advanced ventilators and oxygen supply systems. Our Water and Effluent Treatment business has also played a crucial role by installing water treatment plants and supplying oxygen generators to various hospitals.

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.

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 Water and Effluent Treatment 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 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 the 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 the 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

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.
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 to building the country’s image and stature across the world. We are respected for our high standards of professionalism and corporate governance.

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.

Making a Mark – first, largest, tallest, and longest

- World’s largest coal gasifier made in India and exported to China
- India’s first indigenous hyrocracker 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

Presence in 31 countries across the globe
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)**
- 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

**Heavy Civil Infrastructure (HCI)**
- Metros, nuclear plants, hydel projects, ports, special bridges, tunnels, defence infrastructure

**Transportation Infrastructure (TI)**
- Roads, elevated corridors, runways (airside infrastructure), railway construction, railway electrification and systems, light rail transport

**Power Transmission & Distribution (PT&D)**
- 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
- ‘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 centres
- 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 fleets 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

### 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
- 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 fleets 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

### 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 worlds most renowned Tower Testing and Research stations
- 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 1200 kV and 765 kV Gas Insulated Substation
- Strong reputation and significant market share in the India subcontinent, Middle East, Africa and ASEAN markets

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Business Segments

Water & Effluent Treatment (WET)

- 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 ozonation 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 technology 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)

- 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 in multiple cities and helping more than 27 cities in Covid Control measures through technology interventions.

Metallurgical & Material Handling (MMH)

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

**Setting us Apart**

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

Defence

- 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**

- 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) and Critical Piping Spools

Heavy Engineering (HE)

Business Segments

Power

- Turnkey solutions for coal-based and gas-based power plants, supercritical boilers, oil and gas extraction and processing, petrochemicals, fertilisers, cross-country pipelines and terminals

L&T Hydrocarbon Engineering

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

Realty

- 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

L&T Valves

- 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)

Construction Equipment and others

- 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

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

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

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

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

Our Product/Projects

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

Our Product/Projects

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

Our Product/Projects

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

Our Product/Projects

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

Our Product/Projects

- Manufacturing, marketing and sale of:
  - Construction equipment and mining machinery
  - Rubber processing machinery for tyre industry

Our Product/Projects

- Engineering services, construction services, other critical systems

Our Product/Projects

- Residential complexes, commercial and retail spaces

Our Product/Projects

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

Our Product/Projects

- Manufacturing, marketing and sale of:
Worldwide Presence

* 'Campus' denotes facilities for design and manufacture

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

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.

Changing the dynamics of India’s freight movement

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

Rewari-Madar Railway, DFCC

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 tracks, cycle tracks, horse tracks, car parks and houses six football training pitches, one of which has athletic tracks around pitch.
Marquee Projects

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 by 12 months with highest quality standards, despite COVID-induced challenges.

Bridging the world of possibilities

Constructed under Telangana’s Strategic Road Development Programme, the Durgam Cheruvu cable-stayed bridge will ease traffic flow towards HITEC 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 component has been sourced locally 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.

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.

Bharatpur Pump House

Indian Oil Corporation Limited Bongaigaon Fluidized Catalytic Cracker Unit

700 MWe Steam generators for GHAVP

Durgam Cheruvu cable-stayed bridge
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 spark 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 of 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 systems company, Servowatch Systems Limited.

Protecting Lives, Safeguarding Livelihoods

Governments and businesses the 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 habits 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 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 upon 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. Subrahmanyan
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.

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.

In response to the threat posed by the COVID-19 pandemic, we set up a supply chain outreach programme to promote sustainable practices and improve safety.

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, FIP’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. R. Shankar Raman
Whole-time Director and Chief Financial Officer

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

Determination

Resilience, Innovation and

Compliance

L&T

INTEGRATED REPORT 2020-21 LARSEN & TOUBRO LIMITED
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 concrete casting, 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.

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.

Adding to the growing Climate change concerns globally, continuity of Covid pandemic impact has further influenced the industry to re-think and re-align our business strategies to be future ready, resilient and responsible, both socially and environmentally.

We at L&T, albeit facing a lull in initial few months of the fiscal, have bounced back to catch up with the business targets, thanks to the initiatives taken by every business and all-round support from the employees. Also, the boost from Government. in terms of fast-tracking of project awards, financial stimulus and a well thought Union Budget have helped things to get back on track. A lag may be seen due to impact of second wave of Covid, however, we are hopeful the Government. will speed up the capex spending through faster implementation of projects to maintain speed of economic recovery.

Despite the tough year, we have had quite a few positives in terms of business achievements. In Metals Business, we secured our first breakthrough order in Africa apart from meeting domestic order inflows this year. Going forward, the Metals business looks very promising as almost all our clients, especially domestic, are keen to expand their capacities further. Under Development Projects portfolio, we have successfully commissioned our very own Hydel power plant at Singol Bhatwari in Uttarakhand in December, 2020. Our Nabha Power plant was adjudged the best power plant in India by CI and Ministry of Power. L&T DPI has successfully implemented 96% FasTag tolling across all the road assets and also achieved revenue targets inspite of pandemic. The prestigious Hyderabad Metro Rail restarted operations after 6-months of shut down and we are certain that people of Hyderabad will prefer this state-of-art, safe and environmental friendly transport system as their main commute progressively.

Going forward, we are aiming to monetize / divest all the assets under Development projects to reduce debt and improve Group financial performance. At L&T, we always prioritise giving back to Society and Environment. To preserve natural resources our factories at Kansbahal and Kaneckumpur have been made water neutral. This apart, we have started consuming power from renewable energy sources and also using energy efficient equipment, tools and illumination solutions to increase energy efficiency. Across the projects, we deployed sustainable alternate and green materials including Recycled Plastic ply and Modular Plastic Formwork to reduce consumption of wood.

During the year, all the operational processes are re-engineered with focus on technology, automation and digitalization. 3D designs, BIM and EDM were implemented to enhance the engineering delivery. Construction mechanization and modularization, use of AI, AR, VR, IOT, remote inspection were the key drivers to increase the Construction Productivity, Safety and Quality. Also, we have introduced a new course on scaffolding to underprivileged youth which could now enable them to meet the demand for certified scaffolders required in the construction industry. Some of the other initiatives include procurement of Locally Milled materials with lesser carbon footprint, alternate sourcing, green supply chain, optimising transportation of material, increasing consumption of alternate materials, tree plantation etc. being implemented to meet the objectives of ensuring low carbon generation. We are also looking into designing 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 take pride in spending for them and for training of our workforce.

Mr. M. V. Satish
Whole-time Director and Senior Executive Vice President (Buildings)

Mr. D. K. Sen
Whole-time Director and Senior Executive Vice President (Infrastructure)
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 technologically mature and competent Indian companies like ours, with our skills and capabilities.

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.

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 job sites to improve social infrastructure, especially in providing education, water and sanitation facilities.

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.
Over the years, we have been incorporating new-age construction practices in a bid to improve the control and efficiency levels of project execution. And the pandemic has paved the way for 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)

Insights from the Senior Leadership Team

Excelling in the new normal

FY21 was a unique year which started and ended amidst 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 permanent 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 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.

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.

Dr. Hasit Joshipura
Sr. Vice President & Head-Corporate Center

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.

New-Age Technology

Over the years, we have been incorporating new-age technology and digitalisation into our traditional
### Value creation model

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<tr>
<th>Natural Capital</th>
<th>Manufactured Capital</th>
<th>Intellectual Capital</th>
<th>Human Capital</th>
<th>Social and Relationship Capital</th>
<th>Financial Capital</th>
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<tr>
<td>Water consumption: 9.7 Mn m³</td>
<td>Project Sites (No.): 834</td>
<td>R&amp;D spend (cum last 3 yrs): ₹2,694 Mn</td>
<td>Permanent Employees (No.): 50,092</td>
<td>CSR spend: ₹5,500 Mn*</td>
<td>Order book: ₹3,273.54 Bn</td>
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<td>Energy consumption from Non-renewable sources: 8,383,795 GJ</td>
<td>Manufacturing Locations (No.): 19</td>
<td>Patents filed: 3</td>
<td>No. of Engineers (BTech/MTech/Diploma): 37,010</td>
<td>CSR partners (No.): 108*</td>
<td>Net current assets: ₹575.56 Bn</td>
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<td>Energy Used from Renewable sources: 103,945 GJ</td>
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<td>R&amp;D engineers and scientists: 767</td>
<td>Workforce (Contract Employees) (No.): 320,299</td>
<td>Total suppliers and contractors (No.): 236,170</td>
<td>Net fixed assets: ₹448.20 Bn</td>
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<td>Spend on environment: ₹5 Mn</td>
<td>Active consortia/Number of startup partnerships/engagements/engaged with + Number of collaborations with global majors and universities/technical institutes (combine): 21</td>
<td>Employees covered under leadership development programmes (No.): 789</td>
<td>MSME suppliers (No.): 5,782</td>
<td>Gross debt-equity ratio: 1.51:1</td>
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<td>Materials consumed (MT):</td>
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<td>No of complaints received: 48</td>
<td>Vendors/sub-contractors trainings (No.): 1,049</td>
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<td>Cement: 2,519,031</td>
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<td>No. of complaints resolved: 46</td>
<td>Number of industry chambers members: 16</td>
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<td>Sand: 3,156,441</td>
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<td>Ferrous: 1,112,545</td>
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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. Assessing the external environment
   The environment in which we operate including the economic environment, global pandemic, climate change impacts, infrastructure growth cycle among others.

2. Identifying key 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.

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

4. Evaluate the impacts of material issues
   Material issues have the potential to impact our value creation and achieve our strategic objectives.

5. Our capitals
   Natural
   Manufactured
   Intellectual
   Human
   Social and relationship
   Financial

6. Strategic objectives
   SO1, SO2, SO3, SO4, SO5
   Strategic enablers
   SE1, SE2, SE3, SE4, SE5

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

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

9. Key performance indicators
   Increased social value delivery
   Safe workplace ensuring zero harm
   GHG emission reduction
   Maintaining environment commitments
   Engaged and diversified workforce

10. Capital returns to shareholders and investors
    Deliver sustainable products and solutions
    Patents, copyrights
    Increased social value delivery
    Safe workplace ensuring zero harm
    GHG emission reduction
    Maintaining environment commitments
    Engaged and diversified workforce
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.

Shareholders and Investors

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)

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:
- 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.

Customers

Value creation:
- 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

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.

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.

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.

Value creation:
- Timely payments
- Repeat orders
- Price reduction
- Different purchase processes by businesses as per the project/establishment’s requirements
Materiality Assessment

In FY20, we reviewed 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

- Designing of customised questionnaires for each stakeholder category, keeping in mind individual concerns and expectations.
- Holding stakeholder engagement sessions across selected locations.
- Briefing stakeholders about sustainability and how L&T is working towards it.
- Seeking inputs on survey from various stakeholder groups.
- Collating the information for further analysis.
- Developing a report detailing the findings and other relevant information.

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

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.

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.

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.

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

- 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

- 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

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

Stakeholder Engagement
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

<table>
<thead>
<tr>
<th>Material topics</th>
<th>Relevance of topic, boundary and limitations to the boundary (if any)</th>
<th>Capitals associated</th>
<th>Strategies</th>
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<tbody>
<tr>
<td>Occupational health &amp; safety of employees and contractors</td>
<td>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’.</td>
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<td>Water management</td>
<td>Water is critical for our business and we are committed to using it prudently. Accordingly, we have turned our facilities ‘water positive’ with ‘zero wastewater discharge’</td>
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<tr>
<td>Natural resource conservation</td>
<td>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.</td>
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<tr>
<td>Material sourcing</td>
<td>We focus on enhancing local sourcing of materials needed for our projects. Besides providing opportunities for economic development of local communities, this approach enables us to drive efficiencies by saving on logistics-related costs.</td>
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<tr>
<td>Climate change mitigation and GHG emissions</td>
<td>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.</td>
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<td>Talent attraction and retention</td>
<td>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.</td>
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<tr>
<td>Adoption of renewables</td>
<td>We are increasingly using renewable energy at our campuses and project sites, thereby widening our green cover.</td>
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<tr>
<td>Energy efficiency</td>
<td>Depleting energy sources is detrimental to long-term business objectives. Growing energy savings translates into reduced power cost and fuel, and thus lower operational cost and enhance profitability.</td>
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<tr>
<td>Supply chain management</td>
<td>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. Implementing sustainability practices in the supply chain helps improve their economic, environmental and social performance.</td>
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<td>Labour management</td>
<td>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.</td>
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<td>Local supply base development</td>
<td>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 their growth.</td>
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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 vigorous and sustainable economic growth further provides a boost to our core operations.

Deep impact of COVID-19 Pandemic

The year FY21 was an unprecedented one. The COVID-19 pandemic is the first 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 damper 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.

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 slow 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, Metro, 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. The 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. The 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. The need to provide 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.

The 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 the fleet mode programme 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.

The 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 the 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:

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<th>Description</th>
<th>Mitigation measures</th>
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<td>Pandemic</td>
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<td>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. 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. 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. The Company took steps to ensure that liquidity was maintained to lessen the impact of adverse working capital resulting from customer delays in the settlement of receivables.</td>
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<td>Under-performance in key sectors</td>
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<td>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.</td>
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<td>Geopolitical risk</td>
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<td>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 faces inherent risks throughout the project’s execution phase. The project challenges include employee/ workmen safety, working in difficult/hazardous 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.</td>
<td></td>
</tr>
<tr>
<td>Inequitable terms of trade</td>
<td></td>
</tr>
<tr>
<td>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 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.</td>
<td></td>
</tr>
</tbody>
</table>

The Company 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. 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.
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 focused 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 issue 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 remain 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 cash management products. The Company managed its higher-though 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 damages 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-20’.

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-20’ and has also ushered in new dynamics in certain businesses, which need to be addressed. The Company has now initiated the formulation of ‘Lakshya-20’ 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.

Perspective plan
- Long-term business vision
- Assessment of emerging technologies and new growth opportunities
- Identifying relevant growth initiatives

7-10 years
- Business portfolio
- Geographical business strategy
- Investment in new business
- Leadership pipeline
- Long-term capex outlay

5 year strategic plan
- Assessment of macro environment and mid-long term business outlook
- Strategic priorities for profitable growth of business
- Strategic initiatives
- Sustainability road map

5 year
- 5 year Business plan
- Market outlook
- ESG risks and opportunities
- Talent management and leadership development
- Resource allocation
- Portfolio assessment

Annual plan
- Strategy for key account management and prospects pipeline
- Resource plan
- Sustainability plan

1-year
- Annual budget
- Financial KPIs and operational KPIs
- Capex and Liquidity plan
- Resource allocation for orderbook execution
- ESG risks and opportunities

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 as well as Oman and Saudi Arabia.

Services/Allied Businesses
The services and allied businesses cater to sectors of IT (through LTI and Mindtree), Technology Services (through LTTS), Smart World and Communication, Real estate and Financial services (through L&T Financial Holdings Limited).

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.
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.

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 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.
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.

Strategy Reviewing our Performance

Operational excellence for leadership in cost competitiveness and world class execution

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

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

Talent and leadership pipeline to enable growth and business continuity

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

Pursue Value Accretive growth of current businesses with faster growth of services business and green offerings

Incubate new businesses to tap future growth opportunities

Enable business sustainability through high focus on Environment, Social and Governance (ESG) parameters such as Climate Leadership, Water Stewardship, Circular Economy, Green Supply Chain, Employee and Social Welfare, Board Engagement etc.

