INTEGRATED REPORT



SUSTAINABILITY VISION

For a better world!

L&T shall pursue eco-friendly growth, promoting a culture of sustainability and innovation, and thereby contribute towards a better world.



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About the report

At L&T, we have been taking concerted efforts towards achieving resource efficiency and decarbonising our businesses. We have sharpened our focus on improving performance across environmental, social and governance (ESG) parameters. We are revisiting our vision, policies, frameworks, roadmaps and action plans to deliver solutions towards building a better future. This Integrated Report (IR) includes financial and nonfinancial performance of L&T Limited and is aligned to principles of International Framework developed by the International Integrated Reporting Council (IIRC). The Report expands the target audience from the primary provider of financial capital to include employees, customers, suppliers, local communities, regulators, and policy-makers.

VALUE CREATION MODEL



Water Consumption: **9.4 Mn m³** Energy Consumption from Non-Renewable sources: **9,520,137 GJ**

Energy used from Renewable Sources: 127,129 GJ Spend on Environment: ₹294.8 Mn

Material Consumed

INPUT METRICS

- Cement: 3,256,013 MT
- Sand: 3,186,601 MT
- Ferrous: 1,657,640 MT

Manufactured Capital

Project Sites: **710** Manufacturing Locations: **18**





R&D Spend (Cumulative for last 3 years): **₹4,498.4 Mn** Patents filed: **15** R&D Engineers and Scientists: **187** Active collaborations and partnerships: **28**

BUSINESS PROCESSES AND OFFERINGS



DUTPUT METRICS

Wastewater recycling efficiency: **48%** Saving in energy: **149 Mn kWh** GHG emission: **889,063 tCO₂e** GHG emission intensity: **893 tCO₂e/Bn Material reused/recycled** Steel: **2,676 MT** Zinc: **130 MT** Crushed Sand: **1,330,182 MT**

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Building Infra created: **17 mn.sq.ft** Mobility Infra created

- Roads: 474 lane km
- Railways: 306 track km
- Mass Transit: 3.86 km
- Bridges & Tunnels: 11.6 km

Power Infra created

- Transmission Lines: 1,860 circuit km
- Solar Power capacity: 161 MWp
- Water & Sanitation Infra created
- Irrigation capacity : 1.01 L ha
- Pipelines laid: 32,609 km
- Treatment capacity: 617 MLD
- Factory Output : Total production in the reporting year (B&F, PT&D, M&M, HE, Defence, LTEH): 321,967 MT
- Green Business revenue: ₹388.43 Bn



Value Engineering projects: **74** Revenue in FY 2022 from new emerging business started in last three years: **₹21,510 Mn**



Corporate Overview	Management Discussion and Analysis	Integrated Report	Statutory Reports	Financial Statements	LARSEN & TOUBRO
Hu	ıman Capital		Social	and Relationship Capital	Financial Capital
Permanent Er Engineers (BT 37,966 Workforce (C 200,062 Employees co development	nployees: 45,615 ech/MTech/Diploma): ontract Employees): wered under leadership programmes: 310	CSI CSI Act MS Me	R Spend: ₹1.36 R Partners: 45 ive suppliers a ME Suppliers: mberships of I	5 Bn nd contractors: 97,123 2,615 ndustry Chambers: 15	Order Book: ₹3,155.7 Bn Net Current Assets: ₹344.5 Bn Net Fixed Assets: ₹97.0 Bn Gross Debt Equity Ratio: 0.30 : 1



Revenue/employee: **₹19 Mn/employee** Attrition Rate: **9.05%** Average training hours per employee: **8.37** Accident free man hours: **1,153 Mn**

CSR Beneficiaries: **1.13 Mn** Contribution to Exchequer: **₹54.4 Bn** Awards: **56** Appreciation certificates: **27** Joint Projects: **35** Complaints received: **76** Complaints resolved: **50**

Turnover: **₹1,010 Bn** PBIT: **₹115 Bn** Dividend: **₹30.91 Bn** Return on Net Worth: **12.23%**







VALUE CREATION PROCESS

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







Capitals:

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

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Strategic objectives:

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

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7 Governance:

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

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Key performance indicators:

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

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STAKEHOLDER ENGAGEMENT

Fostering and nurturing relationships with all our partners and stakeholders is essential for the success of the Company and long term value creation. Backed by strong engagement platforms, we are working on several initiatives with our partners across the value chain for inclusive development. We are able to manage risks and opportunities proactively and set clear goals to deliver long term shared value by engaging with our key stakeholders through regular dialogues.

SHAREHOLDERS AND INVESTORS



Material Topics:

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



Material Topics:

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

L&T's Interaction and Engagement Approach

- Quarterly calls
- Face-to-face meetings
- Annual general meetings
- Investor grievance channels along with the presentation of financial reports and presentations
- Business Responsibility and Sustainability Report (BRSR, earlier BRR)
- Integrated Reports (IRs)
- Regular announcements and filings with the stock exchanges

Value creation

- L&T Limited is India's largest E&C company with ₹1,010 Bn revenue and ₹2,483 Bn market capitalisation.
- Solid financial performance irrespective of challenges
- Consistent credit ratings CRISIL: AAA (Stable), ICRA: AAA (Stable)

L&T's Interaction and Engagement Approach

Continuous interaction through various channels such as:

- Customer meets
- Workshops and conferences
- Exhibitions and trade fairs
- Advertising campaigns, bulletins, and news
- One-on-one interactions
- Periodic reviews, annual reviews, customer satisfaction surveys and feedback forms

Value creation

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

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EMPLOYEES

Material Topics:

Employee benefits

Skill development

• Career growth

- and concerns
- Internal magazines and portals such as Newsman, SPOT News, RAPL, etc.
- Enterprise-wide employee portal called 'L&T Scape' for regular connect

Value creation

- Focus on attracting and retaining talent
- Promote employee wellness, functional and soft-skill development programmes, leadership development programmes, continuous improvement in programmes for structured learning and development of workforce

L&T's Interaction and Engagement Approach

- Periodic partner meets
- E-tendering and e-procuring and supplier meets
- Training and capacity building programmes such as Human Rights, EHS training, etc.
- Regular visits to suppliers' and contractors' facilities

Value creation

- Cost-effective price negotiations
- Screening, assessment and audits of suppliers related to quality and EHS aspects

Regular communication through: • Project updates

L&T's Interaction and Engagement Approach

- Town halls
- Departmental meetings
- Connect sessions where employees voice their ideas

SUPPLIERS/CONTRACTORS

Effective/high-guality training programmes

Material Topics:

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







GOVERNMENT



Material Topics:

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

MEDIA



Material Topic:

• Transparent Stakeholder Communication

COMMUNITIES



Material Topics:

- Expectation of livelihood creation
- Improvement in well-being and living standards
- Water and sanitation development of community infrastructure

L&T's Interaction and Engagement Approach

- Regular interaction with local governments
- Member of important industry associations
- Play an active role in policy formulation

For further details on our public policy advocacy, please refer to Principle 7 of BRSR [Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent]

Value creation

- Continual improvement in our ESG performance
- Present our performance through mandatory and nonmandatory disclosures

L&T's Interaction and Engagement Approach

- Regular press meets and periodic media visits
- Interactions for news and articles

Value creation

- Provide media updates
- Share critical information through press releases and feeds to social media (LinkedIn, Facebook and L&T website)
- Conduct media briefings and presentations

L&T's Interaction and Engagement Approach

Regular engagement through:

- CSR programmes and initiatives
- Volunteering activities
- Quarterly review of Integrated Community Development Projects
- Continuous engagement with village panchayats and local authorities

Value creation

- 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 waterstressed regions
- Integrated Community Development Programmes

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MATERIALITY ASSESMENT

ASSESSMENT PROCESS



MATERIALITY MATRIX

We identified 32 potential material issues which are directly or indirectly related to our businesses. Stakeholder feedback was obtained through surveys and finally top 15 material issues which are most important for short-, medium- and long-term value creation from both internal and external stakeholders perspective, were identified.



Material topics:

- 1. Customer Experience & Satisfaction
- 2. Corporate Governance
- 3. Business Ethics
- Employee & Workforce Engagement, Wellbeing, Heath & Safety
- 5. Human Rights & Labour Conditions
- 6. Skilled Manpower
- 7. Sustainable Supply Chain
- 8. Talent Management-Attraction, Retention & Development
- 9. Climate Action
- 10. Diversity, Inclusion & Equal Opportunity
- 11. Data Security, Privacy And Cybersecurity
- 12. Quality Of Products And Project Delivery
- 13. Brand Management
- 14. Water, Waste & Hazardous Materials Management
- 15. Social Engagement & Impact



DESCRIPTION OF MATERIAL ISSUES AND LINKAGE WITH STRATEGY AND CAPITALS

Material Topics	Description	Capitals Associated	Strategies
Customer Experience and Satisfaction	Refers to the relationship, interactions and experiences between the business and the customer throughout the entire journey. L&T's presence is primarily in EPC and projects and customers include Central & State Govt., public and private sector organisations. Partnering with customers for on-time project completion with deeper 'customer connect' at multiple levels, regular monitoring of projects, innovation and state-of-the-art engineering techniques, high safety standards, transparency in energy, water and GHG emissions performance, etc.	8 B 3	SO-I, SO-III, SO-IV, SO-V
Corporate Governance	Set of systematic rules, practices, and processes by which businesses are operated, regulated, or controlled are part of corporate governance. It involves balancing the interests of a company's stakeholders, such as shareholders, senior management executives, customers, suppliers, financiers, the Government, and the community. Corporate Governance reflects our core values around the principles and ideals based on independence, transparency, accountability, responsibility, compliance, ethics and trust.		SO-I, SO-II, SO-III, SO-IV, SO-V
Business Ethics	Implementation of policies and procedures regarding topics which include, but may not be limited to, issues such as insider trading, fraud, bribery, discrimination, professional conduct, etc.	€ € € € € € € €	SO-I, SO-II, SO-III, SO-IV, SO-V
Employee & Workforce Engagement, Wellbeing, Health & Safety	Refers to the physical, mental, and emotional health of employees and workforce, both within and outside the workplace. With 52,155 employees and 200,000 + workforce, it is important to continuously engage the workforce in an effective manner. Engagement includes regular communication, training & development, skilling, management-employee dialogues and technologies that enable the same.		SO-V
Human Rights & Labour Conditions	Human rights include child labour, forced labour, prevention of sexual harassment, etc. Also involves the right to safe and healthy working conditions, as well as rest, leisure and reasonable working hours. Labour conditions cover areas such as working conditions, wages, discrimination, etc, including entitlement to wages and benefits, working hours, overtime arrangements and overtime compensation, and leave for illness, maternity, vacation and respecting collective bargaining agreement. Our scope is not just limited to Tier 1 vendors but also our subcontractors and workers. With a contract workforce of > 200,000 contract, it is crucial to support, respect and protect human and labour rights and ensure that the Company is not complicit in any kind of violations.		SO-V