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

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

These strategic objectives are supported through strategic enablers

KPIs

| Performance |
|-----------------|-----------------|
| % of Services in Total Revenues | - In FY 21, despite the effect of the pandemic which resulted in large disruptions in execution, we achieved revenues of ₹ 1.35 L cr. (-7% y-o-y) |
| Size of Green Portfolio | - However the 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 our Green Portfolio to ₹ 277 Bn which is 29.6% of total revenues (as compared to 31.4% in FY20) |
| New Businesses being incubated | A number of new business ideas were evaluated and the following were incubated in FY21: |
| Metrics linked to ESG performance based on materiality e.g. | - 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 |
| Revenue Composition (%) in terms of Businesses | For details refer to sections |
| Revenue Composition (%) in terms of Geographies | Natural Capital PAGE 38 |
| Businesses divested | Social Capital PAGE 121 |
| | Relationship Capital PAGE 140 |
| | Governance PAGE 158 |
| | Risk Management PAGE 42 |
| | Policies PAGE 160 |
| 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) |
| In FY21, we completed a major divestment exercise the sale of our Electrical & Automation business to Schneider. We also divested UK-based marine solutions business ‘Servowatch’ to Rolls Royce |

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

SO1
- Pursue Value Accretive growth of current businesses with faster growth of services business and green offerings

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 Leadership, Water Stewardship, Circular Economy, Green Supply Chain, Employee and Social Welfare, Board Engagement etc.

SO4
- Optimise the mix of businesses (EPC, manufacturing, services) and geographies (India, international) to de-risk the portfolio

SO5
- Identify and implement sustainable solutions for non-core businesses and assets earning sub-par returns

SO1
- New Businesses being incubated

SO2
- 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 38
Social Capital PAGE 121
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

SO5
- Businesses divested

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)

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

Sustainability Roadmap

Our 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.

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Achieve green product and services portfolio at 25% of total revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Green Portfolio</strong></td>
</tr>
<tr>
<td></td>
<td>billion</td>
</tr>
<tr>
<td>FY16</td>
<td>1.55</td>
</tr>
<tr>
<td>FY20</td>
<td>3.46</td>
</tr>
<tr>
<td>FY21</td>
<td>2.77</td>
</tr>
<tr>
<td>*Percentage of Contribution to the revenue within the scope of this report</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Increase energy conservation by 10% y-o-y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Electricity saved</strong></td>
</tr>
<tr>
<td></td>
<td>GJ</td>
</tr>
<tr>
<td>FY16</td>
<td>30,453</td>
</tr>
<tr>
<td>FY20</td>
<td>26,290</td>
</tr>
<tr>
<td>FY21</td>
<td>18,904</td>
</tr>
<tr>
<td>▲ 20% from FY16</td>
<td></td>
</tr>
<tr>
<td>▲ 42% from FY20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Reduce total energy consumption intensity per turnover by 5% (GJ/$ billion) w.r.t. FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total Energy consumption intensity</strong></td>
</tr>
<tr>
<td></td>
<td>GJ/$bn</td>
</tr>
<tr>
<td>FY16</td>
<td>8.175</td>
</tr>
<tr>
<td>FY20</td>
<td>6.310</td>
</tr>
<tr>
<td>FY21</td>
<td>5.903</td>
</tr>
<tr>
<td>▲ 11% w.r.t. FY16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Reduce direct GHG emission intensity by 5% (direct CO₂/$ billion) w.r.t. FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total Scope 1&amp;2 GHG emission intensity</strong></td>
</tr>
<tr>
<td></td>
<td>tCO₂/$bn</td>
</tr>
<tr>
<td>FY16</td>
<td>85.3</td>
</tr>
<tr>
<td>FY20</td>
<td>77.5</td>
</tr>
<tr>
<td>FY21</td>
<td>68.5</td>
</tr>
<tr>
<td>▲ 4% w.r.t. FY16</td>
<td></td>
</tr>
</tbody>
</table>

Although our total energy intensity has increased, our indirect energy consumption reduced by 10% and FY20 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.

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Increase in water conservation and recycling by 5% w.r.t. FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Percentage of waste water recycled</strong></td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>FY16</td>
<td>12.8</td>
</tr>
<tr>
<td>FY20</td>
<td>17.6</td>
</tr>
<tr>
<td>FY21</td>
<td>57.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Increase in recycling, and use of recycled material by 5% w.r.t. FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Recycled materials used</strong></td>
</tr>
<tr>
<td></td>
<td>Tonne</td>
</tr>
<tr>
<td>FY16</td>
<td>204,589</td>
</tr>
<tr>
<td>FY20</td>
<td>420,549</td>
</tr>
<tr>
<td>FY21</td>
<td>424,919</td>
</tr>
<tr>
<td>▲ 42% w.r.t. FY16</td>
<td></td>
</tr>
</tbody>
</table>

Safety

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Zero accident vision: Working towards the goal of achieving zero accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS</td>
<td>Our frequency rate of accidents has reduced by 5% in FY21 compared to FY20. There was 40% reduction in fatality compared to FY20.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET</th>
<th>Increase employee volunteering base to 5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS</td>
<td>4,400 employees participated in the volunteering programme and worked for various social causes in FY21.</td>
</tr>
</tbody>
</table>

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

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.

Managing the COVID-19 pandemic

Explaining the trade-offs

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

Managing the trade-offs

Our focus was on protecting our employees and supporting communities and the 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-ups 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 medical kit.

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.

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

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 undertake Green Buildings development, which is resource efficient.

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 optimize material utilisation. 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

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 society over their lifetime.

Focusing on sustainable businesses

Explaining 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 teams capabilities to enhance our portfolio consistently.
The precious natural resources are fast depleting owing to growing demand from an increasing population and the change in consumption patterns. Besides, various industrial activities have 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.
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 these goals we periodically review our programme. 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

<table>
<thead>
<tr>
<th>ENERGY CONSERVATION</th>
<th>RENEWABLE ENERGY</th>
<th>GREEN BUILDINGS</th>
<th>MATERIAL MANAGEMENT</th>
<th>CO2 EMISSIONS AVOIDED</th>
<th>WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>128 Mn units</td>
<td>28.87 Mn units</td>
<td>13 green buildings</td>
<td>43,068 MT</td>
<td>&gt; 33,500 tCO2e</td>
<td>Zero</td>
</tr>
<tr>
<td>Energy saved</td>
<td>Renewable energy used in our campuses</td>
<td>Including our office spaces and a green factory</td>
<td>Steel recycled</td>
<td>in FY21</td>
<td>Discharge and high water harvesting in the vicinity of our campuses</td>
</tr>
<tr>
<td>cumulatively (kWh)</td>
<td>(kWh)</td>
<td></td>
<td>(cumulatively)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.47 Mn</td>
<td>&gt; 10%</td>
<td></td>
<td>1,649 MT</td>
<td>in FY21</td>
<td></td>
</tr>
<tr>
<td>Fuel saved (m³)</td>
<td>Of total electricity mix</td>
<td></td>
<td>(cumulatively)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 7,395,449 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 the 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 the 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 were 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

CAPITAL-WISE PERFORMANCE

INTEGRATED REPORT 2020-21 LARSEN & TOUBRO LIMITED

GRI Disclosures 103-1, 103-2, 103-3, 302-1, 302-2
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 33,500 tonnes of CO₂-equivalent emissions in FY21 through energy conservation and renewable energy use.

### Energy conservation interventions (GJ/year)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>GJ/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process re-design</td>
<td>1,968</td>
</tr>
<tr>
<td>Optimisation and operational control efficiency</td>
<td>3,304</td>
</tr>
<tr>
<td>Conversion and retrofitting of equipment</td>
<td>15,548</td>
</tr>
<tr>
<td>Change to CFL and LED lamps</td>
<td>10,755</td>
</tr>
<tr>
<td>Change in personal behavior and auto shutting of lights when not in use</td>
<td>2,294</td>
</tr>
<tr>
<td>Others</td>
<td>4,187</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38,056</strong></td>
</tr>
</tbody>
</table>

---

Emissions

GHG

We are committed to contributing meaningfully to combating 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 the IPCC and WBCSD GHG protocols.

#### 221,512 tCO₂e

Direct GHG emissions (Scope 1)

#### Scope 2

Utilisation of grid electricity supplied by state electricity supply boards.

#### 540,874 tCO₂e

Direct GHG emissions (Scope 2)

#### Scope 3

We are revisiting Scope 3 to broaden the scope.

#### 540,874 tCO₂e

Direct GHG emissions (Scope 3)

---

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.

### Air emissions

**SOx, NOx, Particulate Matter (PM) and ODS emissions**

<table>
<thead>
<tr>
<th>Year</th>
<th>SOx</th>
<th>NOx</th>
<th>PM</th>
<th>ODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY19</td>
<td>0.97</td>
<td>1.66</td>
<td>12.75</td>
<td>12.45</td>
</tr>
<tr>
<td>FY20</td>
<td>8.41</td>
<td>8.41</td>
<td>8.31</td>
<td>8.56</td>
</tr>
<tr>
<td>FY21</td>
<td>2.62</td>
<td>2.62</td>
<td>2.62</td>
<td>2.62</td>
</tr>
</tbody>
</table>

*We have widened the scope of air emissions 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.

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 authorized vendors as per the statutory requirements.
- Biomedical waste generated at dispensaries and health centres is disposed of as per statutory requirements, 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 the 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.

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)

<table>
<thead>
<tr>
<th>Material</th>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous</td>
<td>1,112,545</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-ferrous</td>
<td>419,855</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous chemicals</td>
<td>93,963</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oils and lubricants</td>
<td>2,727</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement and sand</td>
<td>5,675,473</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recycled steel – cumulative

Tonnes

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,231,396</td>
<td>2,680,536</td>
<td>2,719,277</td>
<td>2,941,929</td>
<td>3,330,925</td>
<td>3,634,447</td>
<td>3,937,970</td>
<td>4,241,493</td>
<td>4,326,007</td>
<td>4,415,010</td>
<td>4,495,655</td>
</tr>
</tbody>
</table>

Recycled zinc – cumulative

Tonnes

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,402,455</td>
<td>2,407,946</td>
<td>2,426,877</td>
<td>2,455,804</td>
<td>2,484,731</td>
<td>2,513,658</td>
<td>2,542,585</td>
<td>2,571,512</td>
<td>2,600,439</td>
<td>2,629,366</td>
<td>2,658,293</td>
</tr>
</tbody>
</table>

Fly ash – cumulative

Tonnes

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>18,306</td>
<td>20,018</td>
<td>17,624</td>
<td>15,231</td>
<td>12,838</td>
<td>10,435</td>
<td>8,032</td>
<td>5,629</td>
<td>3,226</td>
<td>1,823</td>
<td>910</td>
</tr>
</tbody>
</table>

Crushed sand – cumulative

Tonnes

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,413,152</td>
<td>2,429,416</td>
<td>2,445,680</td>
<td>2,461,944</td>
<td>2,478,208</td>
<td>2,494,472</td>
<td>2,510,736</td>
<td>2,527,000</td>
<td>2,543,264</td>
<td>2,559,528</td>
<td>2,575,793</td>
</tr>
</tbody>
</table>

Percentage of recycled zinc used in place of Zinc

%  

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.86</td>
<td>3.04</td>
<td>3.30</td>
<td>3.47</td>
<td>3.64</td>
<td>3.81</td>
<td>4.08</td>
<td>4.35</td>
<td>4.62</td>
<td>4.89</td>
<td>5.16</td>
</tr>
</tbody>
</table>

Percentage of fly ash and GGBS used in place of cement

%  

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
</tr>
</thead>
</table>

Percentage of crushed sand used in place of Natural sand

%  

<table>
<thead>
<tr>
<th>FY18</th>
<th>FY17</th>
<th>FY16</th>
<th>FY15</th>
<th>FY14</th>
<th>FY13</th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.51</td>
<td>28.31</td>
<td>28.11</td>
<td>27.91</td>
<td>27.71</td>
<td>27.51</td>
<td>27.31</td>
<td>27.11</td>
<td>26.91</td>
</tr>
</tbody>
</table>
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 and effluent treatment plants, efficient power distribution, mass transit systems and 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 business provides automated communication software 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, LTSHF, 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

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

USGBC: LEED Certified
- L&T TC II, Chennai

13 Green buildings

Urban forest
The 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 the Urban forest method are approximately 30 times denser and grow 10 times faster than conventional tree plantation, creating a self-sustaining forest in just 1/4 of the time.

Comparing normal plantation with Miyawaki Method

<table>
<thead>
<tr>
<th>Landscape/Plantation</th>
<th>Miyawaki Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher initial cost</td>
<td>Moderate initial cost</td>
</tr>
<tr>
<td>Extensive maintenance</td>
<td>Zero maintenance</td>
</tr>
<tr>
<td>Susceptible to pests and diseases</td>
<td>100% organic no pesticides used</td>
</tr>
<tr>
<td>Non-native plant selection</td>
<td>Only native plant selection</td>
</tr>
<tr>
<td>Single-layered greenery</td>
<td>Multi-layered green forest</td>
</tr>
<tr>
<td>Limited plant varieties</td>
<td>Minimum 25 to 50 plant species</td>
</tr>
</tbody>
</table>

Kindles natural biodiversity

Urban Dense Forest

<table>
<thead>
<tr>
<th>Location</th>
<th>Area</th>
<th>Saplings</th>
<th>Survivability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talegaon</td>
<td>3 patches of 400 square metres</td>
<td>3,600 Saplings</td>
<td>100% Survivability</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>800 square metres</td>
<td>2,401 Saplings</td>
<td>100% Survivability</td>
</tr>
<tr>
<td>Bidkin</td>
<td>1 acre (12,500 saplings)</td>
<td>12,500 Saplings survived</td>
<td>95% Survivability</td>
</tr>
<tr>
<td>Erode</td>
<td>8 acres (49,300 saplings)</td>
<td>46,835 Saplings survived</td>
<td>95% Survivability</td>
</tr>
</tbody>
</table>
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 were harnessed at our campuses.

MISSION 2
Enhanced Energy
- Through focused energy conservation projects, more than 128 Million units (kWh) of energy were saved, avoiding over 109,428 tonnes of CO₂ emissions at our establishments, cumulatively.
- 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.
- L&T ensures water and soil conservation and encourage agro-based livelihoods to prevent 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.

MISSION 5
Strengthening the Himalayan Ecosystem
- The business also constructed more than 12,000 km of water distribution pipelines in FY21 and 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.
- 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 programmes 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.
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 fair margin.
- More than 150,000 fully grown trees are nurtured at L&T’s 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) programme 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 are 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, sustain agriculture in the region.

MISSION 8
Strategic knowledge on Climate Change

- The ICD – CSR project focuses on increasing the 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.

- 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 events and days such as world Environment Day, Earth Day and 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 Business has planted trees in more than 55.5 acres of land across India. The following trees were planted:

Type of species
1. Neem
2. Mango
3. Guava
4. Indian gooseberry (Amla)
5. Jamun
6. Moringa
7. Sheesham
8. Almond
9. Indian Elm (Chirol)
10. Babul
11. Karanja
12. Teak
13. Gulmohar
14. Citrus

Our WET business has planted saplings across India

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Saplings Planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangalore</td>
<td>111,634</td>
</tr>
<tr>
<td>Bhopal</td>
<td>84,350</td>
</tr>
<tr>
<td>Bhubaneswar</td>
<td>197,507</td>
</tr>
<tr>
<td>Delhi</td>
<td>72,028</td>
</tr>
<tr>
<td>Indore</td>
<td>86,308</td>
</tr>
<tr>
<td>Jaipur</td>
<td>108,669</td>
</tr>
<tr>
<td>Kolkata</td>
<td>141,620</td>
</tr>
<tr>
<td>Lucknow</td>
<td>3,150</td>
</tr>
<tr>
<td>Pune</td>
<td>45,880</td>
</tr>
<tr>
<td>West</td>
<td>19,197</td>
</tr>
<tr>
<td>Africa</td>
<td>235</td>
</tr>
<tr>
<td>Total</td>
<td>870,578</td>
</tr>
</tbody>
</table>

Our other businesses and CSR initiatives have planted additional 23,484 saplings. 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 give 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, our 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
IMPORTANT PROJECTS COMPLETED IN FY21

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 undertakes 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 Kancheepuram for RBG and a workmen training centre at Ahmedabad for RREC.

Buildings & Factories

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.

3.28 Mn Sq ft

Green buildings were constructed in FY21.
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 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 settling up data centres.

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

A new vertical, B&F Fast, has been set up to explore and create value from advanced construction technologies such as prefabricated or finished volumentric 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

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 which are 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, the 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 their 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

- Durgam Cheruvu project, Hyderabad-the world's longest extradosed cable-stayed concrete bridge-was inaugurated on September 25, 2020.
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 which 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
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 its footprint in 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.
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- Some of the key projects completed in FY21 are:
  - 400 kV Gas insulated substations at Lahal, Guindy, Mylasandra and Pappankalan
  - 230 kV Substations at Ranchi, Chennai and Ratangarh
  - 132 kV Receiving substation & 132 kV cabling for Dhalka 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

Overview
L&T Smart World & Communication (SW&C) delivers best-of-breed technological and digital interventions for which 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 Infrastructure, 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

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

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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 AD Dhafra Petroleum. 72-hour 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’s 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.

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 (up-grade 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 – LTE 300.

**Onshore**
- This business vertical provides EPC 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 Offshore 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 LTIE 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 the Residue Upgradation Facility (RUF) for HPCL Vizag Refinery and for Sonatrach South West Gas project in Algeria – are being executed at the fabrication yard.
- 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.
- Our facilities are strategically located in India at Hazira (west coast) and Kattupalli (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.
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- 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.

Power Business

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.
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 ammonification 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.

- **Key Projects Completed in FY21**

  - EO Reactor for IOCCL’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, PALT, 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
Manufactured Capital

Vadodara Heavy Engineering Works

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, Zirconia 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 Topse, 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 cycles globally in collaboration with a technology provider.

- Through its vast experience, VHEW 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 - Haldor Topse KBR, Uhde, UOP, and so on.

- VHEW 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 a 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 OFT, 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 a Robotic CMM machine and a LASER tracker.

L&T Piping Centre

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.

- LTPC 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.

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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.

Manufactured Capital

- It houses a dedicated unit for design, simulation, prototyping and testing of various Defence systems and software. The Product Technology & Development Centre (PTDC, 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.

L&T has provided critical subsystems for most of India’s space missions.
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. The facility is involved in the niche technology activities of building submarine hulls, outfitting and system integration of vessels.

The latest addition to 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-metre-long bays of 30 metre 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 platforms.

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, UAVs, 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 the manufacture of light alloy structures such as heat shields, interstages and 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 set up a 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 for missile integration, spans 4 acres and includes climate controlled space.
Manufactured Capital

Metallurgical and Material Handling (MMH)

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 Kancheepuram, Tamil Nadu.

Kansbahal Works, Odisha
- Has a facility for fabrication, machining, assembly, casting foundry and under carriage works.
- 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), Kancheepuram
- 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

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.

Overview

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

Kancheepuram
- Spans 18.93 acres and houses R&D offices and facilities to manufacture gate, globe, check, ball and butterfly valves (especially large-size valves)
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 set new benchmarks within their space.
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. Lightweight 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 programme to study the properties of lightweight 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 are 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 for 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 a simple genetic algorithm has been 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 ‘iBOSS’, (Intelligent Buildings Optimum Structural Sizing) 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 the conventional design approach.

DIGITAL INITIATIVES

Buildings and Factories

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)

- Conquer App (Quality application) mobile application for conducting/raise inspection for preconcrete check, post concrete check, quality walkthrough, 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

- 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.

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

Mindtree West Campus, Bengaluru
**Digital Initiatives**

**Heavy Civil Infrastructure**

**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 businesses.

**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 workman monitoring system is being implemented across all the projects in the business. This initiative helps in improved workmen monitoring, job allocation and utilisation.

**DMS**

This unified Document Management System is being implemented across major projects in the business 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.

**Client focused (for external purposes only)**

**Digital Initiatives**

**Water and Effluent Treatment**

**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 in order 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 store documents which facilitates document revision control for projects.

**Constzon**

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 procured, and guides the buyer to buy at the best price.

**MST**

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

#### Digital Initiatives

**Water and Effluent Treatment**

Process/Employee focused (for internal purposes only)

<table>
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<tr>
<th>LMINOP+ - Locate</th>
<th>Measure</th>
<th>Navigate on Phone + GPS catalyst</th>
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- **ViewEHS**: A mobile application developed in-house to help the project execution team to access all SOPs and forms for submission and verification, ensuring 100% safety compliance as per the standards. Empowers 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.

- **Knowledge Finder EHS (KF EHS)**: The module has 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.

- **MFlow**: Developed to digitally monitor and track the materials issued and consumed in every project done by WET IC. M-Flow provides real-time visibility on the project material consumption status and for reconciliation.

- **P-FAB**: An in-house solution to ensure quality compliance at every stage of pipe fabrication in the factory by monitoring progress of production and ensures 100% pipe traceability by having online data base for all quality reports and progress reports.

- **Smart Glass**: A combination of hardware and software solutions used to observe the project progress, safety, quality, workmen welfare and administration from any remote location.

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<th>SWADESH</th>
<th>ePragati</th>
<th>GIS Progress Monitoring</th>
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<td>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. This online dashboard highlights and tracks the safety performance of project based on Risk Score, Repetition Percentage, and Average Repetition Risk Score.</td>
<td>An online platform designed and developed by L&amp;T’s WET business to 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.</td>
<td>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.</td>
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**Project Quality Index (PQI)**: This Construction Quality Enabler will facilitate the inspection and documentation process for the construction and quality teams.

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

**Vendor Performance Rating**: Plant and Machinery are the key drivers of 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
Water and Effluent Treatment

Analytical Dashboards - HR, Finance, 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.

WISA

The entire workmen induction and screening process has been digitised and is 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 digitised O&M assets, getting routine maintenance transactions translated to management metrics. Setting goals and tracking maintenance of each asset in various O&M sites. Visualises and analyses the life history of each asset easily and is 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 at HQ and the necessary intervention in operations can be made immediately if there are any instances of non-functioning of equipment/abnormal process changes.

Workmen Uberisation App

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

Digital Health Monitoring

A 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.

375 MLD Sewage Treatment Plant, Jebel Ali, UAE

DIGITAL INITIATIVES
Power Transmission and Distribution

Empower

An integrated tool for project monitoring including material tracking at site.

VR Training

Immersive Safety training modules for workmen and staff using virtual reality.

Time lapse Camera

Capturing timestamped photos for documentation, visualisation and monitoring purposes.

WISA

Application for managing workforce induction and skills on a digital platform.

Geospatial Portal

Web portal integrated with Align and Empower for project visualisation in a geospatial format.

Video Analytics

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

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.

QIR App

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

EHS App

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

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

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Digital Initiatives

Intellectual Capital

**Digital Initiatives**

**Power Transmission and Distribution**

- **Empower**
  - Remote monitoring of P&M 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 fibre network.
  - Engineering Optimisation
  - Development and testing of web based solution using Python Programming 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.

**Defence**

- **IoT @ Hazira**
  - Monitors and enhances 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.

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

- **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 the gist of the news classifying various topics as per business need and displaying it in a user-friendly interface.

- **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)

- **Man Hours Booking System**
  - 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.

- **LTMMSL**
  - Real time analytics of various security devices like Firewall, Active directory, Exchange server.
  - Correlate various events to identify potential attacks and visualise the health of the IT security through the dashboard.

- **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.

- **e-File Note**
  - Digitised solution for file note preparation as a centralised repository of project budget bookings, savings, forex spend etc.
Intellectual Capital

DIGITAL INITIATIVES
L&T Hydrocarbon Engineering

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

Client focused

Virtual Reality Solution for engineering model review and approvals from client

SMART Glass/Merge Reality Solution for remote inspection, supervision and management

DIGITAL INITIATIVES
Realty

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

Salesforce CRM for managing effective interactions with customers.

Community Portal and Chatbot for Customer Self Service.

Commercial Portfolio Management solution on Salesforce platform.

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.

- 3D Scanning of a Commercial Towers to provide a virtually Walkthrough.
- Smart Building Video made for promoting Commercial Towers with 40+ sub packages.
- Website on ‘Platform as a Service’ PAAS mode with Chatbot for prospects lead generation.

Indian Oil Corporation Limited Bongaigaon Fluidized Catalytic Cracker Unit

Residential project, Centrona, Mumbai
Intellectual Capital

DIGITAL INITIATIVES
Metallurgical and Material Handling
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
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

Heavy Engineering

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.

Project monitoring tools like PROTON, DIGI-EYE, CREMS become part of system to keep project on time.

Advance metrology for digital inspection and marking and Digital Twin for virtual set up is a way of life now. 20 procedures have been established.

Further focus is on office automation with the help of RPA, ML, image processing and autonomous welding in manufacturing.

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.

AI tools like NLP, RPA and ML are implemented in cost estimation and proposal engineering system.

TPM application to measure online OEE, MTTR, MTBF and predictive maintenance etc. Total 75 machines are covered under TPM.

WISA (Working Management Solution)
During COVID-19, it has helped immensely by identifying and approaching the workmen with specific skill sets during the remobilisation planning.

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

Smart World & Communication

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.
Human Capital

Learning and development in the new normal

The pandemic shattered the myth that work is possible only in a physical workplace. A large proportion of the working population selected ‘Work From Home’ worldwide and it became almost a way of life. L&T’s 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 the virtual mode by adapting the content and delivery system to suit the virtual delivery mode. The core Supervisor Executive Development Programme and Management development programmes were all delivered in virtual mode. The STEP programmes such as were recast to the virtual mode, maintaining the same high standards of 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:

<table>
<thead>
<tr>
<th>Programme type</th>
<th>Total programmes</th>
<th>By international faculty</th>
<th>By external faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership development</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Core development</td>
<td>13</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Competency development</td>
<td>31</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Calendar</td>
<td>26</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>Accreditation</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>HR for HR</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Business requirements</td>
<td>116</td>
<td>116</td>
<td>0</td>
</tr>
<tr>
<td>Webinar</td>
<td>33</td>
<td>0</td>
<td>33</td>
</tr>
</tbody>
</table>

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 to 24,000 hrs of learning per month (excluding data of April to Sept).

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

GET orientation: The courses were specially curated and provided to all the GETs before joining L&T. 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 programmes for first-time managers. It was launched just before the pandemic hit. The first batch had 193 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 at these academies. It takes place at 3 levels.

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 programme were the 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 programmes (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 and gain the competitive edge.

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

Leadership Development Academy

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

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

The residential academy is equipped with relevant infrastructure to conduct various types of training programmes. 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.

INTEGRATED REPORT 2020-21 LARSEN & TOUBRO LIMITED
The entire five phases of a project lifecycle – initiating, planning, execution, monitoring and controlling – 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 was developed spanning emerging scenarios in the 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 programme 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 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-I, India)
- National Institute of Construction Management and Research (NICMAR, India)
- Royal Institute of Chartered Surveyors (UK)
- Indian Institute of Management, Indore (IIM-I, India)
- International Project Management Association (IPMA).

These institutes help deliver a globalised project management curriculum. Some executive education programmes are co-designed and delivered along with these partners. As part of its 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 the Project Management Council (PMC), it is committed to developing contemporary programmes that strengthen project management talent to meet evolving business aspirations. These initiatives 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.
Human Capital

Non-unionised workforce numbers
(age-wise and gender-wise) Staff as on April 1, 2021

<table>
<thead>
<tr>
<th>Gender</th>
<th>&lt;30</th>
<th>30-50</th>
<th>&gt;50</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1,435</td>
<td>1,463</td>
<td>155</td>
<td>3,053</td>
</tr>
<tr>
<td>Male</td>
<td>15,568</td>
<td>27,057</td>
<td>4,414</td>
<td>47,039</td>
</tr>
<tr>
<td>Grand Total</td>
<td>17,003</td>
<td>28,520</td>
<td>4,569</td>
<td>50,092</td>
</tr>
</tbody>
</table>

33 years
Median employee age

Attition* (age-wise and gender-wise)
Attition details (01/04/2020 to 31/03/2021)

<table>
<thead>
<tr>
<th>Gender</th>
<th>&lt;30</th>
<th>30-50</th>
<th>&gt;50</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>278</td>
<td>178</td>
<td>9</td>
<td>465</td>
</tr>
<tr>
<td>Male</td>
<td>3,563</td>
<td>4,378</td>
<td>748</td>
<td>8,684</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,841</td>
<td>4,556</td>
<td>752</td>
<td>9,149 (18.26%)</td>
</tr>
</tbody>
</table>

*Figures are excluding superannuation, 356 employees were superannuated

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

<table>
<thead>
<tr>
<th>Year</th>
<th>20-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>No. of Pros</td>
</tr>
<tr>
<td>Leadership</td>
<td>2</td>
</tr>
<tr>
<td>CDP (Core Development Programme)</td>
<td>13</td>
</tr>
<tr>
<td>Competency</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
</tr>
</tbody>
</table>

Men to women remuneration ratio is 1:1

ENSURING EMPLOYEE HEALTH AND SAFETY

Our objective

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

Employee and workforce health and safety are 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 are 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 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 programmes.

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 Board of Directors is fully appraised of 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 business. 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 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 behavior-based training and safety culture development.

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

Extending safety guidelines to the suppliers

In our Mission 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 by 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

<table>
<thead>
<tr>
<th>Safety dashboard</th>
<th>Reduction %</th>
<th>FY21</th>
<th>FY20</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity rate</td>
<td>87%</td>
<td>143.6</td>
<td>204.29</td>
<td>105.2</td>
</tr>
<tr>
<td>Frequency rate</td>
<td>82%</td>
<td>0.10</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td>Fatality rate</td>
<td>24%</td>
<td>7.72</td>
<td>10.19</td>
<td>5.06</td>
</tr>
<tr>
<td>Fatality</td>
<td>39%</td>
<td>25</td>
<td>41</td>
<td>22</td>
</tr>
</tbody>
</table>

Strong Safety Management Systems

L&T Safety Management Systems are accredited to the international standard ISO 45001: 2018 (Health and Safety Management Systems). Each business 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 business are also supported with internally developed Safe Operating Procedures (SOP) which on agreement 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 pandemic posed significant challenges. This sharpened our focus on the use of digital innovation. The use of Artificial Intelligence (AI) will be developed and introduced 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.

Auditing Safety Management System

At L&T, we undertake auditing of the safety management systems applied in all the businesses and projects through accredited internal and external 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 all ICs. Our EHS Council monitors and measures the compliance of corporate procedures. Major supply chain contractors and subcontractors are audited before awarding any contract to ensure that safety standards are maintained throughout contract duration.

Safety is embedded in the organisational culture

We organise a number of initiatives and campaigns to spread awareness of safety among 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.
- 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 programmes to groom fresh Diploma Engineers to perform the role of EHS professionals.
- Safety awareness programmes in specialised areas of tunnel, marine and launching girders 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 businesses actively recognises this through various award schemes.
Human Capital

Safety training

In line with L&T’s progressive safety initiatives and innovations, a comprehensive safety training programme 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, fastening 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 the interactions.