Social & Relationship Capital

Intellectual

Capital



Capital

Natural

Capital

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Material Topics	Description	Capitals Associated	Strategies
Skilled Manpower	Trained, educated and experienced segments of the workforce undertaking more complex mental and physical tasks. As we carry out large contracts related to construction and infrastructure, skilling manpower on a continuous basis is extremely important. Primary skill sets include bar-bending, formwork, electrical work, tiling, masonry, welding, carpentry and solar electrical work, etc. It is also required for hi-tech manufacturing for Defence Engineering and Heavy Engineering businesses.		SO-V
Sustainable Supply Chain	Management of environment, social and economic impacts across the supply chain. Suppliers are our partners in delivering timely performance in construction and manufacturing businesses. We encourage suppliers to partner our sustainable growth. With an active supplier base of 97,123 and 2500+ MSME suppliers, fostering responsible behaviour in the supply chain, in accordance with the highest standards of ethics and integrity, respect for the law, human and labour rights, and environmental stewardship is vital.	*	SO-I, SO-V
Talent Management- Attraction, Retention and Development	Refers to how employers can attract and retain high-quality employees, develop their skill, motivate them to deliver their best and stay with the organization in the long run. Strategic implementation of talent management practices helps businesses improve performance, stay competitive, drive innovation, form productive teams, reduce turnover and create a strong employer branding. Key aspects include productivity, engineering skills, project execution capability, technology orientation, and leadership pipeline.		SO-I, SO-III, SO-IV, SO-V
Climate Action	Key aspects include emission reduction, efficiency in energy use, renewables, judicious use of water, recycling of water/ waste and use of eco-friendly materials, and green business.	£	SO-III, SO-V
Diversity, Inclusion and Equal Opportunity	Refers to providing employment opportunities on merit without any discrimination based on gender, sexual orientation, disability, marital status, pregnancy & maternity, caste, socio-economic status, religion, faith, nationality, ethnicity, race, colour, age, religious or political views. Ensure equal opportunities with respect to recruitment, learning, development, promotion, employee benefits, separation and other aspects of employment relationship based solely upon merit, performance, potential and qualifications required for the job.		SO-V





Manufactured Capital



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Social & Relationship Capital



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Material Topics	Description	Capitals Associated	Strategies
Data Security, Privacy and Cyber Security	Refers to the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this. With the internet being pervasive, cyber security is becoming a major concern for companies. Includes mechanism for data security, privacy and cyber security. Covers people, process and technology. Key aspects include IT security policies, frameworks to manage Cyber Security risk, and controls across the organisation.	B	SO-IV
Quality of Products and Project Delivery	High quality and timely delivery of the projects are critical for success and growth. Products are in high tech manufacturing areas of Heavy Engineering (process plants, reactors, boilers, steam generators). Construction (building, infrastructure, hydrocarbon, etc.) and related projects constitute >90% of revenue for our businesses.		so-i, so-iii, so-v
Brand Management	Refers to maintaining and bettering products, services, and brand perception with the objective to receive cost leverage, increase customer loyalty, and establish meaningful brand awareness. It also includes promoting approaches to increase the perceived value of a product line or brand over time. Our brand management includes corporate brands and individual brands of various ICs.		SO-I, SO-II, SO-III, SO-IV, SO-V
Water, Waste and Hazardous Materials Management	Water is one of the most significant inputs for construction activity. Processes, technologies, and systems to reduce the amount of water used, increase water-use efficiency and manage the wastewater appropriately needs to be deployed. Water conservation through recycling, reuse and efficiency improvement are major focus areas. Hazardous-waste management is the process of collecting, treating, and disposing waste material that can cause substantial harm to human health and safety or to the environment, if handled improperly.		SO-I, SO-V
Social Engagement and Impact	Effective means to create a positive impact in the areas where the Company operates. Our business spans vast areas of the country and we directly impact and get impacted by society. Communities are among our primary stakeholders. Our focus areas include Water & Sanitation, Health, Education and Skill Development.		SO-V



Financial Capital

Manufactured Capital



Γζ

Intellectual Capital

Social & Relationship Capital





Human Capital

SUSTAINABILITY PERFORMANCE

Green Business

(₹ Bn Revenue)



Electricity saved*

(GJ)

We have cumulatively saved 149 million kWh since FY 2008



Energy Consumption Intensity

(GJ / ₹Bn Revenue)

Target: Achieve 11% reduction in intensity by FY 2026 w.r.t FY 2021**



GHG Emission Intensity

(tCO₂e / ₹Bn Revenue)

Target: Reduce GHG emission intensity by 25% by FY 2026 w.r.t FY 2021**



* Results of various initiatives undertaken at campuses and project sites

** Increase in Energy Consumption Intensity & GHG Emission intensity in FY 2022 due to:

- Ramping up of construction activity

- Revenue was not realised in FY 2022 for certain projects executed in the same FY

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Water Consumption Intensity

(kl / ₹ Bn Revenue)

Target: Reduce water consumption Intensity by 30% by FY 2026 w.r.t to FY 2021



% Wastewater Recycling Efficiency

Target: Achieve 60% Wastewater recycling efficiency by FY 2026



Recycled Material used

(MT)

18% of recycled + eco-friendly materials used in FY 2022



Safety

TARGET	STATUS
Zero Harm	Our severity rate of accidents has reduced by 2.5% in FY 2021-22 compared to FY 2020-21. The number of fatalities were 25, remains same as last year

Corporate social initiatives

TARGET

Reach 1.53 million beneficiaries in FY 2025-26

TARGET

Increase employee volunteering base to 5,000

STATUS

1.13 million beneficiaries in FY 2021-22

STATUS

4,900 employees participated in the volunteering programmes and worked for various social causes in FY 2021-22

MANAGING CAPITAL TRADE-OFFS

Managing growth while minimising the impact on the environment

L&T is a growing company and present in multiple business verticals such as EPC projects, high-tech manufacturing services and others.

The pursuit of growth requires judicious allocation of various resources; with financial resources being one of the most important ones. We have devoted significant capital resources (both short and long term) to support the growth of our businesses. Some of these investments are being made in new businesses which have a positive impact on the environment e.g., green hydrogen and battery storage. We are also investing in digital businesses that aim to address the demand-supply gap for skilled personnel (through EduTech, an industry-led, application-based online learning platform) and address the hurdles in growth faced by MSMEs (through L&T-SuFin, a B2B e-commerce platform for industrial products and services). These businesses will have a positive impact on the lives of thousands of people.

Thus, the nature of investments, for some of our growth initiatives, obviates the trade-off between sustainability and growth by addressing both the issues.

While growth creates positive impact for the business, it also puts pressure on usage of natural resources. To reduce this impact on the environment, we also invest in our operations to increase resource efficiency and minimize waste. Increasing the efficiency of plant and machinery is one of the key focus areas. This is being driven by digitally connecting more than

11,000 pieces of equipment across more than 600 project sites and through IIoT for our manufacturing facilities. We aim to enhance the usage of renewable energy (target to reach 50% of electricity consumption by 2026) and clean fuels (biogas, renewable diesel) in our energy consumption. We are devoting resources to make our campuses green by minimising waste, increasing the use of renewable energy, and recycling wastewater. We are also working towards reducing water consumption and increasing water recycling at project sites and manufacturing facilities. Despite the constraints faced in some contracts, where clients insist on the use of natural materials, we try to maximise the use of recycled and alternative materials.

Furthermore, we continue to invest in improving our capabilities, in terms of facilities, equipment, engineering & design and technology to be the leader in creating environment-friendly assets for our clients i.e., renewable energy (solar, hydel), non-fossil fuel energy (nuclear), water treatment and reuse, green buildings, and clean mobility systems. Over a period of years, the share of business from these projects/contracts has grown steadily to reach ~38% of our revenues in FY 2021-2022 while helping our clients reduce their carbon/water footprint.

L&T has demonstrated that capital trade-offs can be turned into opportunities and endeavours to maintain the balance between growth and environment for years to come.

Capitals deployed:



Financial Capital



Human Capital



Manufactured Capital



Social and Relationship Capital



Capital



Natural Capital

Capitals impacted:



Financial Capital



Human Capital



Manufactured Capital



Social and Relationship Capital



Intellectual Capital



Natural Capital





At L&T, we understand that we have only one Earth and we need to optimise resources and synchronise all activities that further the cause of sustainability and business interests. We have been consistently working towards conservation of natural resources, building efficient infrastructure, reducing emissions, and more importantly, urging stakeholders towards behavioural change through consultation and partnership. Our sustainability reporting started in 2008 and is a testimony of our commitment towards a better planet. Corporate Management

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KEY HIGHLIGHTS OF FY 2021-22

WATER NEUTRAL BY 2035

CARBON NEUTRAL BY 2040

1,499,989 SAPLINGS PLANTED

₹388.43 Bn GREEN BUSINESS REVENUE

STRATEGIES IMPACTED

SO-I	SO-III	SO-V	
SE-1	SE-2	SE-3	

SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Corporate Governance
- Business Ethics
- Sustainable Supply Chain
- Climate Action
- Brand Management
- Water, Waste and Hazardous Materials Management

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TRANSLATING SUSTAINABILITY INITIATIVES INTO LASTING OUTCOMES

Our strategy is to adopt a low-carbon pathway for all our businesses and translate our sustainability initiatives into lasting outcomes.

Since 2016, we have been setting targets as a part of our sustainability programme and working to fulfill them. Our Company has a sustainability policy, systems and processes

in place to achieve our sustainability goals. The overall performance is monitored and reviewed by the Board on a quarterly basis. Our revised broad sustainability roadmap came into effect in 2022, with the target year of FY 2025-26. Currently, granular plans are being made.

LAKSHYA 2026 TARGETS ON NATURAL CAPITAL

We have set major targets and are in process of formulating comprehensive action plans on the following aspects:

		Actual		Target
Aspects	UOM	FY 2021 (Base year)	FY 2022	FY 2026
CO ₂ e impact - Post abatement	Mn tonne	0.75	0.81	1.11
Net water consumption (excl. conservation, recharge methods)	Mn kl	9.7	9.4	13.3
Green Business	% of revenue	33.2%	38.2%	40%

While overall GHG emissions will increase due to an increase in business activity, the intensity is expected to reduce by 25% by FY 2025-26, primarily due to various energy efficiency measures and greater use of renewables.

KEY HIGHLIGHTS OF FY 2021-22

Energy Conservation 149 Mn units Energy saved Cumulative (kWh) since FY 2007-08	0.32 Mn Fuel Saved (kl)	Materials Management 45,744 Recycled steel consumed cumulative (MT) since FY 2007-08	46,539 tCO₂e Emission avoided
Renewable Energy 35.31 Mn units Renewable Energy used in our campuses and project sites (kWh) 10% of total electricity mix	Expenditure on Environmental measures ₹ 294.8 Mn (against 85 Mn in FY 2020-21) Green Business ¹	1,779 Recycled zinc consumed cumulative (MT) since FY 2007-08 Reduced use of hazardous chemicals by 32% (vs FY 2020-21) and 54% (vs FY 2010-20)	Mr. S. N. Subrahmanyan, CEO & MD, L&T has joined the CEO Forum as one of the nine founding members of Climate Finance Leadership Initiative (CFLI) India formed by Bloomberg.
Water Management 48% Wastewater recycling efficiency 3% Reduction in water consumption w.r.t FY 2020-21	38.2% of total revenue (as compared to 33.2% in FY 2020-21 ¹)	Consumption of oil and lubricants is at par with FY 2020-21 and 17% reduction (vs FY 2019-20)	

1. Previously called Green portfolio. Green Business revenue data of our Buildings & Factories and Smart World & Communication businesses has been revised for FY 2020-21

Our scope excludes transit houses, guest houses, holiday homes and company owned residential facilities for both FY 2021-22 and FY 2020-21



ENERGY

We are progressively ramping up the share of renewable energy in our total energy consumption. Across our businesses, all departments have Bureau of Energy Efficiency (BEE) certified energy managers and auditors. The primary objective of this team is to enable us to manage and optimise energy use at our manufacturing facilities. Energy audits on ISO 50001 are also conducted at regular intervals.

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In FY 2021-22, our total energy consumption was 9,647,266 GJ, comprising direct energy consumption of 8,365,802 GJ and indirect energy consumption of 1,281,464 GJ. Direct energy intensity decreased by 0.18% with respect to FY 2020-21, while indirect energy intensity increased by 12.6% with respect to FY 2020-21. The increase in overall indirect energy intensity is due to the change in scope of work of Heavy Civil Infrastructure business wherein their direct energy has decreased and indirect energy has increased.