Programmes

- L&T has developed an award-winning carded training system called WISA. This initiative 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. 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 through behaviour-based safety programmes. These Programmes are automated by various technology platforms. We also conduct cross-functional safety audits, along with train-the-trainer programmes. The objective is to progressively ramp up site-based safety capabilities.

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 broadcast 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 had 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 horizontally, 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.

Safety Training Mock Drill
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.
Social Capital

L&T helps catalyse the 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 through 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 programme, inspires and empowers employee volunteers or L&Teers to contribute their time to programmes 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 programme 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.

**Input Matrices**

- CSR SPEND: ₹ 1.5 billion*
- CSR PARTNERS: 108
- NEW SUPPLIERS, CONTRACTORS: 29,407
- MSME SUPPLIERS: 5,782

**Output Matrices**

- TOTAL CSR BENEFICIARIES: 1.21 Million
- VENDOR/DEALER/SUB-CONTRACTOR TRAINING (NOS): 1,049
- CONTRIBUTION TO THE EXCHEQUER: ₹ 108 billion

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

**BUILDING INDIA’S SOCIAL INFRASTRUCTURE**

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

**Drivers of CSR Interventions**

**Corporate CSR Team**

L&T has dedicated CSR teams at the corporate level, committed to maximising social impact. The 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**

A CSR coordinator and teams at campuses, area offices and sites are active, helping to identify local projects and NGO partners, implement and monitor the projects; providing support.

**L&T’s 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 the 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 programmes around the thrust areas identified under the L&T’s CSR theme.

**Volunteers**

L&T has a structured employee volunteering programme, L&Teering, 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)**

LTPCT was established in 2004. The contribution from employees and management grant from L&T have 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. 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 programmes 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 during 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.

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 43,150 hygienically prepared 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 programme to people in distress.

INTEGRATED COMMUNITY DEVELOPMENT PROGRAMME
The Integrated Community Development programme (ICDP) of L&T started in 2014-15 to improve the availability of water, the very ‘necessity of life’. Under the programme, 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 programmes initiated in 2014-15. Today, all the project areas have access to drinking water, as well as water to cultivate fodder for livestock and extra crops.

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

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 in the best way possible while continuing to stay on our mission.

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

Sanitation drives

L&T’s ongoing initiatives in the area of sanitation in villages was boosted by the Government’s Swachh Bharat Abhiyan programme. The 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 programme was also extended to schools where children were made aware of the use and importance of the toilets and then became the torch bearers by spreading awareness through rallies and cultural programmes.

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 and preparing low-cost organic manure 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 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

2014-2020

54% to 100%

Families having access to water for toilets

2014-2020

33% to 98%

Institution building and sustainability

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

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

### Depth of water from land surface

<table>
<thead>
<tr>
<th>Village</th>
<th>Pathardi</th>
<th>Chettipalayam</th>
<th>Papampatti</th>
<th>Kumbalgarh</th>
<th>Bhim</th>
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</thead>
<tbody>
<tr>
<td>Mts</td>
<td>3.5</td>
<td>6.5</td>
<td>5.5</td>
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### Increase in irrigated area

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<th>Papampatti</th>
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<tbody>
<tr>
<td>Ha</td>
<td>113</td>
<td>123</td>
<td>183</td>
<td>126</td>
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</table>

### Increase in arable land

<table>
<thead>
<tr>
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<th>Pathardi</th>
<th>Chettipalayam</th>
<th>Papampatti</th>
<th>Kumbalgarh</th>
<th>Bhim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ha</td>
<td>1,000</td>
<td>1,400</td>
<td>1,700</td>
<td>2,000</td>
<td>800</td>
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</tbody>
</table>

### Fallowland brought under cultivation

<table>
<thead>
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<th>Chettipalayam</th>
<th>Papampatti</th>
<th>Kumbalgarh</th>
<th>Bhim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ha</td>
<td>1,113</td>
<td>1,342</td>
<td>274</td>
<td>78</td>
<td>675</td>
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</table>

Water level in observatory wells

<table>
<thead>
<tr>
<th>Village</th>
<th>Pathardi</th>
<th>Chettipalayam</th>
<th>Papampatti</th>
<th>Kumbalgarh</th>
<th>Bhim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mts</td>
<td>351</td>
<td>364</td>
<td>351</td>
<td>351</td>
<td>364</td>
</tr>
</tbody>
</table>

Water brings rural prosperity

The villages of Pappampatti, Kalangal, Appanackenpati purud and Peedampalli in Coimbatore, Tamil Nadu suffered from severe water scarcity, impacting every aspect of village life. Most of the villagers were 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, lead to financial losses. Those who had borewells 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 the active participation of the people in the project activities. VDCs conducted regular meetings to understand the nature and quantum of the work to be completed, select beneficiaries based on well-defined criteria, take stock of impact achieved through interventions and resolve any issues impeding project implementation. They also acted as intermediaries between people and public institutions such as Gram Panchayat, Block Development Offices, and ensured seamless implementation of the project.

L&T supported the construction of water and soil conservation structures such as field bund, farm ponds, check dams, channel formation and percolation ponds. 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 the pre-watershed period. Also, water pumping time considerably increased due to the 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 in these 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 the project’s 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 initiatives in FY21

One of the beneficiaries, Mr. Nana Bhikaji Wagh from Khandgaon village of Pathardi clusters 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 the crop only 6-7 times owing to less water in his farm well and insufficient 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 (10ftX10ftX3ft) was dug near his well on the farm. After the monsoon, excess run-off water collected pond and also recharged his well. The water in the well increased by four meters which was a memorable and satisfying moment for him. The increased water level in his farm well remained even after the monsoons 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 his 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 the meagre incomes of farmers of this cluster and demonstrated a successful and sustainable model of farmer empowerment.

Challenges and opportunities-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, onto this new learning platform.

Regular virtual teachers’ training, 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 programme

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

Drip Irrigation at ICDP at Pathardi, Ahmednagar

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. The company brings 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 at Mumbai 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.

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, Katupalli.

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.

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 LHDC, Vadodara, there has been a marked improvement in Kunj and he is leading a completely normal life. It saved him physical discomfort of travelling to Ahmedabad for treatment and helped the family to save travel expenses.

822,967

Individuals were provided better access to information and healthcare facilities in FY21
CASE STUDY

Upskilling people and creating livelihoods

Shaik Yaseen from Prakasam district in Andhra Pradesh completed his ITI Civil from Markapuram Government ITI in 2019 and was trying for a job in the construction industry. Due to incompetence, 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 Attibele’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 an opportunity to have one week of on-the-job exposure 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.
Social Capital

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

Environment

L&Teers also contribute to keeping our surroundings safe and clean by conducting tree plantation and cleanliness drives. 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 and the 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’ programmes and products were shared with the employees through internal networks and connecting them with the organisations. Even in these tough times, L&T did its bit to stand by NGO partners and shared its good fortune with those who need it most.

Every year CSR team conducts a 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.

**Benefits 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 contributes to their ideas or plans for future studies or careers. Volunteers also help the community by providing resources, to develop autonomously and build a strong society.

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

**L&TEERING: EMPLOYEE VOLUNTEERING INITIATIVE**

L&T has a growing army of employee volunteers or L&Teers who support the Company’s CSR activities through its organised employee volunteering programme. They partake in initiatives like teaching at community schools and 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 programme that includes community development initiatives. L&Teers also spread their wings to other areas like visiting orphanage and old age centres, reaching out to kids with special needs, joining the relief camps in affected areas, planting trees, organising fundraising activities and volunteering with selected NGOs.

In FY21, regular volunteering programmes were adversely impacted as the pandemic and the ensuing lockdown brought restrictions on reaching 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 and helped tribal and other vulnerable kids with the English language. Recording stories and audio books for the visually impaired continued as a usual activity. Volunteers prepared study materials for underprivileged students they mentored/guided students. 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.

**Health**

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

**Environment**

L&Teers also contribute to keeping our surroundings safe and clean by conducting tree plantation and cleanliness drives. Despite the pandemic induced movement restrictions, environment clean-up drives were conducted successfully.

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Relationship Capital

We have always laid emphasis on building enduring bonds of trust with our stakeholders. These include customers, shareholders, employees, 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

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 gain insights into their perspectives, get clarity on ‘pain points’ and craft the 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:

<table>
<thead>
<tr>
<th>Institutional Investors</th>
<th>Holding %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Insurance Corporation of India</td>
<td>13.7</td>
</tr>
<tr>
<td>HDFC Mutual Fund</td>
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<tr>
<td>GIC Singapore</td>
<td>2.4</td>
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<tr>
<td>GIC India</td>
<td>1.8</td>
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<tr>
<td>NPS Trust (India)</td>
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<tr>
<td>Fidelity Investments</td>
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<tr>
<td>ICICI Prudential Mutual Fund</td>
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<td>SBI Mutual Fund</td>
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</tr>
<tr>
<td>ICICI Prudential Life Insurance</td>
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<tr>
<td>Franklin Templeton Mutual Fund</td>
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</table>

₹ 1,467.47 billion Value distributed in FY21
Relationship Capital

Customers
Our constant endeavour is to provide our customers with a 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 and 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 customer service such as time schedule, product

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. Our environmental and Social Code of Conduct includes 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.

There were no instances of non-compliance during supplier assessments during the year.

9+ Lakh vendors, dealers and sub-contractors were trained in FY21

Government
We work closely with the Government of India as well as local governments during the 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 the communities we work with.

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. Our 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 the size of our business, we have been able to maintain growth. Our financial prudence has helped us navigate through the challenging period of the pandemic.

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 on pages 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

GRI Disclosures 103-1, 103-2, 103-3 GRI Disclosure 102-45
Financial Capital

Inputs

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<thead>
<tr>
<th>Measures</th>
<th>FY21</th>
<th>FY20</th>
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<tr>
<td>ORDER BOOK</td>
<td>₹ 3,273.54 billion</td>
<td>₹ 3,038.57 billion</td>
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<tr>
<td>NET CURRENT ASSETS</td>
<td>₹ 575.56 billion</td>
<td>₹ 553.94 billion</td>
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<tr>
<td>NET fixed assets</td>
<td>₹ 448.20 billion</td>
<td>₹ 428.06 billion</td>
</tr>
<tr>
<td>GROSS DEBT-TO-EQUITY RATIO</td>
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Outputs

<table>
<thead>
<tr>
<th>Measures</th>
<th>FY21</th>
<th>FY20</th>
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</thead>
<tbody>
<tr>
<td>TURNOVER</td>
<td>₹ 1,359.79 billion</td>
<td>₹ 1,331.49 billion</td>
</tr>
<tr>
<td>GROUP PAT</td>
<td>₹ 115.83 billion</td>
<td>₹ 113.91 billion</td>
</tr>
<tr>
<td>DIVIDEND PAID</td>
<td>₹ 50.56 billion</td>
<td>₹ 47.54 billion</td>
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<tr>
<td>RETURN ON EQUITY**</td>
<td>16.25%</td>
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* As on March 31, 2021
** For FY21

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 up to ₹ 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
Financial Capital

ECONOMIC VALUE GENERATED AND DISTRIBUTED

<table>
<thead>
<tr>
<th>Description</th>
<th>FY21 [bn]</th>
<th>FY20 [bn]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic value generated</td>
<td>1,536.23</td>
<td>1,522.20</td>
</tr>
<tr>
<td>Manufacturing, construction and operating</td>
<td>1,006.40</td>
<td>1,067.21</td>
</tr>
<tr>
<td>Employee wages and benefits</td>
<td>247.40</td>
<td>230.87</td>
</tr>
<tr>
<td>Payments to providers of capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interest</td>
<td>39.13</td>
<td>27.97</td>
</tr>
<tr>
<td>- Dividend</td>
<td>50.56</td>
<td>25.27</td>
</tr>
<tr>
<td>- Minority Shareholders</td>
<td>13.38</td>
<td>13.45</td>
</tr>
<tr>
<td>- Payments to exchequer</td>
<td>108.33</td>
<td>93.56</td>
</tr>
<tr>
<td>Community investments (CSR spend)</td>
<td>2.27</td>
<td>3.76</td>
</tr>
<tr>
<td>Economic Value Distributed</td>
<td>1,467.47</td>
<td>1,462.08</td>
</tr>
<tr>
<td>Economic Value Retained</td>
<td>68.76</td>
<td>60.12</td>
</tr>
</tbody>
</table>

Value retained = A - B

<table>
<thead>
<tr>
<th>Description</th>
<th>FY21</th>
<th>FY20</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY21 Value generated</td>
<td>₹ 1,536.23</td>
<td>₹ 1,522.20</td>
</tr>
<tr>
<td>FY20 Value generated</td>
<td>₹ 1,467.47</td>
<td>₹ 1,462.08</td>
</tr>
<tr>
<td>FY20 Value distributed (%)</td>
<td>68.76%</td>
<td>60.12%</td>
</tr>
</tbody>
</table>

Employee Cost and Benefits

Cost towards wages/ salaries (a) (in billion)

<table>
<thead>
<tr>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>208.22</td>
<td>224.64</td>
</tr>
</tbody>
</table>

Other benefit costs (b) (in billion)

<table>
<thead>
<tr>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.92</td>
<td>22.98</td>
</tr>
</tbody>
</table>

Total personnel cost = (a)+(b) (in billion)

<table>
<thead>
<tr>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>231.14</td>
<td>247.62</td>
</tr>
</tbody>
</table>

Liquidity and Capital Resources

Cash and cash equivalents at the beginning of the period (FY20: 111.18 bn, FY21: 138.81 bn)

Add: Net cash provided/used by:

<table>
<thead>
<tr>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Operating Activities</td>
<td>-149.01</td>
</tr>
<tr>
<td>- Investing Activities</td>
<td>23.14</td>
</tr>
<tr>
<td>- Divestment Proceeds</td>
<td>0.02</td>
</tr>
<tr>
<td>- Financing Activities</td>
<td>0.02</td>
</tr>
<tr>
<td>- Discontinued Operations</td>
<td>50.74</td>
</tr>
<tr>
<td>- Cash and cash equivalents at the end of the period (FY20: 111.18 bn, FY21: 133.27 bn)</td>
<td></td>
</tr>
</tbody>
</table>

*The financial works of FY20 are revised*
## Consolidated Balance Sheet

### as at March 31, 2021

### Particulars Note As at 31-03-2021 As at 31-3-2020 ₹ Crore

### ASSETS:
#### Non-current assets
- Property, plant and equipment 2 11,386.29 10,103.79
- 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 financial assets 9 1,110.77 638.15
- Loans towards financing activities 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 5,448.65
- Financial assets
  - Investments 12 31,011.23 12,698.75
  - Trade receivables 13 42,229.78 40,731.52
  - Cash and cash equivalents 14 11,373.52 11,524.57
  - Other bank balances 15 2,867.98 3,793.21
  - Loans towards financing activities 16 41,379.03 41,723.42
  - Other loans 17 648.66 716.00
  - Other financial assets 18 1,110.77 638.15
- Loans towards financing activities 134,348.57 112,916.34
- Other current assets 19 54,791.48 58,659.68
- Group's assets classified as held for sale 45(f) 6.24 4,367.21

**Total Assets**
311,273.71 308,140.13

### Liabilities
#### Non-current liabilities
- Borrowings 22 82,120.04 82,331.33
- Lease liability 23 1,617.72 1,741.60
- Other financial liabilities 23 186.74 901.14
- 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
- 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 1,569.55 4,927.23
- Other liabilities associated with group(s) of assets classified as held for sale 45(f) 1,984.17