RENEWABLE ENERGY

We have utilised 23.67 Mn units from wind powered turbines and 11.63 Mn units of solar energy which constitutes 6.7% and 3.3% respectively of our total grid electricity mix.

Renewable energy generated in	Wind power sourced in	Solar electricity sourced in
campuses: 8	campuses: 5	campuses: 5

Electricity from Renewable energy sources has increased from 97,044 GJ in FY 2020-21 to 127,129 GJ in FY 2021-22 (an increase of 31%) and currently it is 10% of electricity consumption. Total electricity consumption has increased from 984,692 GJ in FY 2020-21 to 1,281,464 GJ in FY 2021-22.



250MW Solar power plant at Rewa. Madhya Pradesh

ENERGY CONSERVATION

At L&T, our core objective is to achieve a significant increase in energy conservation measures every year. The energy conservation measures have increased by 96% compared to FY 2020-21. Since FY 2007-08, we have cumulatively saved energy equivalent to 149 Mn units, thereby avoiding 46,539 tCO₂e in FY 2021-22 through energy conservation interventions and renewable energy.

Energy conservation interventions	(GJ/year)
Process re-design	13,908
Optimisation and operational control efficiency	4,179
Conversion and retrofitting of equipment	21,888
Change to CFL and LED lamps	28,039
Change in personal behaviour and auto shutting of lights when not in use	2,543
Others	4,183
Total	74,740

Cumulative energy conserved (GJ)



400kV Kamudhi-Ottapidaram Transmission Line, Tamil Nadu

Direct energy intensity² (GJ/₹ Bn Revenue)





Indirect energy intensity²

(GJ/₹ Bn Revenue)



2. Intensity data for FY 2020-21 and FY 2019-20 has been revised. Total revenue has been considered for Intensity calculation; earlier, customer revenue was considered.

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EMISSIONS

GHG

Corporate

Overview

We are committed to become Carbon Neutral by 2040 from FY 2020-21 baseline, contributing meaningfully to combating climate change. Our focus is on realigning our processes and systems to reduce our GHG emissions.

SCOPE-1: Consumption of fuels such as petrol, high speed diesel, furnace oil, natural gas, LPG, CNG and acetylene.	SCOPE-2: Utilisation of grid electricity supplied by state electricity supply boards.	SCOPE-3: Purchased goods and services, waste generated in operations (solid waste), employee commute and business travel
615,035 tCO ₂ e	274,028 tCO ₂ e	4,976,909 tCO ₂ e
Direct GHG emission intensity-Scope 1 ³	Indirect GHG e	mission intensity-Scope 2 ³

(tCO₂e /₹ Bn Revenue)







AIR EMISSIONS

We monitor air emissions at our campuses and project sites and ensure that our emissions stay within permissible limits. Our principal sources of air emission are process stacks at a few campuses and diesel generator sets. We have been consistently striving to reduce emissions from different sources. The table below shows our performance over the last three years.

SOx, NOx, PM & ODS emissions (in tonnes) ⁴					
	SOx	NOx	PM	ODS	
FY 2020	1.56	17.78	12.45	8.38	
FY 2021	8.31	1.01	9.46	2.62	
FY 2022	0.11	0.93	0.22	0.65	

3. Intensity data for FY 2020-21 and FY 2019-20 has been revised. Total revenue has been considered for Intensity calculation; earlier, customer revenue was considered.

4. Excludes data from Minerals & Metals, Transportation Infrastructure, Buildings & Factories, Smart World & Communication, Heavy Civil Infrastructure, Realty businesses and our offices





WATER

We are continuously stepping up our water conservation initiatives as part of our overall commitment to sustainability. The construction business is a water-intensive sector, but we have been successful in reducing water consumption significantly. We are devoting resources to making our campuses green and one of the important components is recycling and reuse of wastewater. We are also working towards reducing water consumption and increasing water recycling at project sites and manufacturing facilities. Our groundwater withdrawal has been reduced by 11% since FY 2019-20. Water recycled is used for gardening and flushing. We undertake various measures to construct rainwater harvesting structures both at our premises and in areas where our projects are functional



WASTE & CIRCULAR ECONOMY

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 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 standards and regulations.

2,464 tonnes

Hazardous waste⁶ 10.4% w.r.t FY 2020-21

48,995 tonnes

Water Withdrawal (kl/year)⁵

Source	FY 2020	FY 2021	FY 2022
River / Lake	2,174,162	1,637,695	2,001,310
Municipal	770,622	980,433	1,369,437
Rainwater	56,672	56,575	82,364
Groundwater	3,087,682	4,087,726	3,251,265
Others	4,722,684	3,235,055	2,897,996
Total	10,811,822	9,997,484	9,602,372

Total Water Consumption⁵ (Mn kl/year)



Our waste management measures:

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

5. Water withdrawal data revised for FY 2020-21 and FY 2019-20, data on dewatering and hydrostatic water consumption removed from FY 2019-20 and data corrected for FY 2020-21. (Note: 1 kl = 1 m³)

6. Data has been revised for FY 2020-21

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COMPLIANCE

Our campuses and project sites have obtained necessary approvals with respect to the various statutes, rules and regulations from authorities before commencing their operations. 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 noncompliance, and no fines were imposed on our campuses within the reporting period.

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MATERIAL MANAGEMENT

Management

Discussion and Analysis

The materials consumed primarily during our business activities are steel, cement and sand. We make sustained efforts to recycle our steel and zinc at our production facilities. But the scope of using recycled material is limited due to customer specifications. At our construction sites, we make judicious use of fly ash and granular blast furnace slag to blend cement.









Material consumption (partially reported, MT)

Material	Consumption
Ferrous	1,657,640
Non-ferrous	7,692
Hazardous chemicals	58,531
Oils and lubricants	2,713
Cement and sand	6,442,614





Crushed sand – cumulative since FY 2008 (tonnes)







Percentage of crushed sand used in place of sand





Percentage of recycled steel used in place of ferrous



Percentage of recycled zinc used in place of zinc



LIFE CYCLE ASSESSMENT (LCA) OF DIAMOND GREEN DIESEL REACTOR

LCA is a method for assessing a product's environmental impact considering its various life cycle stages. We undertook a cradleto-gate LCA of a critical reactor manufactured by our Heavy Engineering business. These reactors process biomass (recycled animal fats, used cooking oil and inedible corn oil) to make green diesel and reduce greenhouse gas emissions by up to 80% compared with conventional diesel fuel. LCA results of the manufacturing process of the reactor show that the maximum impacts are due to the steel and energy consumption from the grid associated with the manufacturing process. Other than these, there are negligible impacts during the manufacturing process.

Note: Our product portfolio constitutes less than 10% of the standalone revenue of the Company



EXPANDING OUR GREEN BUSINESS

We are steadily developing our portfolio of sustainable engineering and design solutions. 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. Our green business offers infrastructure that has a low impact on the environment and focuses on public wellbeing. Our green business contributed ₹388.43 Bn (38.2%) to the revenue of the Company.

Our Green business includes:

- Renewables (Solar / Hydro)
- Non-fossil power generation (Nuclear)
- Water & effluent treatment
- Railway Network
- Flue Gas Desulphuriser (FGD)
- Process equipment for biodiesel / clean fuels

- Green buildings / facilities
- Surface miners / sand plants, etc. (except for coal)
- Mass Rapid Transit System (Metro & High-speed Rail)
- Solid waste Management automated communication software for effective solid waste management in Smart Cities
- Natural-gas extraction facilities

Project Renewed in FY 2022	Leadership Development Academy, Lonavala	IGBC Platinum		
Project completed in FY 2022	A M Naik Tower, Powai, Mumbai	LEED Platinum		
	LTI, Mahape			
	Technology Centre 4, Chennai			
Future Projects	L&T Innovation Tower – Phase I, Chennai	Certification in process		
	L&T Innovation Tower – Phase II, Chennai			
	L&T IT Park, Coimbatore			

14 of our campuses have been certified at different periods and we are working on their recertification processes.



Our Green Buildings and their Rating

BIODIVERSITY

The urban forest is a unique methodology proven to work worldwide, irrespective of soil and climatic conditions. Our Defence Engineering business has been successfully undertaking urban forest development initiatives for the past few years. Here is a glimpse of the impact.

Location: Talegaon	Location: Coimbatore	Location: Bidkin	Location: Erode		
3 patches of 400 square metres 3,600 saplings	800 square metres, 2,401 saplings	1 acre 12,500 saplings with 100% survival rate	8 acres 49,300 saplings with 95% survival rate		

PLANTATION

L&T has planted 1,499,989 saplings in FY 2021-22, with over 99% having been planted by our Water & Effluent Treatment (WET) business. Over the years (2008-2022) L&T has planted over 4.8 Mn. trees.

Cluster wise plantation



We continue to explore opportunities both internally and externally in different aspects of Natural Capital. As stated in our Group Vision, we will pursue eco-friendly growth, thereby increasing our green portfolio y-o-y. We will continue to focus on promoting sustainability within the organisation and innovation will be a big enabler towards this objective. We will also continue to disclose our sustainability performance through international platforms such as Dow Jones Sustainability Indices (DJSI) and Carbon Disclosure Project (CDP) and we are committed to working on Task Force on Climate-Related Financial Disclosures (TCFD) disclosures as well.

CASE STUDIES

Plastic Waste Management

Waste collection and segregation are conducted daily to minimise waste generated at the site and keep workplaces clean and hazard-free. Our WET business has tied up with a third-party manufacturer and supplier – PGS Enterprises India Ltd. – to send its plastic waste to be recycled into plastic granules, polyfuel, etc

IMPACT

331.6 kg/annum plastic waste recycled 108 staff and 194 workmen participated and trained on plastic management

665 kgCO,e/annum emissions avoided





Promoting sustainable construction

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Sustainable construction means using renewable and recyclable materials when building new structures, as well as reducing energy consumption and waste. The primary goal of sustainable construction is to reduce the industry's impact on the environment. A project of our Heavy Civil Infrastructure business, the Mumbai–Ahmedabad High-Speed Rail Project's C4 Package, has been reducing its CO₂ impact by using supplementary cementitious materials in concrete, and reducing its water usage by replacing conventional water-curing with a curing compound.

IMPACT

Emissions avoided using Supplementary Cement Materials: **119,946 tCO**₂

Water savings by using

- Curing Compound: 2020.8 kl
- ✓ Superplasticisers: 44,479.2 kl

Savings through reduction in raw material usage: **₹1.6 Bn**

LEED Platinum Certification for A M Naik Tower, Powai, Mumbai

The US Green Building Council has awarded L&T's corporate office, A M Naik Tower, the prestigious LEED Platinum certification under LEED 2009 Core and Shell development.

The certification recognises the iconic structure as a showcase of sustainability, demonstrating L&T's leadership in transforming the building industry. A M Naik Tower scored high on multiple parameters – including overall energy savings, water efficiency, design innovation and indoor environmental quality.

The primary features are as follows:

- Concrete-filled tube technology in steel structure
- Significant energy savings over regular commercial buildings due to solar roof-top PV cells, high-performance glazing insulated roof and high-efficiency HVAC equipment and lifts with regen drive
- Sewage treatment plant generates water for flushing, irrigation and HVAC make-up
- Rainwater harvesting facility
- Organic waste composter treats kitchen waste, which is reused for landscaping
- E-waste segregation facility

- Smart campus with high-end digitisation: monitor and control of lighting, HVAC systems, meeting-room management
- IAQ sensors to monitor and control of CO₂ levels for employee wellness
- Anti-COVID-19 features: UVGI (Ultraviolet Germicidal Irradiation) in central AC system for health and safety of occupants
- Low water-flow fixtures in toilets

IMPACT

700 tCO,e/annum emissions avoided

Water conservation through rainwater tanks: **60 Kl/annum**

Wastewater recycled through Sewage Treatment Plant (STP): **96,000 Kl/annum**

Waste reduced by 135 tonnes/annum



A M Naik Tower, Powai, Mumbai





Our business segments across geographies, and our tech-enabled manufacturing capabilities give us a big competitive advantage globally. We implement global best practices at our manufacturing facilities and locations 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 was at record levels. Our revenue also picked up momentum during the year.