**Total Liabilities**
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 66,723.27
- Non-controlling interests 12,051.53 8,520.83

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

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>2020-21</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuing operations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INCOME:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue from operations</td>
<td>34</td>
<td>135,979.03</td>
<td>145,452.36</td>
</tr>
<tr>
<td>Other income</td>
<td>35</td>
<td>3,429.35</td>
<td>2,360.90</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td></td>
<td>139,408.38</td>
<td>147,813.26</td>
</tr>
<tr>
<td><strong>EXPENSES:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing, construction and operating expenses:</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of raw materials, components consumed</td>
<td></td>
<td>15,571.40</td>
<td>15,548.66</td>
</tr>
<tr>
<td>Construction materials consumed</td>
<td></td>
<td>24,558.23</td>
<td>30,316.12</td>
</tr>
<tr>
<td>Purchase of stock-in-trade</td>
<td></td>
<td>1,213.58</td>
<td>841.09</td>
</tr>
<tr>
<td>Stores, spares and tools consumed</td>
<td></td>
<td>2,023.54</td>
<td>2,184.46</td>
</tr>
<tr>
<td>Sub-contracting charges</td>
<td></td>
<td>22,316.18</td>
<td>26,454.05</td>
</tr>
<tr>
<td>Changes in inventories of finished goods, work-in-progress, stock-in-trade and property development</td>
<td></td>
<td>343.37</td>
<td>647.70</td>
</tr>
<tr>
<td>Other manufacturing, construction and operating expenses</td>
<td></td>
<td>12,983.56</td>
<td>13,328.71</td>
</tr>
<tr>
<td><strong>Finance cost of financial services business and finance lease activity</strong></td>
<td></td>
<td>86,700.90</td>
<td>97,362.67</td>
</tr>
<tr>
<td><strong>Employee benefits expense</strong></td>
<td>37</td>
<td>24,762.03</td>
<td>23,114.00</td>
</tr>
<tr>
<td><strong>Sales, administration and other expenses</strong></td>
<td>38</td>
<td>8,892.00</td>
<td>8,646.71</td>
</tr>
<tr>
<td><strong>Finance costs</strong></td>
<td>39</td>
<td>3,913.44</td>
<td>2,796.66</td>
</tr>
<tr>
<td><strong>Depreciation, amortisation, impairment and obsolescence</strong></td>
<td></td>
<td>2,904.21</td>
<td>2,462.27</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td></td>
<td>127,172.58</td>
<td>134,382.31</td>
</tr>
<tr>
<td><strong>Profit before exceptional items and tax</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net profit after tax from discontinued operations</strong></td>
<td></td>
<td>8,237.92</td>
<td>654.57</td>
</tr>
<tr>
<td><strong>Net profit after tax from continuing operations &amp; discontinued operations</strong></td>
<td></td>
<td>12,921.28</td>
<td>10,894.28</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A. Items that will not be reclassified to profit or loss:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity instruments through Other comprehensive income</td>
<td></td>
<td>55.05</td>
<td>(386.05)</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on equity instruments through Other comprehensive income</strong></td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Gain/(loss) on remeasurements of the net defined benefit plans</strong></td>
<td></td>
<td>57.40</td>
<td>(205.94)</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on remeasurements of the net defined benefit plans</strong></td>
<td></td>
<td>(13.69)</td>
<td>50.60</td>
</tr>
<tr>
<td><strong>Share in Other comprehensive income of joint ventures/associates (net)</strong></td>
<td></td>
<td>(3.71)</td>
<td>(153.34)</td>
</tr>
<tr>
<td><strong>Net profit after tax from continuing operations &amp; discontinued operations</strong></td>
<td></td>
<td>4,668.96</td>
<td>27.75</td>
</tr>
<tr>
<td><strong>B. Items that will be reclassified to profit or loss:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt instruments through Other comprehensive income</td>
<td></td>
<td>123.69</td>
<td>115.22</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on debt instruments through Other comprehensive income</strong></td>
<td></td>
<td>(31.14)</td>
<td>(19.46)</td>
</tr>
<tr>
<td><strong>Exchange differences in translating the financial statements of foreign operations</strong></td>
<td></td>
<td>95.28</td>
<td>95.76</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on exchange differences in translating the financial statements of foreign operations</strong></td>
<td></td>
<td>95.28</td>
<td>48.05</td>
</tr>
<tr>
<td><strong>Effective portion of gains/(losses) on hedging instruments in a cash flow hedge</strong></td>
<td></td>
<td>1,237.96</td>
<td>(947.41)</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on effective portion of gains/(losses) on hedging instruments in a cash flow hedge</strong></td>
<td></td>
<td>1,237.96</td>
<td>334.42</td>
</tr>
<tr>
<td><strong>Cost of hedging reserve</strong></td>
<td></td>
<td>11.12</td>
<td>(21.04)</td>
</tr>
<tr>
<td><strong>Income tax (expenses)/income on cost of hedging reserve</strong></td>
<td></td>
<td>8.14</td>
<td>23.62</td>
</tr>
<tr>
<td><strong>Share in Other comprehensive income of joint ventures/associates (net)</strong></td>
<td></td>
<td>(26.56)</td>
<td>23.62</td>
</tr>
<tr>
<td><strong>Other comprehensive income for the year (net of tax)</strong></td>
<td></td>
<td>1,454.37</td>
<td>(1,314.66)</td>
</tr>
<tr>
<td><strong>Total comprehensive income for the year</strong></td>
<td></td>
<td>14,375.65</td>
<td>9,579.62</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Particulars Note</th>
<th>2020-21</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit for the year attributable to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners of the Company</td>
<td>11,382.93</td>
<td>9,549.03</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>1,316.95</td>
<td>1,449.25</td>
</tr>
<tr>
<td>Total</td>
<td>12,921.28</td>
<td>10,994.28</td>
</tr>
<tr>
<td>Other comprehensive income for the year attributable to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners of the Company</td>
<td>1,124.99</td>
<td>(1,032.83)</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>324.88</td>
<td>(281.83)</td>
</tr>
<tr>
<td>Total</td>
<td>1,454.37</td>
<td>(1,314.66)</td>
</tr>
<tr>
<td>Total comprehensive income for the year attributable to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners of the Company</td>
<td>12,712.42</td>
<td>8,516.20</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>1,663.23</td>
<td>1,063.42</td>
</tr>
<tr>
<td>Total</td>
<td>14,375.65</td>
<td>9,579.62</td>
</tr>
<tr>
<td>Earnings per share (EPS) of ₹ 2 each from continuing operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic earnings per equity share (₹)</td>
<td>55</td>
<td>23.82</td>
</tr>
<tr>
<td>Diluted earnings per equity share (₹)</td>
<td>55</td>
<td>23.80</td>
</tr>
<tr>
<td>Earnings per share (EPS) of ₹ 2 each from discontinued operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic earnings per equity share (₹)</td>
<td>55</td>
<td>58.67</td>
</tr>
<tr>
<td>Diluted earnings per equity share (₹)</td>
<td>55</td>
<td>58.61</td>
</tr>
<tr>
<td>Earnings per share (EPS) of ₹ 2 each from continuing operations &amp; discontinued operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic earnings per equity share (₹)</td>
<td>55</td>
<td>82.49</td>
</tr>
<tr>
<td>Diluted earnings per equity share (₹)</td>
<td>55</td>
<td>82.41</td>
</tr>
<tr>
<td>Face value per equity share (₹)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes forming part of the financial statements</td>
<td>1 to 64</td>
<td></td>
</tr>
</tbody>
</table>

Consolidated Statement of Cash Flows
for the year ended March 31, 2021

<table>
<thead>
<tr>
<th>Particulars Note</th>
<th>2020-21</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit before tax (excluding exceptional items) from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing operations</td>
<td>12,235.80</td>
<td>13,430.95</td>
</tr>
<tr>
<td>Discontinued operations</td>
<td>10,790.50</td>
<td>883.25</td>
</tr>
<tr>
<td>Profit before tax including discontinued operations (excluding exceptional items)</td>
<td>23,026.30</td>
<td>14,314.20</td>
</tr>
<tr>
<td>Adjustments for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend received</td>
<td>(28.47)</td>
<td>(101.60)</td>
</tr>
<tr>
<td>Depreciation, amortisation, impairment and obsolescence</td>
<td>2,904.21</td>
<td>2,462.27</td>
</tr>
<tr>
<td>Exchange difference on items grouped under financing/investing activities</td>
<td>(75.47)</td>
<td>5.69</td>
</tr>
<tr>
<td>Effect of exchange rate changes on cash and cash equivalents</td>
<td>74.98</td>
<td>(88.14)</td>
</tr>
<tr>
<td>Unrealised (gain)/loss on finance leases</td>
<td>(14.55)</td>
<td>-</td>
</tr>
<tr>
<td>Exchange costs</td>
<td>3,913.44</td>
<td>2,796.66</td>
</tr>
<tr>
<td>Interest income</td>
<td>(1,377.66)</td>
<td>(829.78)</td>
</tr>
<tr>
<td>(Profit)/loss on sale of fixed assets (net)</td>
<td>(11,187.77)</td>
<td>(733.84)</td>
</tr>
<tr>
<td>(Gain)/loss on disposal of discontinued operations</td>
<td>(10,707.92)</td>
<td>-</td>
</tr>
<tr>
<td>(Gain)/loss on derivatives at fair value through profit or loss</td>
<td>-</td>
<td>(13.19)</td>
</tr>
<tr>
<td>Employee stock option-discount forming part of employee benefits expense</td>
<td>137.67</td>
<td>190.84</td>
</tr>
<tr>
<td>Non-cash items related to discontinued operations</td>
<td>3.13</td>
<td>49.44</td>
</tr>
<tr>
<td>Business combination expenses</td>
<td>-</td>
<td>84.28</td>
</tr>
<tr>
<td>Impairment of debt instruments</td>
<td>151.26</td>
<td>350.59</td>
</tr>
<tr>
<td>Impairment recognised on non-current assets held for sale</td>
<td>0.23</td>
<td>3.93</td>
</tr>
<tr>
<td>(Gain)/loss on de-recognition of lease liability/right-of-use assets</td>
<td>(15.78)</td>
<td>(1.85)</td>
</tr>
<tr>
<td>Interest expenses/(income) related to discontinued operations</td>
<td>1.16</td>
<td>1.33</td>
</tr>
<tr>
<td>Operating profit before working capital changes</td>
<td>16,344.95</td>
<td>18,524.11</td>
</tr>
<tr>
<td>Adjustments for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase/decrease in trade and other receivables</td>
<td>2,783.81</td>
<td>(11,278.12)</td>
</tr>
<tr>
<td>Increase/decrease in inventories</td>
<td>348.90</td>
<td>353.19</td>
</tr>
<tr>
<td>Increase/decrease in trade payables and customer advances</td>
<td>2,219.78</td>
<td>8,144.27</td>
</tr>
<tr>
<td>Cash generated from operations before financing activities</td>
<td>21,997.44</td>
<td>10,733.41</td>
</tr>
<tr>
<td>(Increase)/decrease in loans and advances towards financing activities</td>
<td>4,617.71</td>
<td>6.92</td>
</tr>
<tr>
<td>Cash generated from operations</td>
<td>26,615.15</td>
<td>10,740.33</td>
</tr>
<tr>
<td>Direct taxes refund/(paid) (net)</td>
<td>(3,471.03)</td>
<td>(4,046.45)</td>
</tr>
<tr>
<td>Net cash (used in)/from operating activities</td>
<td>22,144.12</td>
<td>6,693.88</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>2020-21</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B. Cash flow from investing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase of fixed assets</td>
<td>(1,807.70)</td>
<td>(3,436.82)</td>
</tr>
<tr>
<td>Sale of fixed assets (including advance received)</td>
<td>885.36</td>
<td>137.39</td>
</tr>
<tr>
<td>Purchase of non-current investments</td>
<td>(1,873.24)</td>
<td>(1,970.64)</td>
</tr>
<tr>
<td>Sale of non-current investments</td>
<td>240.19</td>
<td>2,245.29</td>
</tr>
<tr>
<td>(Purchase/sale of current investments (net)</td>
<td>(16,841.55)</td>
<td>2,065.74</td>
</tr>
<tr>
<td>Change in other bank balance and cash not available for immediate use</td>
<td>915.13</td>
<td>(1,439.82)</td>
</tr>
<tr>
<td>Deposits/loans given to associates, joint ventures and third parties</td>
<td>(151.59)</td>
<td>(175.27)</td>
</tr>
<tr>
<td>Deposits/loans repaid by associates, joint ventures and third parties</td>
<td>-</td>
<td>17.69</td>
</tr>
<tr>
<td>Interest received</td>
<td>1,275.45</td>
<td>2,877.64</td>
</tr>
<tr>
<td>Dividend received from joint ventures/associates</td>
<td>175.05</td>
<td>12.57</td>
</tr>
<tr>
<td>Dividend received on other investments</td>
<td>28.47</td>
<td>101.60</td>
</tr>
<tr>
<td>Settlement of derivative contracts related to current investments</td>
<td>-</td>
<td>13.19</td>
</tr>
<tr>
<td>Consideration received on disposal of subsidiaries (including advance received)</td>
<td>295.78</td>
<td>-</td>
</tr>
<tr>
<td>Net proceeds from transfer of discontinued operations (net of tax)</td>
<td>11,530.82</td>
<td>-</td>
</tr>
<tr>
<td>Consideration received on disposal of joint venture</td>
<td>-</td>
<td>43.16</td>
</tr>
<tr>
<td>Consideration paid on acquisition of subsidiaries</td>
<td>(121.77)</td>
<td>(9,895.93)</td>
</tr>
<tr>
<td>Cash and cash equivalents acquired pursuant to acquisition of subsidiaries</td>
<td>7.07</td>
<td>210.72</td>
</tr>
<tr>
<td>Cash and cash equivalents (of subsidiaries) classified as held for sale (other than discontinued operations)/reclassified from held for sale</td>
<td>13.69</td>
<td>(14.34)</td>
</tr>
<tr>
<td>Consideration paid on acquisition of additional stake in a joint venture</td>
<td>-</td>
<td>(48.06)</td>
</tr>
<tr>
<td><strong>Net cash (used in)/from investing activities:</strong></td>
<td>(5,428.84)</td>
<td>(8,236.27)</td>
</tr>
<tr>
<td><strong>C. Cash flow from financing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from issue of share capital (including share application money) [net]</td>
<td>15.85</td>
<td>17.56</td>
</tr>
<tr>
<td>Proceeds from non-current borrowings (Note 50)</td>
<td>35,737.52</td>
<td>42,587.43</td>
</tr>
<tr>
<td>Repayment of non-current borrowings (Note 50)</td>
<td>(28,318.78)</td>
<td>(23,683.03)</td>
</tr>
<tr>
<td>Proceeds from (repayment of) other borrowings (net) [Note 50]</td>
<td>(6,151.20)</td>
<td>4,915.20</td>
</tr>
<tr>
<td>Payment (top) from non-controlling interest (net) - including sale proceeds on divestment of part stake in subsidiary companies</td>
<td>796.02</td>
<td>(60.05)</td>
</tr>
<tr>
<td>Settlement of derivative contracts related to borrowings</td>
<td>66.73</td>
<td>308.29</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>(3,650.89)</td>
<td>(3,929.61)</td>
</tr>
<tr>
<td>Additional tax on dividend</td>
<td>-</td>
<td>(621.72)</td>
</tr>
<tr>
<td>Repayment of lease liability (Note 50)</td>
<td>(581.64)</td>
<td>(1,258.03)</td>
</tr>
<tr>
<td>Interest paid on lease liability</td>
<td>(203.57)</td>
<td>(162.79)</td>
</tr>
<tr>
<td>Interest paid (including cash flows on account of interest rate swaps)</td>
<td>(3,184.42)</td>
<td>(2,739.70)</td>
</tr>
<tr>
<td><strong>Net cash (used in)/from financing activities:</strong></td>
<td>(15,274.38)</td>
<td>6,371.55</td>
</tr>
<tr>
<td>**Net (decrease)/increase in cash and cash equivalents (A + B + C)</td>
<td>2,140.92</td>
<td>4,809.16</td>
</tr>
<tr>
<td>Cash and cash equivalents at beginning of the year</td>
<td>11,117.95</td>
<td>6,460.23</td>
</tr>
<tr>
<td>Cash and cash equivalents for discontinued operations (classified as held for sale)</td>
<td>-</td>
<td>(17.88)</td>
</tr>
<tr>
<td>Cash and cash equivalents at end of the year</td>
<td>13,257.81</td>
<td>11,177.95</td>
</tr>
</tbody>
</table>

Note: The notes referred in the above financials are included in the Annual Report.

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**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
   - (b) Other bank balances disclosed under current assets (Note 15) 13,287.91
   - (c) Cash and bank balances disclosed under non-current assets (Note 9) 283.91

**Total cash and cash equivalents as per Balance Sheet:**

- **Add:** (i) Unrealised exchange (gain)/loss on cash and cash equivalents (reflected in Statement of Profit and loss) 15,257.01
- **Add:** (ii) Unrealised exchange (gain)/loss on cash and cash equivalents (reflected in Other comprehensive income) 11,371.95

**Less:** (iii) Other bank balances disclosed under current assets 2,867.98

**Total cash and cash equivalents as per Statement of Cash Flows:**

11,177.95

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
SIVARAM NAI R.
Firmar
Company Secretary & Compliance Officer
Membership No. 39826
Membership No. FC13939

Mumbai, May 14, 2021

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**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.

Goverance 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:

<table>
<thead>
<tr>
<th>Name of Board Committee</th>
<th>Number of meetings in FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Committee</td>
<td>8</td>
</tr>
<tr>
<td>Nomination and Remuneration Committee</td>
<td>5</td>
</tr>
<tr>
<td>Stakeholders’ Relationship Committee</td>
<td>3</td>
</tr>
<tr>
<td>Corporate Social Responsibility &amp; Sustainability Committee</td>
<td>4</td>
</tr>
<tr>
<td>Apex Risk Management Committee</td>
<td>3</td>
</tr>
</tbody>
</table>

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 Organisation (ILO) conventions
- The National Voluntary Guidelines (NVG), India
- Sustainable Development Goals (SDGs)
- Other United Nations (UN) directives that comprise:
  - The United Nations Global Compact Network India (GCNI)
  - Applicable International Labour Organisation (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.

Noteworthy policies, procedures and directives are summarised below:

<table>
<thead>
<tr>
<th>L&amp;T Policies</th>
<th>Pillar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability Policy</td>
<td>E,S,G</td>
</tr>
<tr>
<td>EHS policy</td>
<td>E,S</td>
</tr>
<tr>
<td>Green Supply Chain Policy</td>
<td>E</td>
</tr>
<tr>
<td>HR Policy</td>
<td>S</td>
</tr>
<tr>
<td>CSR Policy</td>
<td>S</td>
</tr>
<tr>
<td>Policy for Protection of Women's Rights at Workplace</td>
<td>S</td>
</tr>
<tr>
<td>Whistle Blower policy</td>
<td>G</td>
</tr>
<tr>
<td>Risk Management Policy</td>
<td>G</td>
</tr>
<tr>
<td>Related Party Transactions Policy</td>
<td>G</td>
</tr>
<tr>
<td>Quality Policy</td>
<td>G</td>
</tr>
</tbody>
</table>

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 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 to pages 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 through programmes/workshops 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 compromise ethical values.

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 on 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.
- The 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 emails are sent across all units of the Company highlighting the salient features of the SEBI Regulations as well as the 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).
- During FY21, 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 to 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 to 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 to 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

**Business/IC Reviews**

<table>
<thead>
<tr>
<th>Review area</th>
<th>Scope</th>
<th>Periodicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business review</td>
<td>Business</td>
<td>Monthly</td>
</tr>
<tr>
<td>PRM</td>
<td>Operations</td>
<td>Monthly</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Prebid/execution</td>
<td>As per schedule</td>
</tr>
<tr>
<td>CSTI</td>
<td>Budget/financial</td>
<td>Monthly/real time</td>
</tr>
<tr>
<td>CSR</td>
<td>Social audit/budget</td>
<td>Monthly/real time</td>
</tr>
<tr>
<td>Digital Initiatives</td>
<td>Product launch and enhancements</td>
<td>Monthly</td>
</tr>
<tr>
<td>SCM</td>
<td>Online dashboards</td>
<td>Live</td>
</tr>
<tr>
<td>Business Segments</td>
<td>Project/progress</td>
<td>Quarterly</td>
</tr>
<tr>
<td>HR</td>
<td>Staff details Training</td>
<td>Monthly/real time</td>
</tr>
<tr>
<td>Safety</td>
<td>Online, risk etc.</td>
<td>Live/annual</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Project &amp; performance</td>
<td>Quarterly/Monthly/real time</td>
</tr>
<tr>
<td>Finance</td>
<td>Progress update</td>
<td>Monthly</td>
</tr>
<tr>
<td>Labour Management</td>
<td>Update</td>
<td>Weekly</td>
</tr>
</tbody>
</table>
Business Review

Construction
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Construction Equipment & Others
PAGE 180

Power
PAGE 187

Heavy Engineering
PAGE 189

Defence
PAGE 189

Hydrocarbon Engineering
PAGE 190

L&T Valves
PAGE 196

L&T Realty
PAGE 198

Construction

Riyadh Metro Line -3 Kingdom of Saudi Arabia
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.

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.

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.

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 us 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.

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 across 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 employees’ knowledge, experience and skills. A database of profiles of 6,000 staff was built through a digital solution which structures, categories and stores up-to-date skill information under 40 major skills and 540 sub-skills with proficiency levels from Basic to Role Model.
Transportation Review

Infrastructure

It is one of the oldest, largest businesses 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 (IREC) and Railways Business Group (RBG).

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 projects such as the Dhaka and Mauritius LRTs, the

Further to full range railway system integration

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 – RRK (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 business digitally monitors, in real-time, the 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.

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 iHS – 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 ‘PDP’ – 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.

Human Resources

Digitalisation has become a way of life and has been integrated into the project delivery process. The business digitally monitors, in real-time, the 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 laboratory 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 (NSC)

- Kakrapar Atomic Power Project 3 & 4 bagged the ‘Best Safe Contractor Award (Winner) – 2020-21’ from NPCIL (Nuclear Power Corporation of India Limited)
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.

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.

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 workers at project sites. Training modules are tailor-made project-wise for identified hazards that could lead to major incidents
- 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 was conducted across project sites to encourage reuse and recycle of waste materials. 12,000 MT of waste was recycled so far.
- ‘Ulta Chattha’ 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.

Marquee projects

Marque projects commissioned 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, clocking over 17,159 training man-hours. Various projects and factories received ~19 external trainings were conducted through 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, being an effective virtual mode of imparting training.

A series of Town Hall Leadership Speak sessions for the business, Call to Staff and Joy @ WVF established effective communication channels for clarity amongst staff on the way forward during such challenging times.

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.

To combat the COVID-19 pandemic, 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.

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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
- 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 and Project Management.
- Leadership mentors helped shape careers and provide developmental opportunities for high-potential talent.
Construction Equipment & Others

The Construction Equipment & Others (CE&O) business pertains to manufacturing and marketing of construction equipment, mining equipment, and equipment for the 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.

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 35,000+ 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 across 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 Tonne 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 the Machine Care Programme (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 Mechanism, 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 up to 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 is moving towards ‘Zero reportable accident’ and ‘Zero loss of man-days’.
- CMB’s EHS programmes 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 programmes; 48,000+ participants.
- Women empowerment – operators and mechanics.

**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.


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 more 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.

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**Stacker cum Reclaimer – 22 Mtr. – JSW- Dolvi, Maharashtra**

Komatsu PC210-10M0 Hydraulic Excavator – the truly efficient and fastest selling equipment in the construction segment in India.
Business Review

Human Resources
During COVID-19 pandemic, the health of employees, their families and all other stakeholders was closely monitored for business continuity.
- Task force constituted for COVID-19 Case management and prevention
- Programmes on awareness on COVID-19 organised for 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 QCFI – Bangalore Chapter

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.

The factory spans about 19.28 acres and houses a 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 action 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
- Developed of Induction type Platen Heating System in tyre curing presses towards commitment to the environment, which is likely to see good customer acceptance
Major Product Developments

Significant achievements were accomplished in bringing out new products in the 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.

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

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 to 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 we now have a sizeable presence in the FGD business.
Business Review

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

- Liaisons/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

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

Business Review

Heavy Engineering

The business ranks among the top-three global fabricators to supply engineered-to-order critical equipment, piping and systems, including critical revamp and upgradation projects, for core sector industries.

20% Market share in the FGD market
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 Visag 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 ethylene oxide reactor from Sibur, Russia
- 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)
- LTSSHJV 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
- 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
- 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 undertaken
- 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

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
- 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 Visag 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 ethylene oxide reactor from Sibur, Russia
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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 ‘Abhiyakti’ platform is used for regular interaction with young engineers.

Business Review

INTEGRATED REPORT 2020-21 LARSEN & TOUBRO LIMITED
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 has also not customised any delivery systems for such munitions.

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 and workmen tracking.

Major Achievements
- New benchmarks set up by work centres in terms of deliveries of OPVs, K9 Vajra-T and 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.

Human Resources
The HR initiatives have been aligned to identify and groom 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 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’. 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.

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Business Review

Hydrocarbon Engineering

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.

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.

  - LTHE has initiated the PIO (Protect-Innovate-Opportunise) programmes – there are three pillars to sustain long-term growth initiatives and identified as ‘SHIELD’, ‘DREAMS’ and ‘DHOV’.

  - Programme ‘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 developing localisation plans in the countries which are core to LTHE’s growth agenda by offering smart solutions.

  - Programme ‘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 (EPILCON) 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 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.

  - Programme ‘DHOV’ 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.

- The 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 programmes 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 calendarised 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 the CEO and across leadership strata to ensure engagement. LTHE ensured medical assistance 24x7 basis by arranging for 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.
L&T Valves

Leveraging 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.

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.

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

Cryogenic Valves
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.
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 declared 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 declared 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 won the ‘ACI Excellence in Concrete Construction Awards 2020’.

VII. Prestige Song of the South Project, Bengaluru won the ‘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 Chandigarh, 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

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.


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.

L&T Hydrocarbon Engineering Limited

I. Ranked second among the top 30 EPC Contractors by the Oil & Gas Middle East magazine.

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 NTCP by Tandasite.

II. Client Project Safety Award received from NPCIL by RAPP, Kotasite for FY20.

III. Won 8th FICCI Quality System Excellence Award for Quality System Excellence in Construction.

IV. 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 of Non-Destructive Testing (ISNT) at National NDE conference.

II. Won three Awards in Gujarat Rajya Shram Puraskar.

III. Two Anubhuti teams from Hazira won Awards at Surat Chapter’s Virtual e-Convention on Quality Circles and Other Allied Quality Concepts.

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).


III. L&T Defence received ‘Special Award’ from The Southern Gujarat Chamber of Commerce & Industry (SGCCI), Golden Jubilee Memorial Trust.


Realty


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).

Heavy Civil Infrastructure

I. IC! ‘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.

<table>
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<th>Goals</th>
<th>Initiatives</th>
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| **End poverty in all its forms** | - 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 |
| **End hunger, achieve food security, improve nutrition and sustainable agriculture** | - Training communities in better nutrition practices  
- Encouraging 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 |
| **Ensure healthy lives and promote wellbeing of people of all ages** | - 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 programmes  
- Health infrastructure strengthening during COVID-19  
- Welfare teams at the workplace | PAGE 123-143 |
| **Ensure inclusive and quality education, and promote lifelong learning opportunities for all** | - 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 | PAGE 123-143 |
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| Achieve gender equality and empower all women and girls | - Making water available at the 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 | PAGE 123-143 |
| Ensure availability and sustainable water management and sanitation for all | - 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, judicial 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 | PAGE 123-143 |
| Ensure access to affordable, reliable, sustainable energy for all | - 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 | PAGE 51, 58-60, 64, 71 |
| Promote inclusive and sustainable economic growth, full and productive employment and decent work for all | - 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 | PAGE 111, 125 |
| Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation | - Embody 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 | PAGE 115-116, 124-127 |
| Reduce inequality within and among countries | - 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 programmes | PAGE 30, 71, 79, 109 |
| Make cities and human settlements inclusive, safe, resilient and sustainable | - 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 programme for water-stressed rural settlements | PAGE 30, 71, 79, 109 |
| Ensure sustainable consumption and production patterns | - 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  
- Encouraging plantation of water-intensive crops encouraging use of indigenous pesticides, seed treatment, balanced dose of fertilisers  
- Multi cropping among farmers on the increase | PAGE 58-60 |
Sustainability Development Goals (SDGs)

**Goals**
- **SDG 13: Climate action**
  - 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

- **SDG 14: Oceans**
  - Evaluate business process risk to ensure that negative impacts are avoided/minimised/controlled

- **SDG 15: Life on land**
  - 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 forests 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
  - Afforestation by creating fast growing sustainable forest

- **SDG 12: Responsible consumption and production**
  - 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
  - Associate with industry forums like
    - Confederation of Indian Industry – Centre of Excellence for Sustainable Development (CII-CESD)
    - CII – Green Business Centre (GBC) and Government bodies for promoting sustainable development

- **SDG 17: Partnerships**
  - 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

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This report has been prepared in accordance with the GRI Standards ‘Comprehensive’ option.

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## Assurance Statement

### INDEPENDENT ASSURANCE STATEMENT

**Introduction and scope of work**

BURRELA 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. The Assurance Statement assesses the related information for the year within the scope of each GRI indicator.

This information and its presentation is in the Integrated Report 2020-21 as the sole responsibility of management of L&T. Larsen & Toubro Ventures was not involved in the drafting of the Report. Our sole responsibility was to improve transparency of the information provided.

### 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 1001 Assurance Standard of the Type 2 Model’s 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.

### Methodology

As part of the independent assurance, Burrela Ventures undertook the following activities:

1. Reviewed actual data in selected locations of L&T and interviewed through MS teams relevant personnel of L&T.
   - Heavy Engineering, Panipat
   - Defence, Gurgaon, Talaram and Coimbatore
   - L&T Hydrotreater MRF, Panipat
   - L&T Mettur Dam, Coimbatore, Chennai
   - L&T Metro, Chennai
   - L&T Mettur Dam, Panipat
   - Power Transmission & Distribution, Chennai
   - Smart World, Chennai
   - Water & Effluent Treatment, Chennai
   - Metallurgical S-Material Handling, Panipat
   - L&T Realty, Mumbai
   - L&T Rail
d
   - LCA, Tumakuru
   - L & T, Kolkata

The assurance process involved carrying out an examination by assessors from Burrela Ventures with experience in Environmental, Health, Safety, Social Accountability, and Sustainability. We interviewed managers and non-managers involved in various locations. The Environment & CSR team of L&T at Panipat was also interviewed.

The engagement was carried out by Burrela Ventures Pte. Ltd.