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KEY HIGHLIGHTS OF FY 2021-22

710 TOTAL PROJECT SITES

18 MANUFACTURING LOCATIONS

321,697 MT

₹388.43 Bn GREEN BUSINESS REVENUE

STRATEGIES IMPACTED

SO-I	SO-III	SO-V		
SE-1	SE-2	SE-3	SE-4	SE-5

SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Customer Experience and Satisfaction
- Corporate Governance
- Business Ethics
- Human Rights and Labour Conditions
- Skilled Manpower
- Sustainable Supply Chain
- Talent Management-Attraction, Retention and Development
- Climate Action
- Data Security, Privacy, and Cyber Security
- Quality of Products and Project Delivery
- Brand Management
- Water, Waste & Hazardous Materials Management

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- Social Engagement and Impact





BUILDINGS & FACTORIES

Setting us apart

- Turnkey solutions from 'concept-to-commissioning' across the entire spectrum of urban infrastructure, with in-house design expertise using advanced systems like Building Information Modelling (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 Statue of Unity

 the world's tallest statue, Shri Narendra Modi Cricket
 Stadium, Motera – the world's largest cricket stadium, the
 Ahmad bin Ali Stadium in Al Rayyan, Qatar, 11 national and international airports apart from many other landmark structures have been built by L&T.
- End-to-End EPC capability in multispecialty hospitals including specialised medical systems and equipment.
- Plug-and-play capability to design-and-build world-class IT infrastructure and data centres.
- Capability to offer integrated design and build solutions for light manufacturing plants and factories.
- Forerunner in offering modular and mechanised processes for advanced construction technologies such as Prefabricated Prefinished Volumetric Construction, Offsite Manufacturing, Structural Steel Construction, and 3D printing to fast-track projects.

OFFERINGS

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



TRANSPORTATION INFRASTRUCTURE

Setting us apart

- Engineering and construction company in India offering Design-to-Build or EPC solutions with single point responsibility for Integrated Railway and Mass Transit Projects.
- Expertise to design and build a full spectrum of highways, bridges and elevated corridors including complex interchanges, both in India and abroad.
- Pioneers in introducing mechanised construction techniques for faster execution with quality and safety.
- Well-equipped engineering centres which offer end-to-end design capabilities including consultancy and construction engineering for all our offerings.
- First-of-its-kind training centre for rail construction in the country.





A section of the Mauritius Metro Project

HEAVY CIVIL INFRASTRUCTURE

Setting us apart

- Capability to execute complex infrastructure projects covering civil, structural, mechanical, and electrical works with international safety and quality standards.
- Expertise to build underground structures with various tunnelling technologies e.g., New Austrian Tunneling Method (NATM), Tunnel Boring Machine (TBM) and erecting super structures using innovative methods e.g., incremental launching and full span 'U' girders.
- End-to-End design and engineering capabilities for all offerings including feasibility, detailed project report, seismic qualification, geotech engineering, blast resistance, etc.
- Owner and operator of one of the largest fleets of critical machinery e.g. TBM, heavy lift cranes, shotcrete machines, etc.
- Global supply chain management cell to undertake competitive sourcing of materials.
- Temporary Works Competency Centre (TWCC) to manage enabling structures assuring effective utilization and asset management.



OFFERINGS

Metros, Nuclear plants, Hydel projects, Marine



The Mumbai Trans Harbour Link



POWER TRANSMISSION & DISTRIBUTION

Setting us apart

- Providing integrated solutions with in-house 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 world's 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.

OFFERINGS

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



Toshka 2 – Wadi Halfa 220 kV double circuit overhead transmission line, Egypt
WATER & EFFLUENT TREATMENT

Setting us apart

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

OFFERINGS

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



318 MLD Coronation Pillar Sewage Treatment Plant, Delhi

MINERALS & METALS

Setting us apart

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

OFFERINGS

Leading EPC solutions provider in the fields of minerals, metals and finishing for large industrial, steel, aluminium, copper, zinc and gold complexes, associated facilities, and the mining industry. The business offers integrated solutions for a wide range of systems and equipment for cement, mining and steel sectors, powered by in-house design, engineering, manufacturing, construction, and commissioning capabilities. Key offerings:

- Mineral Beneficiation
- Iron and Steel Making
- Aluminium, Zinc, Copper, Gold Smelters and Refiners
- Speciality Conveyors
- Equipment for Mining, Cement, Material Handling



Laminar Cooling System for Rourkela Steel Plant

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HYDROCARBON

Setting us apart

- Industry leading HSE performance
- Integrated design-to-build capabilities
- In-house engineering centres offering 'Fit to Purpose' engineering solutions with a focus on technology.
- Onshore construction and offshore installation capabilities.
- Project management resources with experience in executing large and complex projects.
- Strategically located state-of-the-art, allweather 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

Full spectrum engineering services (including FEED), EPCIC, turnkey construction, fabrication and asset management services for oil and gas extraction and processing, petroleum refining, chemicals and petrochemicals, fertilisers projects; crosscountry pipeline and terminals (including for LNG regasification) as well as offshore wind farm projects



Ammonia-Urea Plant for HURL at Sindri, India

POWER

Setting us apart

- In-house engineering, state-of-the-art integrated manufacturing facilities.
- Technology collaborations with global leaders like Mitsubishi Power- Japan, Sargent & Lundy - USA, Howden UK, Chiyoda Corp - Japan, John Cockerill – Belgium.
- Competency in executing large and complex projects within and outside India.
- Major player in new emission-control technologies such as Flue Gas Desulphurisation (FGD).



OFFERINGS

Turnkey solutions for coal-based and gas-based power plants, ultra-supercritical and supercritical boilers, ultra-supercritical and supercritical turbines, Generators, power block auxiliaries, heat recovery steam generators, other critical system, Enviro solutions - FGD, electrostatic precipitators (ESP) and selective catalytic reduction (SCR) total plant design and engineering, construction



400 MW Bibiyana-III Combined Cycle Power Plant, Bangladesh

HEAVY ENGINEERING

Setting us apart

- Providing engineered-to-order equipment, solutions and critical piping to various industries
- Technology-driven, quick turnaround solutions for Process Plants offered by Modification, Revamp and Upgrade (MRU) business
- World-class manufacturing complex with cutting edge technology adopting Industry 4.0 for Engineered-To-Order (ETO) critical equipment.

OFFERINGS

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

DEFENCE ENGINEERING

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
- Leveraging the digitalisation trends achieving higher degree of welding automation, enhancing IoT application through deployment of smart devices on various machinery to increase consistency of output, and reduction of cycle times in a sustained manner.

OFFERINGS

Tactical and Assault Bridging Systems, Akash Airforce Launchers, Medical Oxygen Plants Infantry Combat Vehicle, Productive Welding Processes, Army Bridging Systems, BrahMos Systems (Naval), Naval Platforms



Propylene Oxide (PO) Reactors

Corporate Management Discussion and Analysis Overview

REALTY

Setting us apart

NCR, and Chennai.

commercial and retail business.

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SMART WORLD & COMMUNICATION

Setting us apart

- Focussed on solutions to make world smart and safe, providing secured robust state of the art digital infrastructure with latest of communication technology, connecting millions of operational assets.
- Implemented 27 Safe and Smart Cities with Integrated Command Control Centre (ICCCs), 2mn+ Smart Utility end points by leveraging its expertise in IOT platforms, OT Data Analytics & AI/ML.
- Multiple Data Centres & Cyber Security solutions, Mega Communications Projects connecting 30,000+ Gram Panchayats, 5 Metro Telecommunication projects and next gen connectivity for Indian Armed forces.
- L&T's Smart World & Communication business has developed it's own Platforms - Fusion-IOT, NOC and SOC to provide customised and scalable solutions to clients and have also developed expertise on several industry platforms.
- Created a unique ecosystem of technology partners across the world to be able to stitch problem-specific solutions.

OFFERINGS

Safe & Smart Cities across India, Fusion: Indigenous Command Control Centre for City Operations, End to End IOT Implementation and Analytics, Smart Utilities: Advanced Metering Solutions for Utilities & Pioneering Pre Paid Electricity, Defence Communication, Data Center and Network Operations Services, Cyber Security for Operational Assets & Security Operation Centre, Telecom Services including 5G, Network Connectivity, Tactical Communication Systems, SatCom Ground Stations, Radio Communication & Software Defined Radios, High Capacity Radio Relays & Helo Deck **Communication Systems**

GVMC City Operations Center









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

• Total portfolio of ~ 60 mn sq. ft. across residential,

commercial, and retail segments in Mumbai, Bengaluru,

• India's first Transit Oriented Development (TOD), Seawoods

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For the business to progress, it is imperative to continue the innovation journey to stay relevant. L&T's innovation efforts are backed by advanced technology, helping it deliver projects which set new benchmarks within their space. With a continuous focus on innovation, design and development, the future is taking shape in L&T's Technology and Innovation centres across India. These breakthroughs are deployed across all businesses of L&T, ensuring added value to our customers.

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KEY HIGHLIGHTS OF FY 2021-22

29 TOTAL PATENTS OWNED

₹837 Mn TOTAL R&D SPENT

56 AWARDS WON FOR INNOVATION

37 NEW PRODUCTS AND SERVICES DEVELOPED THROUGH R&D

187 R&D¹ DESIGN ENGINEERS

STRATEGIES IMPACTED

SO-I	SO-III	SO-IV	SO-V
SE-1	SE-2	SE-5	

SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Corporate Governance
- Business Ethics
- Talent Management-Attraction, Retention & Development
- Data Security, Privacy, and Cyber Security
- Quality of Products and Project Delivery
- Brand Management

¹ Includes our core R&D engineers

RESEARCH AND DEVELOPMENT PROJECTS

1. Artificial Aggregate – An alternative to natural stone aggregates

Due to growing investments in the infrastructure sector, the demand for various construction materials like cement, steel, aggregates and others is increasing exponentially. To conserve natural resources like aggregates, research is being conducted on the development of artificial coarse aggregates, using industrial by-products such as fly ash and GGBFS (Ground Granulated Blast Furnace Slag) with suitable chemical activators to form a solid rock mass. This research has been taken up at L&T's Construction Research and Testing Centre. Initial results are encouraging and further research is in progress to improve durability and other qualities. This green and sustainable product has a wide scope for usage across the construction value stream and will help enable significant energy savings.

2. Shredded waste plastic modified asphalt mixes for eco-friendly and durable pavements

Disposal of used plastics has been a major cause of concern for many developed and emerging nations.



Plastics are usually non-biodegradable and burning of waste plastic emits harmful gases like sulphur dioxide. Utilisation of used waste plastic as a modifier in asphalt roads is an emerging technology to mitigate environmental hazards. Plastic-modified asphalt mixes can be produced by two methods - dry process, and wet process. L&T's Construction Research and Testing Centre had taken up a detailed study to evaluate the effect of shredded waste plastic on the mechanical properties of mixes prepared by the dry mixing process. The study revealed that the addition of shredded waste plastic has the potential to reduce the optimum binder content of the bituminous mixes. A 500m trial stretch was constructed with shredded waste plastic modified bituminous mix at the Kancheepuram campus in 2021. Preliminary investigations showed that the modified mix performed better than the conventional mix, especially during the monsoons, and further studies are planned to help push the usage of this mix in future road projects.