- Assurance Services: ERM, A&I, Consulting Services
- Assurance Services: ERM, A&I, Consulting Services
- Assurance Services: ERM, A&I, Consulting Services
- Assurance Services: ERM, A&I, Consulting Services
- Assurance Services: ERM, A&I, Consulting Services

BURRELA VERITAS PTE. LTD.
Certification Bodies: TÜV Rheinland & PwC

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2. L&T has submitted performance data on various GRI indicators for year 2020-21. The data pertaining to various GRI indicators is reflective of performance data submitted by Bureau Veritas through the process above described. The validity of the reported data was confirmed by Bureau Veritas assessment through a comparison with data management platforms maintained by L&T such as EHS, HR and Business Affairs (MIS) portals. If no data is available, then relevant documentary records were reviewed to confirm data quality in reporting.

3. Each L&T related data was reviewed on a random sampling basis. After sample verifications, it was confirmed that the same verified data for all locations went into preparation of the final report within the integrated report.

4. Bureau Veritas reviewed relevant stakeholder engagement activities that had been undertaken by L&T under the Integrated Report. L&T's assurance report also has been developed in order to ensure that environmental and social performance criteria are met. The assurance report was reviewed for the accuracy of the information presented.

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 assurance industry.

Reporting boundary

The reporting boundary of L&T's integrated report 2020-21 covers only the business activities of Larsen & Toubro Ltd. (L&T), and its four 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 (IRC) IR Framework.

2. The reporting criteria for the Integrated Report 2020-21 is also the Global Reporting Initiative (GRI) Standards.

- GRI 101: Foundation Standard
- GRI 102: General Disclosures Standard
- GRI 103: Management Approach Standard
- GRI 300: Economic Disclosures Standards Series
- GRI 400: Social Disclosures Standards Series

Evaluating against the defined reporting criteria

Bureau Veritas undertook an evaluation of the L&T integrated report 2020-21 against the International Integrated Reporting Council (IRC) IR Framework and the current version of the GRI Standards. This includes:

1. The report was evaluated against the 7 guiding principles of the IR Framework:
   a. Strategy Focus and Materiality
   b. Comprehensiveness and Consistency
   d. Performance and Governance
   e. Reliability and Completeness
   f. Consistency and Comparability

2. The report content was evaluated against the 5 content elements defined in the IR Framework:
   a. Organisational overview and external environment
   b. Governance
   c. Performance
   d. Business model
   e. Outlook and risks

3. The report was also evaluated for conformance to the current versions of the GRI Standards by cross-checking the IRG table in the report against the referenced documents to ensure proper engagement with relevant standards.

Comprehensive reporting of the GRI Sustainability Reporting Standards including materiality assessment of the reporting principles and necessary indicators. The report is also aligned with principles of AA1000 Assurance Standard version 3.

Our findings

We summarise our key findings in the bulleted text below, and recommend the integration of this assessment in the Integrated Report:

Financial Capital

The company's financial performance resulted in a consolidated net profit of Rs 48,886.42 million for the year 2020-21. The company has achieved a return on equity of 22.5% in the year 2020-21, which is above the industry average of 17.5%.

Human Capital

The company has engaged with its employees to develop their skills and enhance their performance. The company has also established a robust health and safety committee to address any concerns related to safety and health. The company has implemented a comprehensive health and safety program to ensure the well-being of its employees.

Manufacturing Capital

The manufacturing activities of the company have resulted in the creation of infrastructure such as roads, railways, electricity transmission lines, and water pipelines. The products manufactured by the company have been a significant contributor to the nation's economic growth.

Intelectual Capital

L&T has invested in R&D activities, and has recently successfully completed a number of significant projects. The company's research and development efforts have led to the development of innovative products and services, which have contributed significantly to the company's success.

The equipment and processes used in the manufacturing of infrastructure projects have been regularly assessed and improved to ensure safety and efficiency. The company has also developed a comprehensive quality management system to ensure the consistent delivery of high-quality products and services.
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 people worldwide. L&T CSR projects were completed in reporting year 2020-21. Various CSR projects maintained NABARD, eco-friendly and social performance. Engagement with stakeholders, volunteers, employees, clients, suppliers & contractors, NGOs, government bodies, and communities was evident. A CDP report shows that L&T has achieved gender-balanced participation, quarterly reviews of integrated community development projects, continuous engagement with volunteers and stakeholders.

Natural Capital

Various initiatives were taken to conserve natural resources and reduce their impacts on the environment, such as renewable energy projects, energy efficiency, recycling of waste, water conservation, and reduction of greenhouse gases. The company has been awarded various environmental and safety certifications. L&T has focused on these initiatives. Energy conservation from non-renewable sources, energy used from Renewable energy, Green Environment, Water conservation, etc.

Our opinion

On the basis of our methodology and the activities described above, it is our opinion that:

- Nothing has come to our attention that indicates that the information contained in this Report is accurate, reliable, or free from material omissions or misstatements.
- There is evidence to indicate that the activities described above reflect the commitment of L&T’s activities over the reporting period.
- The information within this 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 (FY 2019-20).
- L&T has implemented appropriate systems for the extraction, aggregation, and analysis of data from the Report.
- L&T follows processes in place for consulting and engaging with its key shareholders.
- The report provides a basis to understand the performance by L&T in terms of the various indicators used by its business model and the resulting values and their effects on the capital.

Limitations and Exclusions

Exclusions from the scope of our work includes any assurance or information relating to:

- Activities outside the defined assurance period stated herein above.
- Financial statements: expressions of opinion (level 3), audit of future performance (level 3), and audit of future performance (level 4).
- Competence claims in L&T’s report being filed in India, “Test for India”, “Test of India”, “Test of its technology”, “Test of its commitment”, etc.
- Claims of compliance, “water-positive”, or “zero waste”-
- Discharge in the report.
- The number of people carried by the report and those from L&T’s community development efforts.
- Our assurance does not relate to the activities and operations of L&T outside the scope and geographical boundaries mentioned in the report and as 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 as measured in the financial statements of L&T’s financial year 2020-21.

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 operates in the fields of Quality, Health, Safety, and Social and Environmental management with over 150 years of experience 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.

Remember that to maintain its independence, Bureau Veritas has conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social and Health & Safety information systems and processes on an excellent understanding of Bureau Veritas assurance methodology for the assurance of Integrated Reports.

Mehesh Ghata
Lead Assurance
Bureau Veritas (India) Pvt. Ltd.

Sanjay Patanker
Technical Reviewer
Sustainability Director - India
Bureau Veritas (India) Pvt. Ltd.

Date: 03/02/2021
Place: Mumbai
United Nations Global Compact

Communication on progress

<table>
<thead>
<tr>
<th>Principle</th>
<th>Category</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>Human Rights</td>
<td>Businesses should support and respect the protection of internationally proclaimed human rights.</td>
<td>38, 39, 69, 115, 143, 162</td>
</tr>
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<td>2</td>
<td>Human Rights</td>
<td>Businesses should make sure that they are not complicit in human rights abuses.</td>
<td>38, 39, 69, 115, 143, 162</td>
</tr>
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<td>Labour</td>
<td>Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.</td>
<td>142, 162</td>
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<td>4</td>
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<td>Businesses should uphold the elimination of all forms of forced and compulsory labour.</td>
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<td>5</td>
<td>Labour</td>
<td>Businesses should uphold the effective abolition of child labour.</td>
<td>38-39, 142, 160, 162</td>
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<td>6</td>
<td>Labour</td>
<td>Businesses should uphold the elimination of discrimination in respect of employment and occupation.</td>
<td>38-39, 115, 142, 160, 162</td>
</tr>
<tr>
<td>7</td>
<td>Environment</td>
<td>Businesses should support a precautionary approach to environmental challenges</td>
<td>56-69</td>
</tr>
<tr>
<td>8</td>
<td>Environment</td>
<td>Businesses should undertake initiatives to promote greater environmental responsibility</td>
<td>56-69</td>
</tr>
<tr>
<td>9</td>
<td>Environment</td>
<td>Businesses should encourage the development and diffusion of environmentally friendly technologies.</td>
<td>56-69</td>
</tr>
<tr>
<td>10</td>
<td>Anti-Corruption</td>
<td>Businesses should work against corruption in all its forms, including extortion and bribery</td>
<td>160</td>
</tr>
</tbody>
</table>

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

**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 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 activities from the design, execution, and testing points of view. In general, we depend on an external agency to carry out C-Value testing of water pipelines.

**The Objective**
Designing of C-Value and Hydrosetting pipeline for energy and cost savings.

**Initiatives Undertaken**
We took initiatives to formulate procedures and formats to get approvals from Customer and project consultant, shared knowledge, demonstrated testing at site and measured Training effectiveness.

**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

**Manufactured Capital**

**Developed an App Incident Management System (INMS)**

It is very tough to monitor field engineers and devices. Take those difficulties into account the, Project Director discussed with the Digital Team and decided to make a Digital platform. The project team and Digital team together formulated an APP, 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 the 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 engineers for O&M activities.

**Benefits Derived**
- 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 the field engineer raised any ticket about device failure, it will automatically be routed to the 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

**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 was 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.

**Achievements**
- Total 4.5 MT steel saved
- More than 180 man-hours 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**
**Case Studies**

### Bihar Campus Wi-Fi Project

Campus Wi-Fi Project, is one of the dream projects of Hon’ble CM of Bihar under Viksit Bihar Ke Saat Nischay. The project, had been awarded to L&T’s Smart World and Communication Business by BSEDC on 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 their constituent colleges of the state of Bihar to give impulse to the digital India project and to facilitate the “Digital India Initiative” among students.
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 the Internet.

**Initiatives Undertaken**
We ensured the following operational excellence and best practices in the 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

---

### Natural Capital

**Manufactured Capital**

**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 a 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.

**Initiatives Undertaken**
During FY21, our team refurbished around total 200 boxes of various dimensions, totalling 300 CBM (cubic meter) of boxes.

**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

### Natural Capital

**(Defence engineering)**

**Saving electricity cost and enabling renewable energy through solar power**

Installing solar power plant offers several benefits, such as saving electricity consumption bill, reduction of 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.

**Initiatives Undertaken**
- To reduce the electricity energy consumption bill, a 113.9 kW Solar Power Plant was installed
- The 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 exported to the grid, which resulted in financial savings

**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
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, at 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)

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 our 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
- EHS
- Quality

Benefits Derived From
- The efforts are very useful in monitoring and maintaining law & order in the city using CCTV footage for effective investigation
- Online access to various citizen services
- Effective monitoring of emergency situations through special smart surveillance solutions like drones
- Integrated GIS for monitoring the availability of Hospital beds, RTPCR testing centres, Primary Health Centres, etc. during COVID

Key Benefits
- More than 1,300 offences were resolved using CCTV surveillance feeds
- ₹ 11 Cr e-challans generated from traffic violations till date
- 46% energy saved due to smart lighting system
- 28,000 citizens per month benefitted from free Wi-Fi facility

Saving of potable water
In the laboratory, during COD test, distillation process, etc, water runs to cool down the distillation column, which is wasted. To save water, a bucket is filled, and a small cooler pump is installed which will be the inlet of distillation column. The hot water is sprayed in the last bucket, through which a water is conveyed to the first bucket, with a series of more buckets in between. During the process, water is cooled down to room temperature.

Initiatives Undertaken
In the laboratory, during COD test, distillation process, etc, water runs to cool down the distillation column, which is wasted. To save water, a bucket is filled, and a small cooler pump is installed which will be the inlet of distillation column. The hot water is sprayed in the last bucket, through which a water is conveyed to the first bucket, with a series of more buckets 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
Case Studies

Intellectual Capital

Solid waste management through IoT solutions

The IoT-based solid waste management system offers 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 ensures proper management of bins through volume sensor installed & real time bin-fill status at the control room.

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 vehicle and real-time management of 10 garbage collection points is enabled with two smart bin sensors per location. Through this solution, garbage-fill status is monitored from a central location and drivers are directed accordingly through SMS, email & alert in mobile application.

Smart Bin Analysis Report

<table>
<thead>
<tr>
<th>In Hours</th>
<th>Average Bin Filled Time at 10 Locations</th>
<th>Average Bin Collect Time at 10 Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

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 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 help city administrators to seamlessly manage the mega religious convergence, the largest gathering of its kind across the world held during Kumbh Mela 2019 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 congestion 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
Travel time saving through Adaptive Traffic Control System

Deployment of Adaptive Traffic Control System (ATCS) help the citizens 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 within the constraints of maximum and minimum time.

The Objective

The Objective

Travel time saving through Adaptive Traffic Control System

Initiatives Undertaken

24x7 real-time monitoring of city junctions and sensitive locations.

- IPC section 144 - violation monitoring
- Over crowd monitoring
- Surveillance of supplies of nonpermitted items to individuals (like alcohol)
- Sanitisation area monitoring across cities
- Raipur CCC turned out to be COVID-19 Control Centre and attended 16,984 calls from 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 Public Address systems to provide awareness regarding preventive measures to be followed during COVID-19

Benefits Derived

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Max. Time (Sec.)</th>
<th>Utilisation (Sec.)</th>
<th>Time Saved (Sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Cycle</td>
<td>136</td>
<td>80</td>
<td>56</td>
</tr>
<tr>
<td>2nd Cycle</td>
<td>136</td>
<td>89</td>
<td>47</td>
</tr>
<tr>
<td>3rd Cycle</td>
<td>136</td>
<td>104</td>
<td>32</td>
</tr>
<tr>
<td>4th Cycle</td>
<td>136</td>
<td>104</td>
<td>32</td>
</tr>
<tr>
<td>5th Cycle</td>
<td>136</td>
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<td>37</td>
</tr>
<tr>
<td>6th Cycle</td>
<td>136</td>
<td>114</td>
<td>23</td>
</tr>
<tr>
<td>7th Cycle</td>
<td>136</td>
<td>122</td>
<td>14</td>
</tr>
<tr>
<td>8th Cycle</td>
<td>136</td>
<td>129</td>
<td>7</td>
</tr>
<tr>
<td>9th Cycle</td>
<td>136</td>
<td>89</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>1,360</td>
<td>1,036</td>
<td>324</td>
</tr>
</tbody>
</table>

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/ no entry violation
- 15,303 COVID-related calls addressed

Crime investigation using the smart surveillance system

By using the smart surveillance system police Raipur policemen are solving many cases giving the people a safe and crime free environment.

The Objective

To deploy smart surveillance system for policemen Raipur.

Initiatives Undertaken

Deployed smart surveillance system for policemen 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.

Achievements

- In a kidnapping case, the culprits demanded a ransom of ₹25 Crore and the police were able to arrest the kidnapper without giving any ransom. The case was within 14 days.

Securing IT Infrastructure

TNSDC is one of the backbones of entire IT Infrastructure of the Government of Tamil Nadu, ensuring cyber security through integration of back-bone network.

Objective

To ensure maximum cyber security for IT infrastructure of Tamil Nadu Government.

Initiatives Undertaken

- Citizen service is fully available 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 at TNSDC Perungudi
Case Studies

Intellectual Capital

Forecasting seasonal diseases - Vizag Smart City

A seasonal disease forecasting algorithm can help the government take proactive action in health risk mitigation. Number of cases from Jun 2020 to Dec 2021 (month and ward wise) was forecasted by the algorithm.

**Objective**
Forecast outbreak of seasonal diseases Visakhapatnam for proactive implementation of preventive measures.

**Initiatives Undertaken**
- We collected historical data with respect to three seasonal diseases viz. Dengue, Malaria and Chikungunya from public health department GVMC.
- The data ranges from Jan 2016 to May 2020 for a total of 77 wards (Ward1-Ward 72, Anakapalli, Bheemili, Rail, Naval, NT).
- An algorithm was built based on the historical data from Jan 2016 to May 2020.
- A web application with data was developed and designed for viewing and accessing the data.