R&D Centre for Mumbai-Ahmedabad High Speed Rail Project

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Digital Initiatives

There are 50+ digital solutions that are in production and widely used by thousands of L&T's operating staff at hundreds of project sites. Over 11,000 construction equipment are connected, providing real-time visibility into operations of these machines at remote project sites. This visibility enables improvement in productivity and utilisation of these machines, better maintenance and uptime, and better fuel efficiency leading to faster work completion and cost savings.

The initiatives highlighted in the subsequent section have been started in FY 2021-22.

Digital Initiatives across our businesses:

- **Smart Glass and Help Lightning:** AR-Enabled Remote Assistance Software, including video collaboration services, that enables experts to work virtually side-by-side with anyone needing help, anywhere in the world.
- Smart Cameras and Image analytics: Cloud-based smart cameras help to monitor project site from a single dashboard. Smart cameras provide live feeds which are interpreted by AI Models to detect Safety and non-compliance of COVID appropriate behaviour, e.g Vision+
- Workforce Induction and Skills Application (WISA): End-to-end digital solution for all workmen related functions encompassing worker profiles, wage modules, experience records, trade validation, certifications and accreditations, skill database, health profile, safety training module, attendance management and workmen camp management.
- **PROCUBE (Project, Progress & Productivity):** Tool to monitor multiple aspects of a project. It captures the real time day-to-day progress while helping to gauge workmen's productivity levels, analysing the project and speeding up progress.
- TORQ (Tying, Operation, Revenue, Quality): Quality control tool developed to raise NC Observation, RFI inspection, Quality Audit and Laboratory Management. It helps to monitor and ensure maintenance of quality standards across the lifecycle of the project.
- SHEILD EHS Platform (Safety Health Environment for Industrial Landscape through Digital): Platform to evaluate a project's EHS status, manage EHS processes from inspection checklists to approvals, observations and audits, PTP, DWP, shut down operation and managing safety observations with checklists, and workflows to ensure planning, communication and action.
- **Conquer Quality Inspection Application:** Web and mobile-based application to conduct quality inspection prior to final commissioning. It generates quality observations, pour cards, quality walkdown, and customer and executive feedback.
- **Digital Stores:** Solution to handle material from issue to consumption with proper reconciliation across the project sites. All material transactions are digitally captured using a mobile application, supported by layers of authentication and workflow.



- VR Training for Safety: Immersive Safety training modules for workmen and staff using virtual reality.
- **Connected Asset:** Remote monitoring of P&M equipment for utilisation and conditional monitoring.
- **POMS (Post Order Management System):** Collaborative supply-chain accelerator used for enhancing visibility and tracking of critical vendor milestones from PO to delivery at sites.
- **Surveys using advanced technologies:** Advanced technologies e.g LIDAR, drones, 3D layer scanning, Ground Penetrating Radar etc., are used to conduct surveys to provide accurate project information, enabling efficient design and mitigating risks at an earlier stage.
- **eMtrack (Material Tracking):** Digital solution that facilitates material return and material transfer between stores, and aids in the reconciliation of materials issued to various subcontractors in one line and being consumed against activities.
- Automation of manual processes: Digital technologies e.g. Robotic Process Automation (RPA), Machine Learning etc., have been used to design solutions to automate manual processes and improve productivity.

BUILDINGS & FACTORIES



 HR Skill Inventory System: Man-management solutions like
 muSkill Descures Assessment

mySkill, Resource Assessment Management & Planning (RAMP),

and Resource Upskilling through Competency assessment (RUCA), working in tandem to drive staff skill profiling, competency assessment, resource allocation and skill enhancement capabilities.

• FORM FIT: A solution to track formwork panel utilisation and productivity.

Transportation Infrastructure

- **Machine Control:** 3D GNSS based Machine Control System deployed for Motor Graders and Excavators, enabling the equipment to run on auto mode for level control, with the operator only driving the equipment, thereby improving the productivity and safety at workplace.
- **3D Volumetric Measurements:** Bulk material like aggregate stocks are measured digitally using drone-based scanning and volumetric analysis, enabling easy reconciliation and material planning.



Konkan Railway

HEAVY CIVIL INFRASTRUCTURE

- **Pre-Cast Segment Management System (PCSMS):** Application for tracking the status of viaduct segments using bar codes. It enables real-time tracking of production and better traceability of finished segments at the stacking yard.
- **ConPro:** Application for end-to-end tracking of concrete supply chain. It enables auto dispatching of orders from batching plants and live tracking of transit mixers.
- Enabling Structures Tracking Application (ETAP): Digital application to track utilisation of all Enabling Structures across project sites by using QR codes. This has helped to increase the reusability of fabricated items and improve tracking of the same.
- **RebarPro:** Application that provides end-to-end tracking of rebar (full length, offcuts, scrap) from store-to-site. This enables faster MIS dashboards creation, waste minimisation and productivity improvement.



Mumbai - Ahmedabad High-Speed Rail Project

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POWER TRANSMISSION & DISTRIBUTION

- Exposure Declaration: Digitalised system to track commodity and currency exposure.
- Pronto: Centralised digital system that takes care of site invoicing activities by enabling resource optimisation and prompt delivery of services.
- Engineering Optimisation & Calculation Automation Web-based solution using Python Programming with an optimiser engine for migrating structural logic from spreadsheets to backend services.
- Time Lapse Camera: Capturing timestamped photos for documentation, visualisation, and monitoring purposes.
- Prapti Bodhi: Scientific planning for businesses based on historical data, volume, 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.
- T-TRAX: RFID-based solution for tracking tower bundles across factories and site locations to improve tower-wise visibility, traceability, and lot completion.
- Factory IOT: Monitoring of OEE (overall equipment effectiveness) at transmission line tower plants through IoT data.



400 kV Ibri Izki Transmission Line, Oman

- Fibertrack: Application for tracking and monitoring of patrollers and Operation & Maintenance of around 16,300 km of fibre network.
- AI For contracts and engineering: Contract comprehension includes key clause identification, risk quantification, document, and datasheet extraction.

WATER & EFFLUENT TREATMENT

• **SPRINT:** Geospatial solution that helps project teams to visualize and track pipe laying activity, including theft identification and material reconciliation.

MINERALS & METALS

- Wrench: Centralized platform across EPC with automated live S-Curves and progress dashboards that also enables document management, and communication control across all stakeholders.
- **iMPACT:** Comprehensive item-wise material and progress management tool applicable across structural fabrication, piping and equipment. Material management is controlled through GPS enabled QR codes at different stages of fabrication, storage and erection.
- **eALPS:** Centralised web-based portal for quality vendor inspection call management system for vendors to raise inspection call requests along with its documents.
- Super Procure: Application to raise logistics' requests from project sites. The system enables float bids among 67 registered transporters and helps to prepare comparison statements online while expediting release orders to L1 vendors.



48 MLD Water Treatment Plant, Gadag, Karanataka

HYDROCARBON

- **Drishti (Enterprise Level KMS):** Enterprise level knowledge management system to provide situational guidance and capture, store, and extract the information required for efficient knowledge transfer across the organisation.
- mCode (Unified Material codification): Unified material codification system for parametric comparisons, benchmarking, data mining and analytics of various material categories to drive procurement cost optimisation.
- EPSILON (Integrated Project Management System): Decision support system for effective project management and control, applying advanced analytics at the enterprise level.
- Virtual Reality Immersive Walkthrough: Virtual reality immersive walkthrough for engineering 3D models offering efficient constructability and maintainability review for Operation & Management teams.



Gas Production Modules fabricated at LTHE's Oman Facility for Hasbah II



3-D model of Farabi Petrochemicals at Yanbu, Saudi Arabia



metal deck profile • Digital Radiographs Inspection using AI: Auto AI-enabled radiograph interpretation in the weld joints.

Management

• Price benchmarking: Smarter supply chain system using ML based parametric price discovery model for commodity items like cables, cable trays, valves, and pipes.

HEAVY **ENGINEERING**

- One-man multiple stations: One man operating multiple smart welding stations has been successfully implemented at AMN Heavy Engineering Complex, leveraging wireless technology as part of the Autonomous Welding Project.
- PDM (Predictive maintenance) application module: Implemented for first time by the business on TITAN DHD (deep hole drilling) machine, this application delivers capabilities like early failure reduction, reduced spares consumption and improved OEE (Over Equipment Efficiency).
- Additive manufacturing: The business has leveraged 3D printing technology to make prototypes for development projects, thereby significantly reducing development cost



Heavy Engineering's digital initiatives









ARSEN & TOUBRO



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POWER

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Overview

DEFENCE ENGINEERING

- **IoT of Welding Robots with Digital Report book:** Planned / unplanned downtime and calculating OEE (Over Equipment Efficiency) with the help of an IoT data logger for descriptive analysis.
- **Monitoring Execution:** Work Allocation System enabling QC engineer to track First Person Responsible (FPR, viz fitter, welder and electrician) while undertaking inspection and develop person-wise First Time Right (FTR) data.
- GST Auto-reconciliation: RPA BOT along with ERP customisation provides automated GST reconciliation capability to avoid IDT losses.
- **3D PDF for design information:** Area-wise cabling information shifted from 2D based AutoCAD files to 3D embedded PDF files which facilitates viewing the cable routing with its complete inventory in a 3D environment from a desktop computer instead of a high-end workstation.
- Artificial Intelligence-Machine Learning: Database of pipe spools created using content extraction from queries of projects executed previously through natural language processing and text analysis. This enables a project planner to visualise the entire pipe spool lifecycle in a timeline sheet with all the queries and inspection data and assists the execution team to predict the cycle time for future projects.
- **Digital Twin:** Laser scanning and digitalisation concepts extended to create digital twin models of the platform where onboard inventory is being scanned for generating 3D models and integrating them in the composite model. This helps to

proactively identify interferences through dynamic motion analysis of ship-in route and generate digital templates of pipe spools thereby avoiding physical templating.

- **PLM CAD Integration:** Integration of PLM platform with native CAD software improves the efficiency in D&E functions and brings better change management.
- **Armoury:** Provides the interface to search surplus material lying in closed projects with different attributes such as make, size, grade, vendor, etc thus improving the possibility of alternate use of inventory.
- Smart Quality Management System: ERP based Smart Quality Management System assists in integrated way of planning in design, material, production and quality functions.
- **RPA Load Balancer:** In house developed BOT-based load balancing system to distribute RPA tasks to various virtual machines.

REALTY

- **MY LTR App for Brokers:** Enhanced dynamic interaction with brokers for complete life cycle, resulting in reduction in broker registration and payment TAT, improved transparency with leads and bookings sourced, improved collaboration for new project launches.
- **LTR Konnect:** Centralised HR portal for smooth interaction with employees. The portal provides learning and training opportunities in digitisation, analytics, data driven decision making and process excellence.



L&T Tech Park, Bengaluru

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SMART WORLD & COMMUNICATION

- **i-Survey:** End-to-end point of presence survey management solution with mobile app capturing survey data, latitude & longitude, photographs and online approval system leading to improved productivity and performance in SCM.
- **i-Attend:** Mobile-Based attendance punching and monitoring solution for Linear Projects with scattered project locations.
- **SmartPro-Planning:** Customised and smart project monitoring tool providing integrated view of project progress status (Financial and Physical Progress) with dashboard and reports in terms of scope vs progress on design, procurement (po + delivery), installation, integration, commissioning and go live.
- **SmartPM Solution:** End-to-end Smart Meter Project Management Solution with mobile App & QR Code Scanner for Consumer Indexing, Smart Meter installation.

1,000+

cases registered via emergency call box; emergency calls response time- 10 seconds and resolution time – 10 minutes for incidents recorded (accidents, police and medical emergencies)

187,410 citizens using free monthly Wi-Fi facility

Case study

Ease of living of citizens through Pune Smart Elements project

Brief description

- Flagship technology infrastructure and a pan-city project consisting of Integrated Command and Control Centre (ICCC) along with 732 smart elements across Pune.
- Enables the city administration and its stakeholders to make informed decisions with real-time data and deliver effective governance.
- Institutionalise data driven decision making across levels of city functionaries for regular operations and during crises.
- Enhancing collaboration across multiple departments within and outside urban local and government bodies.
- ICCC provide insights using data for civic officials across urban functions through the deployment of sensors across the city.
- Smart elements installed across Pune: City Wi-Fi, Emergency Call Box, Public Address System, Environmental sensors, Flood Sensors, COVID Management through ICCC

Impact

- Total Data consumed: 19.81 TB per month
- Critical Zones with average AQI > 200 observed and reported with Environment Monitoring Sensors deployed in 50 locations
- 100 + Incidents recorded using flood sensors deployed at 50 locations
- PA system audio message related to COVID-19 broadcasted live every 30 minutes using PA systems between 7 am to 10 pm daily



Moradabad Command Control Centre



Our human assets play a key role in seamless driving of operations in today's ever-evolving business environment. They deliver projects and business solutions effectively on time, every time. At L&T, we have always strived to create an enabling work environment that encourages continuous learning, promotes inclusivity and equality, while ensuring a healthy and safe workplace.

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KEY HIGHLIGHTS OF FY 2021-22

52,155 TOTAL EMPLOYEE STRENGTH

37,966 ENGINEERS

33 YEARS MEDIAN AGE OF EMPLOYEES

8.37 AVERAGE TRAINING HOURS PER EMPLOYEE

4.96 Mn SAFETY TRAINING HOURS

STRATEGIES IMPACTED



SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Corporate Governance
- Business Ethics
- Employee and Workforce Engagement, Wellbeing, Health & Safety
- Human Rights and Labour Conditions
- Skilled Manpower
- Talent Management-Attraction, Retention and Development
- Diversity, Inclusion and Equal Opportunity
- Brand Management

LEARNING & DEVELOPMENT

Corporate Learning & Development (L&D)

L&T is an 80+ years old Indian multinational conglomerate. It carries a workforce that is multi-generational, drawn from diverse ethnic and cultural backgrounds, and brings with it a rich mix of educational and professional experience.

Continuous learning is one of the highly treasured values of L&T. This gets addressed through a well laid out L&D Strategy. Building a leadership pipeline to enable growth and business continuity is one of the strategic enablers of the Company. This includes attracting and retaining top talent, but more importantly, it emphasises L&T's deep-seated culture of 'home-grown' talent. Over the years, L&T has prospered manifold in terms of executing green-field, mega/complex projects including Smart Cities, Mumbai Trans Harbour Link, Airports under the Government's UDAAN scheme, the landmark construction of the Statue of Unity and the most recent – India's first Mega Bullet Train Project valued at ₹25,000 crore. This extraordinary feat requires a sound foundation of well-honed internal talent.

L&T's L&D Strategy is centred on three pillars:

• Anchored to Dynamic Business Needs: L&D offerings are strongly aligned to the needs of the business over three major career archetypes – Business Leadership, Technical Leadership, and Project Leadership:

Leadership Archetypes



- Leadership Commitment: From addressing the sessions, conducting training, to spending one-on-one time for mentoring, the leadership's commitment and investment towards talent development is visible at multiple levels.
- Strong Learning Ecosystem People, Processes, Infrastructure: We have a well-established Learning & Development Team, that focuses on Technical Training (CTEA), Project Management (IPM), Leadership and Behavioral Training, Centre of Excellence (CoE) for Process Improvement, Digital Learning (ATLNext), Leadership Development Academy (LDA), etc.



Built on the foundation of these three pillars, the L&D strategy has multiple facets like:

- **1. Grow Within** Focus on grooming and developing talent internally.
- **2. Built to Last** Design deep-rooted interventions, adaptable to changing needs, that can sustain over long periods of time.
- **3. Best Practices + Next Practices –** We position our interventions on time-tested design principles. At the same time the pedagogy we use, keeps pace with the latest approaches in Project, Technical and Behavioural Education, e.g., blended learning is a big part of our offerings in all career archetypes.
- **4. Partnering for Growth** It is said "If you want to go far, go together.". We operate with a very strong internal and external network. Internally, we are well supported by Business Leaders, HR Leaders, Business Talent Partners, and many Subject Matter Experts (SMEs). Externally, we collaborate with the best in the world, be it academic institutes like INSEAD, Michigan Ross, IIMs, XLRI or faculty members / consultantsconsultants such as Prof. Krishna Palepu - the Ross Graham Walker Professor of Business Administration at Harvard Business School, and Prof Das Narayandas - the Edsel Bryant Ford Professor of Business Administration at Harvard Business School.
- **5. Crafting Leadership Journeys** We encourage long-term growth journeys for our employees. This ensures holistic development guided by learning through training, peers, and on-the-job conditioning, supplemented by structured inputs through one-on-one coaching and strategic action learning projects, e.g., Ascent (Competency Leadership Development Program for Tier-3 employees)

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L&D Practices to meet Short & Medium-Term Needs	L&D Practices to meet Long-Term Plans
Classroom Training (In-Person or Virtual) for	7-Step Leadership Pipeline Programmes
Competency Development	Journey-Based Competency Development Programmes
Webinars	Action Learning Projects
Experiential Learning – Hands-on Training, Simulations, AR / VR	Management Development Programmes Mentorship
Digital Learning – ATLNext (Technical & Behavioural Modules)	Qualification/ Accreditation/ Certification Programmes
RapL (micro-learning platform)	

Ascent – Competency Development Journey



Apart from these established processes, there are additional measures taken to ensure People Development Needs are identified and addressed regularly. The following forums viz. Talent Partners Meet, CoE Partners Meet, ATL Partners Meet, HR Council, DC – i-LEAD keep the interaction on People Development alive and updated. We also participate in external industry forums for benchmarking, gaining knowledge and networking. We get outside-in perspectives on current and future talent development trends from such forums.

198,975

Courses conducted in FY 2021-22 against 187,575 in FY 2020-21

4.36 lakh hours

of courses conducted in FY 2021-22

3,276 hours of training on Human Rights provided in FY 2021-22



Corporate Technology & Engineering Academy (CTEA) Madh and Mysuru

CTEAs have state-of-the-art infrastructure and learner friendly environments, with robust processes to design and deliver technical, functional, and business specific training programmes in a healthy and pollution-free environment. In addition to excellent classroom facilities, both the academies lay emphasis on providing hands-on training to the participants through various labs / hands-on areas, like manufacturing excellence lab, CAD & Safety lab, Digitalisation lab, Prestress Technology, IoT, PLC, Robotics, 3D printing, GD&T, etc. CTEA provides Training & Competency Building services to many L&T businesses including Construction ICs, Defence Engineering, Hydrocarbon, Power, Heavy Engineering, L&T Technology Services, Nabha Power, MHI, L&T Infotech, Valves & Process etc.

Employee development at these academies is focused on various levels:

- Level 1 includes young recruits such as GETs, DETs and FLS (Frontline Supervisors). It focuses on skill enrichment of freshers, wherein technical orientation and hands-on experience are offered to Graduate Engineers Trainees (GETs) from various L&T businesses to make them industry ready. As a part of their orientation, CTEA organized online sessions with a blended approach for latest batch of GETs. Some of the key highlights include virtual labs, mini projects, videos and effective presentations. Another focus area in Level 1 is the transformation journey of fresh Industrial Training Institute (ITIs) to be converted into responsible FLS. CTEA also design and deliver domain-specific survey and quality modules and impart technical and functional modules, to meet the current business needs.
- Level 2 training is aimed at Competency Development needed by employees to hone their knowledge and skills at their workplaces. CTEA conducted 162 virtual programmes, covering 12,540 working professionals, which include niche programmes like Behaviour Based Quality, Advanced Hydraulics, 5G Architecture, DMEA & Certification programmes on topics like Riggers, Scaffolding, Stores Management, etc.

CTEA has also customised some key programmes to meet changing business requirements, these include the Vendor Development Initiative, which involves formation of taskforces comprising CTEA and Project Heads across ICs to identify Entrepreneurial functions required for construction works, so that vendors can start and build their own successful business. A one-of-its-kind, six-day programme was designed and executed at Mumbai and Delhi, covering 40 sub-contractors.

CTEA also organises several technical professional engagements and motivational annual events like the CAD Fest, Technology Conclave, Virtual Technical Summit, and Technology Day Celebrations. An innovative engagement activity named 'Learner Premier League' was organised to motivate L&T-ites to hone their existing skills or acquire new skills the 'IPL WAY.' It was a two-month online engagement activity as part of the calendar programme to enhance learner experience, which helped leverage group activity across multidisciplinary teams, increased engagement with the learners during the COVID-19 period and brought a fun element by breaking the monotony.

CTEA also organised a virtual event 'Engineering Through my window' on Engineers Day, to recognise innovations in engineering across the organisation. The event provided a platform to nurture and encourage innovators, where engineers had to pen-down their ideas to resolve any challenge at work.

Digitalisation & Process: AR-based mobile application on Wall & Column System module - an immersive self-paced learning mobile application for detailed visualisation of the concept created with completely gamified outputs on mobiles to create an enriching interactive experience.

Any Time Learning (ATL): L&T has established a scalable, multi-featured and externally-integrated Digital Learning Platform called ATLNext. It offers a gamut of online courses including competency courses, behavioural courses, and business-specific technical courses to meet the unique needs of the learners.

In FY 2022, we have tied up with globally renowned content providers such as Skillsoft and Coursera to provide training content to employees, while continuing with many existing content providers like Harvard Manage Mentor (HMM) and EBSCO. We have also implemented a unique Al/ML technology-based communication fitness coaching programme to improve work-related communication skills of target employee groups. All the offerings of ATLNext culminated into 2.7 lakh hours of learning clocked by L&T employees through digital learning.



L&T's Leadership Development Academy. Lonavala



Leadership Development Academy

Our Leadership Development Academy (LDA) is situated in the tranquil environs of the popular hill station, Lonavala. 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 L&T-ites for a holistic learning centre that will help manage their training programmes better. Even after 25 years, the Academy continues to be the preferred training destination for the L&T group.

The residential academy is equipped with great infrastructure to conduct various types of training programmes. It can accommodate multiple levels of leadership programmes at the same time. This campus is one of the few places in the country that have been designed exclusively to meet our growing demand and training. Green design with energyefficient outfits and water-efficient measures are some of the important features of this world-class Academy. The IGBC Platinum Certification and CII Award winning energy efficient campus is a testimony of our conscious attempt towards sustainability. We have also introduced ESG training at LDA this year. LDA recognises that learning happens through discussions/debates in classrooms, in the privacy of a library, or in the relaxed atmosphere of a recreation room. This integrated facility provides all these advantages to nurture thought leaders and entrepreneurs of the future.

DIVERSITY & INCLUSION

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L&T continues to be an organisation where diverse workgroups come together to contribute towards creating a better world. The multi-generational and multi-cultural workforce works in harmony to achieve the organisation's results. The Company has employees from 46 nationalities, including Indians and more than 80 languages are spoken across project sites and offices. Within India, L&T has employees from 28 states and 8 UTs.

Ref: The short film Symphony <u>https://www.youtube.com/</u> watch?v=Grb-4czOWzA_

To further enhance inclusion of diverse workgroups, we have launched a special initiative WINSPIRE. In the first year, the focus was to induct, engage and develop more women. 24% of Graduate and Post Graduate Engineer trainees hired in 2021 are women. Various interview sessions and panel discussions were organised to engage the women workforce. Leadership Development Programmes for Women Employees 'WINSPIRE RISE' and 'WINSPIRE PROPEL' were launched, covering 110 participants across L&T. This will help to build a steady pipeline of women leaders going forward.