<table>
<thead>
<tr>
<th>Benefits Derived</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Predicted number of cases ward wise for the year of 2020 and 2021 for proactive implementation of preventive measures.</td>
<td><strong>180</strong> Incidents solved using CCTV surveillance</td>
</tr>
<tr>
<td>- High-risk areas plotted on Geo view for prioritisation and management. This has enabled the city administration in effective handling of the seasonal diseases.</td>
<td><strong>₹ 47,900</strong> Logins per month on e-governance application</td>
</tr>
<tr>
<td>- Average air quality index observed – 102</td>
<td></td>
</tr>
<tr>
<td>- Total data consumed – 270.55 TB</td>
<td></td>
</tr>
<tr>
<td>- On an average 300+ calls received through ECB</td>
<td></td>
</tr>
<tr>
<td>- Smart waste management –on an average 50+ “bin-full” alerts addressed</td>
<td></td>
</tr>
</tbody>
</table>

**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.

**Human Capital**

Sensitising employees on safety

**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.
- **Realistic Learning**: Conducted theme-based skits demonstrating hazards and associated risks and safety measures to be followed through plays involving staff and 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 LT. WINSPiRE is one such initiative that was recently launched. It is a collection of various interventions to celebrate the contribution of LT’s women employees.

Women employees at various career stages shared their challenges and experiences through a series of interviews and panel discussions. Corporate HR collaborated with the Corporate Brand Management & Communications team to produce a short film 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 LT’s Women employees. Both of these were unveiled on March 8th (International Women’s Day) by our CEO & MD Mr. S. N. Subrahmanyan.

The WINSPiRE initiative will be grow 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 towards creating an alternate but sustainable source of income for deserving families, launched with the support of LTPCT and Vrutti as implementing agency.

Objective
To provide 2,000 families in Talasari and Jawhar block of Palghar district in Maharashtra with an additional source of income.

Initiatives
The families covered under this initiative were supplied with 3-7 saplings of mango and 4 varieties of cashew. Around 8,769 pits were dug and the plants planted.

Impact
Our focused guidance helped the farmers during this six-month period as they are now aware about plantation of orchards, nurturing horticulture plants, preparing bio input, indigenous type of fencing and management practices to keep the plants healthy. We also gave them periodic direct and indirect information on how to plant saplings, and dig the pits, what material should be placed to fill pits, how frequently plants needs to be watered, which input fertiliser to give and how to protect the plants with fencing.

Achievements
2,000 Families benefitted with additional income

Creating livelihood opportunities during the pandemic

In the difficult pandemic circumstances, LTPCT provided livelihood for more than 55 Self – Help Group members of Talasari through mask making activity.

Objective
To motivate SHG and Producer Group (PG) 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 opportunities 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 skills of all members.

Achievements
₹ 12 Lakh Worth of orders received for 1.5 Lakh masks

Migrant labourers return home to farming livelihood

Providing livelihood to migrant labourers returning.

Objective
To provide solar-based lift irrigation systems to help farmers who never grew vegetables during summertime.

Impact
• For the first time, 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 a water distribution system

Constructing a water distribution to a water starved area.

Objective
To provide respite to 50 families by constructing a water distribution system.

Impact
• All households have water available close to their homes
• Five stand posts provided water twice a day
• A committee has been formed to manage, maintain and repair the system. An amount of ₹ 50 per month has 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 to increase the beneficiaries’ household income by selling male birds, increasing the share of protein consumption, 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 among 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. 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 farmers 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 price margin for farmers. In this regard, the CMS team has worked on backward and forward linkages.

**Impact**
- The team helped in procure 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 & 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 initiatives 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. 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

INTEGRATED REPORT 2020-21 LARSEN & TOUBRO LIMITED

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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

---

**Case Study**

**Solar Power Plant**

At our campus in Bengaluru, we have installed an off-grid 100 kWp Rooftop Solar Power plant. We conducted a feasibility study along with a Load Bearing test to determine the capacity of the solar power plant required according to the 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.

---

**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.

---

**Energy Conservation Initiatives**

The Energy Conservation Initiative reduces campus-wide energy consumption and helps our India operations 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 optimisation
- Reducing main Chiller operations by using alternative low energy sources during non-peak hours
- Replacement of old equipment with newer energy-efficient chillers with newer technologies
- Uninterrupted Power System (UPS) Optimisation
- Reducing losses within a UPS system by managing connected load and reducing the number 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

---

**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

**ESG Highlights**

- Electricity consumption reduced by 63.2%
- Renewable Energy share increased to 26.4%
- Emissions due to travel reduced by 92.8%
- Mitigated 4,116 tonnes CO₂ through energy conservation and green power procurement
- 2,000 acres of land irrigated through water conservation programmes
- 70% of office area covered under green building norms.
- 9.65 ML water recycled
- 180 farm ponds constructed
- Planted 152,025 trees
- Reached 126,649 beneficiaries, including women, children and youth from low income communities and special abilities
- 14,000+ children received happiness kits comprising nutritional food, immunity-boosting items, and hygiene-related goods and stationery
- Zero work-related accidents

---

**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 programmes and 344+ Competency-based programmes
- 51% beneficiaries of our CSR programmes 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**

<table>
<thead>
<tr>
<th>Type of Grievance</th>
<th>Recd in FY21</th>
<th>Resolved in FY21</th>
<th>Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whistle Blower</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

---
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.

Our ER&D services offered

- Products:
  - Mechanical Design
  - Security
  - Cloud & Analytics
  - DevOps
  - Immersive Experiences
  - Embedded Systems
  - 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
  - Embedded Systems
  - VLSI

- 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
- 365 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
- Hi-tech: 8 of top 10
- Medical and life sciences: 3 of top 5
- Transportation: 8 of top 10
- Industrial products: 7 of top 10
- Media & entertainment: 4 of top 5

*Data as of March 31, 2021

ESG Highlights

Environment

- We installed solar panels for public street lighting and helped optimise 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

<table>
<thead>
<tr>
<th>Comparison</th>
<th>FY21</th>
<th>FY20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Consumed per Annum (in KWH)</td>
<td>1,340,508</td>
<td>2,643,108</td>
</tr>
<tr>
<td>Saving in terms of power consumption (KWH)</td>
<td>1,754,692</td>
<td>68,223</td>
</tr>
<tr>
<td>AVG per unit rate per Annum in INR</td>
<td>9.49</td>
<td>7.90</td>
</tr>
<tr>
<td>Savings in terms of INR (₹ Lakhs)</td>
<td>123.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Performance Highlights

Revenue (in Million)

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56,191</td>
<td>54,497</td>
</tr>
<tr>
<td>Cost of Sales (in Million)</td>
<td>37,008</td>
<td>38,115</td>
</tr>
<tr>
<td>EBITDA (in Million)</td>
<td>10,074</td>
<td>8,186</td>
</tr>
<tr>
<td>EBIT (in Million)</td>
<td>9,276</td>
<td>8,186</td>
</tr>
<tr>
<td>Net Income (in Million)</td>
<td>6,633</td>
<td>11,104</td>
</tr>
</tbody>
</table>

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
- Awarded the Brandon Hall HCM Award 2020 for Excellence in Best Advance in Employee Engagement
- LTTS’ Chest rAI & i-BEMS recognised with the 2021 BIG Innovation Award
- LTTS’ Chest rAI & i-BEMS recognised 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

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, AVI-driven Smart Offerings, and Sustainability.

Mr. Amit Chadha
CEO & MD
Social
- CSR spend (FY21): ₹ 157.19 million as against a budget of ₹ 156 million.
- 22,359 elderly people 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 programmes viz., Accelerated Leadership Programme (ALP), Young Leadership Programme (YLP), CEO Club, Gladate, Illuminate, Glocal, Prisms, and Global Engineering Academy were implemented during the year.

Governance
- All major policies such as whistle-blower, POSH, anti-bribery, and anti-corruption 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.

### CSR performance at a glance

<table>
<thead>
<tr>
<th>Environment</th>
<th>During FY 21</th>
<th>Resolved during FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>488 people benefited from our solar project</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>51 cyclone-resistant houses handed over to beneficiaries</td>
<td>35,000 sq. ft of space maintained</td>
<td>28,886 kgs of (dry + wet) waste collected</td>
</tr>
<tr>
<td>4,635 agro forestry saplings planted</td>
<td>4,634 cubic metre of clearance channel constructed</td>
<td></td>
</tr>
<tr>
<td>22,359 healthcare treatments provided</td>
<td>446 locations where primary care was given</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water</th>
<th>1,068 people benefited from various socio-economic programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,635 agro forestry saplings planted</td>
<td>4,634 cubic metre of clearance channel constructed</td>
</tr>
<tr>
<td>Health</td>
<td>22,359 healthcare treatments provided</td>
</tr>
<tr>
<td>446 locations where primary care was given</td>
<td></td>
</tr>
</tbody>
</table>

### 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 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 3 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 ₹ 5.25 billion worth of infrastructural damage.*

The cyclone ravaged several thousand 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 built and handed over 51 cyclone- resistant houses. Although the COVID-19 pandemic 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 labour was compensated with locals who were not able to go out for regular employment. This helped the locals to earn livelihood and ensured that the project activities carried on without any major delays.

Moreover, considering Odisha lies in a cyclone prone area, we have also undertaken disaster management and survival training 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-risk-

tive-infrastructural-damage-says-odisha-government/story-

BVt5V5VtibEvQvvhvqHRU0I.html#:~:text=The%20Housing%20%26%20

Urban%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.

Last year, the pandemic prevented us from engaging in any labour-intensive activities. However, the project continued with strict adherence to government norms. This included conducting non-
labour-intensive activities such as basic maintenance and plant watering throughout the year.

<table>
<thead>
<tr>
<th>Education</th>
<th>8,550 students benefited from our education programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill Development</td>
<td>247 youth benefited from digital literacy courses</td>
</tr>
<tr>
<td>Infrastructure support provided to women research scholars</td>
<td>60 youth benefited from Office Assistantship training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water</th>
<th>4,635 flowering plants, shrubs and creepers maintained</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 signage poles, 50 solar mashals and 76 spike lights maintained</td>
<td></td>
</tr>
<tr>
<td>180 warli paintings and 535 social messages maintained</td>
<td></td>
</tr>
<tr>
<td>Involved a mixed use of tanker water and drip irrigation</td>
<td></td>
</tr>
</tbody>
</table>
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 has been a part of L&T Group since mid-2019. Mindtree delivers digital transformation and technology services from ideation to execution, enabling Global 2000 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’s deep expertise in infrastructure and applications management turns IT into a strategic asset.

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 realise 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 minimise our environmental impact and promote the well-being and prosperity of Mindtree Minds and our communities. Aligned with our sustainability vision, Mindtree has embarked on its own sustainability journey, adopting global best practices and, in turn, augmenting long-term value creation for all its stakeholders. The 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

Some of the highlights include

Environment
198,965 kWh of energy saved through battery optimisation, VFD installation, UPS optimisation, Split AC installation, LED lights etc.
74.8% Renewable Energy component in our total mix
2,745 KL of water saved pan India

Social
Supporting education and growing digital talent
Community empowerment (Disability, Livelihood)
Work ethos and culture

Governance
Diverse and inclusive (employees and Board)
Strong corporate ethics and risk management policies
Data privacy and security

Go green
Digitisation of processes
Procure, 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 though this initiative.

Some of the highlights include

The artificial lake that we constructed at our Kalinga campus fed our construction requirement on the site with 6,695 kl water from the pond.

In 2020-21 by reducing incineration and landfills.
**Social**

- ₹ 80 million spent on CSR initiatives
  - 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 Programme with 320 participants and average learner rating of 4.32

**CSR – Volunteering – Mindtree Minds**

- Volunteer under the guidance of the Mindtree Foundation Team in creating study play and learn material for Nall 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

**Social**

- 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 Programme with 320 participants and average learner rating of 4.32

**CSR – Education – Mindtree Foundation’s Gubbachi Project – who works with migrant children, where they do bridge courses as they are from different states and enroll them to Govt., schools and continue to work with them through Nall 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:

<table>
<thead>
<tr>
<th>Opening no. of Cases as of April 1, 2020</th>
<th>No. of New Cases Registered during the Year</th>
<th>No. of Cases Resolved during the Year</th>
<th>Outstanding Cases as of March 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whistleblower</td>
<td>4</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>POSH</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**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**
  - 33 21-30 years
  - 67 >30 years
- **Board age profile**
  - 33 36-55 years
  - 50 56-70 years
  - 17 >70 years
- **Board diversity**
  - 83 Male
  - 17 Female

**Services offered by the Company**

**Types of Business**

**Lending Business:**

- Rural Finance
- Farm Equipment Finance
- Micro Loans
- Consumer Loans
- 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 an ESG Risk Rating of 28.2 and was assessed by Sustainalytics to be at MEDIUM risk of experiencing material financial impacts from ESG factors.

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**
- May
  - Gap Assessment
  - Sustainability readiness
- Sep
  - Sustainability task force
- Oct
  - *1st Materiality Assessment*

**2019**
- May
  - *1st Sustainability Report*
- Jul
  - S&P Global Corporate Sustainability assessment invitation

**2020**
- Apr
  - ESG Targets adopted
- Jun
  - Certified FTSE4Good indices
  - 2nd Sustainability Report (IIRC framework)
  - External assurance by E&Y
  - Inclusion in CDP ratings
- Dec
  - CSR spend of 13.79 lakhs community members reached through
  - 4,500 women entrepreneurs
  - 3,900 Computer literacy: cadre of over 860 ‘Digital Sakhis’ and up-skilled
  - 7.35% issue through rights

**2021**
- Apr
  - Setting up of Board level ESG Committee
  - Certified for FTSE4Good indices for second consecutive year
  - 3rd Sustainability Report (IIRC framework)
  - External assurance by E&Y

---

**Financial Performance Highlights**

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lending Portfolio</td>
<td>₹ 94,013 Cr.</td>
<td>₹ 15,629 Cr.</td>
</tr>
<tr>
<td>PAT Before Exceptional Items</td>
<td>₹ 1,155 Cr.</td>
<td>'AAA'</td>
</tr>
<tr>
<td>Roe Before Exceptional Items</td>
<td>7.35%</td>
<td>7.35%</td>
</tr>
<tr>
<td>RAEE Before Exceptional Items</td>
<td>₹ 2,999 Cr.</td>
<td>₹ 2,999 Cr.</td>
</tr>
<tr>
<td>Raised long-term borrowing</td>
<td>₹ 15,629 Cr.</td>
<td>‘AAA’</td>
</tr>
</tbody>
</table>

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**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 CO₂ 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
- 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 lines 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 (GCBDI).
- 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

**Social:** Facilitating Financial Inclusion and Individual Prosperity especially in unserved and under-served segments
- Serve over 59 lakhs 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 lakhs community members reached through CSR efforts
- CSR spend of ₹ 23.15 crore
- Committed to employee care: Initiatives for people who lost lives due to COVID-19

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**Digital Sakhi Seva Kendra**

**One More Milestone in Tanuja’s Life**

Mrs. Tanuja Javale 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 here 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 programme. 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 Sakhi 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.

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**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 three 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.

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**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 move up and down every year, the premium also gets adjusted accordingly.

This product was developed in consultation with a customer (Global Infrastructure Partner), 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 differentiators for LTFH’s Two-Wheeler Finance business.
Notes

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: 1 July, 2021

S N Subrahmanyan
Chief Executive Officer
Managing Director