3.16% Share of women in senior management

of personnel with 10+ years in L&T





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Non - unionised workforce number (age-wise and gender-wise)

Data as at March 31, 2022

	-			
Gender		AGE		Total
	<30yrs	30-50yrs	>50yrs	
Female	1,540	1,549	149	3,238
Male	15,341	29,356	4,220	48,917
Grand Total	16,881	30,905	4,369	52,155

Attrition (age-wise and gender-wise)*

Data as at March 31, 2022

Gender		AGE		Total	Attrition %
	<30yrs	30-50yrs	>50yrs		
Female	310	190	3	503	15% ¹
Male	1,738	2,306	172	4,216	8%
Grand Total	2,048	2,496	175	4,719	9%

*Excludes superannuated staff

1. Personal reasons (including family related, marriage & relocation), further studies and career prospects account for higher attrition rate in female employees.

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

Consolidated training break up			
Programme types	Total programmes	By internal faculty	By external faculty
Leadership Development	6	0	6
Core Development	53	2	51
Competency Development	66	12	54
Calendar	177	50	127
Accreditation	2	0	2
HR for HR	1	1	0
Business Requirements	76	2	74
Webinar	65	1	64
Operational Excellence	41	41	0
Safety	10	10	0
TOTAL	497	119	378

Leadership Development Programmes

310 participants



New Joinees (age-wise and gender-wise) Data as at March 31, 2022

Gender		AGE		Total
	<30yrs	30-50yrs	>50yrs	
Female	540	141	2	683
Male	3,275	1,686	107	5,068
Grand Total	3,815	1,827	109	5,751



We have been undertaking numerous awareness sessions on issues pertaining to Human rights across the Company; viz part of employee induction, EHS training and so on. In FY 2022, we initiated specific Train the trainer programme on Human Rights.

HEALTH & SAFETY

This section complements with BRSR Principle 3 i.e. Businesses should respect and promote the well-being of all employees, including those in their value chains

Our Goal

Mission Zero Harm is to ensure all L&T workplaces, offices and premises are safe and without hazards. This commitment extends to all our contractors and suppliers working on our behalf at our project sites or premises. L&T's Corporate EHS Policy defines the commitment to Health & Safety and Mission Zero Harm through a structured Corporate EHS framework supporting our EHS procedures and guidelines.

Top-Down and Bottom-Up approach for Contractors and Suppliers

Our contractors and suppliers are evaluated on their safety infrastructure and assessment through auditing at our projects. A comprehensive understanding of safety requirements is imparted to contract workers at our construction sites through initial health and safety induction training. This is followed with specific activity training on risks with refresher sessions supported by skills enhancementbuilding programmes.

The importance of workmen safety and wellbeing on all our contracts is crucial to the culture of our 'Mission Zero Harm' goal. At our manufacturing locations and project sites', safety committees are constituted comprising senior management

representatives, as well as union members. These committees facilitate specific safety objectives, in line with the Company's 'Mission Zero Harm' goal. In the collective bargaining agreement, specific clauses related to health and safety are incorporated as well. In addition, workers have a Safety Ambassador at sites who helps them to raise safety issues directly and in turn, the Ambassador communicates good health and safety practices to workers.

Safety dashboard	FY 2020	FY 2021	FY 2022
Severity Rate	204.29	143.60	140.23
Frequency rate	0.11	0.10	0.11
Fatality	41	25	25

Accredited Safety Management Systems

Regular auditing is conducted for our safety management systems through accredited external and internal lead auditors to maintain the standards for continued accreditation of ISO 45001:2018. Internally accredited lead auditors ensure that all operations maintain the standard, adopt, and share best practices and innovation across our ICs. Our EHS Council monitors and measures compliance with corporate procedures. Major supply chain contractors and subcontractors are audited before awarding any contracts to ensure that safety standards are maintained throughout the contract duration. In addition to this, the EHS Council audits each IC on the implementation of procedures. L&T's safety management systems across the business are also supported by internally developed Safe Operating Procedures (SOPs), which are fully endorsed by the L&T EHS Council. It is important that every business, through their Safety Management Systems (SMSs) sets targets and objectives to achieve the Zero Harm goal. The business undertakes a riskbased approach to all activities auditors, ensuring that the standards are being maintained, and identification and sharing of best practices and innovation, particularly in digitalisation is implemented across all L&T businesses.







Emergence from COVID-19 Pandemic

L&T provided full vaccination cover for all workers and optionally extended the same to their families. Continued monitoring of workers across the business ensured the spread of the virus was controlled. L&T's Crisis Management Team (CMT) proactively continues to monitor and manage health and safety initiatives across businesses, facilities, and projects.

Apart from putting processes in place to maintain real-time communication, the continued use of AI to monitor our projects 24/7 to detect and prevent unsafe situations and behaviour has enabled real time reactions to risk analysis. Further, use of mobile safety apps are ensuring this type of real-time reaction and compliance, further improving our compliance without the need for delayed direct interaction. Search engines provide direct access to doctors and medical facilities through mobiles.

Digitalisation in Health and Safety

Artificial Intelligence (AI) is being used as a prominent solution for the identification and prevention of unsafe acts and conditions, while further enhancing our Building Information Modeling (BIM) in Safety. We plan to increase the use of 3D models in more construction sites for 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. Continued focus 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. We continue to develop VR-based training modules with digitalisation playing a critical role in the identification and reporting of unsafe acts/conditions. Specific training incident investigation allows us to fully understand the underlying causes and implement necessary steps to prevent re-occurrence. Further details of digital initiatives undertaken in health and safety have been covered in Intellectual Capital.

Behavioural-Based Safety & Well-being

The EHS Council has developed a Behavioural-Based Safety (BBS) Programme that is implemented across all businesses. External BBS providers such as DuPont continue to assist in further developing an integral safety culture in all our businesses at all levels and their understanding of risk. Introduction of the Safety Task Analysis Risk Reduction Talk (STARRT) Card and Hazard Identification Tool (HIT) Card have encouraged all employees to report hazards observed and ensure that action is taken.

L&T recognised the importance of mental wellbeing and undertook awareness campaigns and programmes for the same. Projects progressed to having counselling availability and personal wellbeing initiatives when working away from home.

Furthermore, climate change is not only affecting projects and their timely delivery but workers are also facing higher fatigue due to rising temperatures. Fatigue Mitigation Plans are implemented and enhanced with medical awareness and medical checks to lessen the impact on workers.

Safety and Organisational Culture

Every business organises several initiatives and campaigns to spread awareness of safety among our employees, workforce, and suppliers. L&T dedicates the first month of the year to Safety. Every year, a theme is agreed at the corporate level which supports the drive to Mission Zero harm. The theme for 2022 was **"Do it Right, Do it Safely, Do it every Day'.**

- The CEO & MD and the Executive Directors communicate the overall direction and priorities
- Fire Service Week: Prevent fires, prepare yourself, promote safety



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- Developing innovative programmes: 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

During the Safety Month, cross-functional safety audits, along with 'train-the-trainer' programmes are conducted. The objective is to progressively ramp up site-based safety capabilities. We recognise the efforts of individuals for their contributions to safety across projects through various rewards and recognition schemes.

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. Training modules have been developed into online sessions, with both internal and external faculty.

Projects undertake specific training and apply the 'Lifetime Learning' approach where specific workers can undertake and be trained in a specific area. Virtual Reality training modules for our workmen across the board give a new dynamic to safety training. To overcome any disabilities or language difficulties, our training includes interactive tests and sessions where a 3D screen and AI provide attendees with the opportunity to apply and test their learnings from the interactions.

On-site safety training through 'Induction Vans'





SOCIAL AND RELATIONSHIP CAPITAL

L&T strives to promote initiatives that enhance the quality of life for communities in and around the areas where the Company operates. L&T has been working towards the social and economic development of communities around its premises and at various locations across the country long before the CSR section was introduced in the Companies Act 2013. Building on over eight decades of social responsibility activities, the Company has a well-entrenched CSR programme that contributes to inclusive growth by empowering communities and accelerating development through interventions in water and sanitation, health, education, and skill development.

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KEY HIGHLIGHTS OF FY 2021-22

1.13 Mn

LIVES BENEFITED THROUGH OUR COMMUNITY **DEVELOPMENT PROGRAMMES**

STRATEGIES IMPACTED



SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Customer Experience and Satisfaction
- Corporate Governance
- Business Ethics
- Employee & Workforce Engagement, Wellbeing, Health & Safety
- Human Rights and Labour Conditions
- Sustainable Supply Chain
- Diversity, Inclusion & Equal Opportunity
- Brand Management
- Social Engagement and Impact

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SOCIAL CAPITAL

Input Metrics

₹1.36 Bn CSR Spend

45 CSR Partners

48,168 New suppliers and contractors

2,615 MSME suppliers

The activities are brought under the CSR theme 'Building India's Social Infrastructure' to bring about impactful and long-lasting social change.

Building India's Social Infrastructure

L&T aims to improve the quality of life, mitigate social inequalities, build self-sufficiency, and help individuals achieve their true potential in the identified communities.







Lives Impacted



Output Metrics

1.13 Mn CSR beneficiaries

510,781 Vendors, subcontractors and workers trained

₹54.4 Bn Contribution to exchequer



Drivers of CSR Interventions

- **1. 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 committee of the Board. They devise, execute, and monitor CSR programmes, either directly or in partnership with NGOs.
- 2. CSR coordinator and teams at campuses, area offices, and sites: Area offices and campus teams perform needassessment, identify local projects and NGO partners, implement and monitor the projects – providing support in achieving stated CSR goals.
- **3. L&Ts Health Centres:** L&T's multi-specialty Health Centres and their professional staff are equipped to provide outpatient and tertiary health services by reaching out to the underprivileged communities and making health care accessible and affordable to them.
- **4. Prayas Trust:** Run by the female spouses of employees and women employees to provide services to the underprivileged sections of society located around various L&T facilities.
- **5. Volunteers:** L&T-eering, the Company's structured employee volunteering programme enables and encourages employees to participate in community development activities. Volunteers invest their time in programmes that benefit underprivileged communities.



6. L&T Public Charitable Trust (LTPCT): Established in 2004, LTPCT has been undertaking projects to facilitate sustainable development of society through initiatives in the realms of vocational training, water management, holistic development of children and healthcare in the marginalised communities. Employees' contribution and management

grant from L&T have made the institution a not-for-profit entity within the conglomerate. LTPCT benefits from the support and in-house expertise of various L&T companies to design and deliver its programmes for the community.

L&T's COVID-19 Care

L&T was at the forefront of responding to the COVID-19 threat, with prevention and treatment related initiatives for affected individuals. The Company supported the Government's efforts during the pandemic by strengthening health infrastructure, providing preventive gear and supplies for frontline workers, as well as donating testing, diagnostic, and treatment equipment.

L&T reached out to 10 states in India and contributed around ₹ 337.7 Mn for COVID-19 Relief.

Personal Protective Equipment

PPE Kits, Ply Masks

Hospital Equipment

32 oxygen generators, over 1,750 bedside ventilators, mobile x-ray units, ambulances, portable laboratories, thermal scanners, pulse oximeters, High Flow Heated Respiratory Humidifier and Cannula, Fowler beds, and CPAP machines

Integrated Community Development Programme

The Integrated Community Development Programme (ICDP) of L&T started in FY 2014-15 to improve the availability of water. Two projects in Tamil Nadu have been handed over to people's institutions for sustaining the work initiated by the project.

Rajasthan, Maharashtra and Tamil Nadu

States covered

23,907 Households covered



The ICDP starts from need assessment of the location and follows a systematic community organisation strategy. These include mobilising people around the problem, forming village development and monitoring committees, creating awareness about saving water, building civil infrastructure to help water and soil conservation, ensuring its maintenance by the community, providing sanitation facilities with people's contribution in terms of labour, encouraging climate resilient and sustainable agricultural practices and building capabilities of the local people to use the resources judiciously.







Infrastructure

As a part of the intervention, structures like check dams, anicuts, contour trenches, farm bunds and farm ponds were constructed with participation from the community. These structures, along with other sustainable agricultural practices, helped increase the water level in water bodies, and retained soil moisture.



The depth of water from land surface has increased in Sewantri due to 43% less than average rainfall in FY 2021-22, as indicated in the graphs alongside.

Depth of water from land surface (metre)



SEWANTRI



DEVGAON





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DEVGAON



Changing the financial landscape of a village

Name: Hassan Pathan

Location: Georai Marda village, Devgaon, Aurangabad, Maharashtra

Demography: 473 individuals with 90 households

Problem: Dependent on rain-fed farming, and irrigation from open wells, allowing the farmers to cultivate a single crop every year

Intervention: Civil interventions like farm bunding, farm ponds, ravine deepening

Impact: Groundwater recharge, improved crop yield, annual income of ₹ 54,250 cultivation of 2 crops

500+ farmers

Overall beneficiaries in the region

Water Distribution System

To provide water security to all beneficiary families, water distribution schemes are introduced. The households are provided with adequate piped water supply within or nearby the household premises to relieve women and girls from the drudgery of fetching water.

Capacity Building

In all the ICDP locations, the communities were trained to facilitate optimum, equitable, and efficient water use and implement other agricultural methods and technology to increase the yield. Farmers were trained in agricultural practices that required minimum use of water along with techniques to prepare low-cost organic manures that retain the land's fertility.





245.2

Promoting sustainable and climate resilient agriculture: This intervention is aimed at reducing the input cost of crops and increasing the yield by promoting organic methods of cultivation.

Region: Devgaon, Jalna District, Maharashtra
Overall impact in the region:
Savings on cost of fertilizers by 30-35%
120 Farmers benefitted
Savings of ₹300-400 a week through the sale of organic vegetables



Enhancing Nutrition

Under this component, women were given good quality seeds of indigenous species of vegetables. They were encouraged to grow a kitchen garden that provided fresh, nutritious, and organic food to the household to meet their daily nutritional needs. During FY 2021-2022, 150 households benefitted through kitchen gardens.

Sowing the seeds of positive change

Location: Sewantri, Rajasthan

Challenge: Low-Income generation due to bad quality of seeds

Intervention: Social interventions like providing good quality indigenous seeds

Impact: In FY 2021-22, 150 households benefited, the yield increased from 4.4 quintals/ha to 6.74 quintals/ha and the average household income has increased from ₹6,006 to ₹19,808

Cultivating rewarding agricultural practices

Name: Jaydeep Ramrao Rathod

Location: Devgaon Tanda, Maharastra

Challenge: Usage of chemical fertilisers, huge cost, adverse effect on land fertility

Intervention: Promotion of multilayer farming, farmer training and demonstration of organic farming under the guidance of Project Agronomists

Impact: Increase in harvest and income of the family, 13 quintals of wheat, priced at ₹ 4,000/quintal





Institution Building and Sustainability

Community groups like Village Development Committees (VDCs) with 50% participation from women, Farmers' groups, and Self-Help Groups (SHGs) were created.

COVID-19 Vaccination: Awareness generation and vaccination through SHGs using audio/ video messages on social media.

Result: Vaccination of 1,347 people

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Making hay whether the Sun shines or not

Location: Alamgaon Village, Nagzari, Maharashtra

Demography: 272 households, Population: 1,558

Intervention: Training and awareness on climate resilient agricultural practices

Impact: The formation and capacity building of Village Development Committees (VDCs) and other village institutes for governance,. Federation of SHGs led to the process of forming Farmer Producer Group and selling of farm produce at fair prices with the support of Government schemes. Farmer Producer Group [Swarajya Shetkari] initiated on September 30, 2020 with a membership of 300 people.

Paradigm shift in gender perspective through women leadership

Selection of a woman candidate as President in Village Development Committee. This paradigm shift brought confidence among women and empowered them to make decisions.

Empowering women through SHGs and capacity Building

Region: Sewantri, Rajasthan

Gross Savings: ₹1,895,125

No of SHGs: 78

No of participants: 1,254 women

Role of SHGs: Better access to savings and credit facilities for income generation, provide loans to their members for health, education, and livelihood, provide women with a firm base for dialogue with credit institutes and banks.

Intervention: Training in financial and digital literacy, SHG processes and functioning, menstrual hygiene, maternal care and reproductive health; 208 community meetings conducted

Impact:

- 46 SHGs linked with banks and total of ₹7.6 Mn worth loans mobilised by the SHGs
- 15 Pashu Sakhis developed to cater to the health of goats
- 435 women engaged in vegetable cultivation, packaging and selling in local markets; 678 engaged in goatry; 27 women earning through purchase of buffaloes and sale of milk
- 78 micro enterprises set up for individual or small groups of women like grocery stores, flour mills, beauty parlours, sewing and tailoring, etc.
- 70 SHGs have more than ₹3.5 Mn as total savings



Impact Indicators

The impact of the ICDP projects that were initiated in 2014 and completed in 2020 is sustained and visible this year by either the same/increased level of water in the wells, and area of irrigated land; which is shown in the following ICDP sustainable graphs.





PATHARDI



BHIM



KUMBHALGARH



PAPPAMPATTI



CHETTIPALAYAM







PATHARDI



BHIM



KUMBHALGARH



LARSEN & TOUBRO

PAPPAMPATTI



CHETTIPALAYAM

 Baseline
 Target
 FY 2019-20

 FY 2020-21
 FY 2021-22

Highlights of ICDP programme in three new locations as follows:

Coverage under ICDP in three new locations: Devgaon, Nagzari and Sewantri			
Households covered	5,345		
Area of land under the project area	10,074 ha		
Population	25,208		
FY	2022		
Water Availability			
Increase in water table level	8.88 m		
Percentage of household with drinking water	77%		
Agriculture			
No. of crop demonstrations	65		
Area protected from Direct Run-off	3471.54 ha		
Increase in area under cultivation / irrigation	53%		
Fallow land converted to agriculture land	190.51 ha		
Area under horticulture	43%		
Health and Nutrition			
No. of kitchen gardens	539		
No. of children in Balwadis supported	241		
Livestock Livelihood			
No. of veterinary camps	26		
Pastureland area under protection	19 ha		
Institution Building			
No. of self-help groups (SHGs) active	213		
SHG Savings fund created for inter-loaning	₹6.57 Mn		
No. of farmers groups formed	26		
Capacity Building			
No. of farmers attended farm-field trainings	408		
Training on subjects	Water budgeting		
	Improved Kharif and Rabi cropping		

- Horticulture wadi development
- Zero-budget natural farming
- Best practices on grains, pulse, vegetable nursery and fruit orchards.
- Seed treatment
- Formation and strengthening of community organisation





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Enhancing quality of life

L&T continued to support interventions that aimed at enhancement of education and health services in the same locations to further improve the quality of people's lives.

Institutionalising Community Learning **Resource centres**

Opening a Community Learning Resource centre has been one of the key interventions of Saajhi Shikshas' after COVID-19. The project, in collaboration with the Rajasthan State Commission for Protection of Child Rights, launched a helpline number in the name of 'UMEED' to provide psychosocial care to the children and parents of the community. With the aim of reducing mental stress and providing proper psychological care, the project team linked children and parents on the UMEED helpline platform. In the initial six months of FY 2022, about 300+ parents and children have been able to connect and benefit from the UMEED helpline.

ही जिला परिवासना सन्दर्भ

During and after COVID-19 pandemic

Once the schools reopened, most of our education projects initiated a blended approach of teaching and learning, where both offline and online classes were conducted. With this approach, children coming to school and those who preferred to stay at home, were both covered.

'Engineering Futures'- L&T's STEM **Education Programme**

Since 2019, L&T has introduced a STEM (Science Technology Engineering Math) Education Project called 'Engineering Futures' (EF). Operating in resource-poor Government schools around four campus areas in Vadodara, Hazira, Chennai and Faridabad. This programme helps teach Science and Math through hands-on models and digital content for better comprehension, while encouraging curiosity and scientific rigour among the students of these schools. Each school is equipped with a computer centre as a dynamic educational laboratory that builds the capacity of teachers to utilise technology and empowers students with practical digital literacy skills.

Community-level STEM Model-making sessions: The project team carried resources on field and conducted STEM model-making sessions with students. 2,294 students from four locations who did not have proper internet connection/ smartphones were reached out. All the models were aligned with the online classes going on in Science and Math.

Restoring health of children

Under Nutrition and Health care, the project has initiated work with 10 balwadis at Sewantri in Rajasthan. Through these Balwadis, 241 (121 girls, 120 boys) children were able to get effective care, nutrition, and pre-school education. Due to access to quality nutrition, all severely malnourished children have recovered, and their health has improved.

EDUCATION

L&T's education programmes are the key to promoting social upliftment and inclusive development in the country. The Company has undertaken a variety of initiatives to provide infrastructure to schools that lack adequate resources. It also strives to improve the quality of instruction and learning for the children.

Saajhi Shiksha

these centres

Aim: Inclusive and guality education for marginalised children aged between 3-18 years

Location: Bhim Block, Rajsamand, Rajasthan, Impact: Implemented in 19 schools and six Anganwadi Centres.

Intervention: Establish Learning Resource Centres to support the learning continuity of children

Impact: Engagement with 263 children through a team of community volunteers, three new Learning Resource Centres launched, 105 children were freshly enrolled, 16,384 library books checked out from








Impact of strategies adopted

- Trained 300 EF teachers (100%) equipped with remote learning strategy and methodologies and conducted online classes for students
- 9,603 (56%) students participated in the remote learning programme
- 4,852 (30%) students were able to perform STEM activities
- 7,555 (44%) students who do not have access to smartphones were reached out through community visits and worksheets
- 17,158 (100%) parents gave feedback on the remote learning experience and encouraged children to participate in the project
- In the national level competition MANAK Science Awards, conducted by Department of Science and Technology, Govt of India, 198 project ideas from 83 STEM schools were submitted, of which 12 ideas got selected and were awarded ₹10,000 for developing their prototype



An idea can touch many lives

Name: J. Subash, part of the Engineering Futures Programme

Achievement: His idea of a 'Pushing Stand Trolley Wheelchair' as a participant of MANAK was featured in the 39,263 ideas shortlisted by the Department of Science and Technology across the country.

Strengthening school infrastructure for creating a better learning environment

Providing adequate school infrastructure motivates children to come to school, in turn improving attendance and increasing the students' interest in learning. Building classrooms, separate washrooms for boys and girls, providing books for the library, and improving overall infrastructure of the schools in different CSR locations across India are some of the activities that are executed under the School Infrastructure initiative.

Pre-school Community Balwadi Centres: Set up in the community to help children become school-ready and create awareness among parents to enrol their children in schools.

Community Learning Centres: Provide remedial teaching for the students who have limited opportunities for receiving guidance from their homes. The classes are run after school hours and on weekends in the community areas or in public places like gardens or parks. The sessions are conducted either by trained volunteers or project staff.

Students are grouped as per their learning levels and progress is monitored through a baseline and end line tests.

Extra-curricular activities are also conducted to help the overall development of children and also retain their motivation to participate in academic activities.

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The Library Programme was implemented in the community to ensure that the children get access to guality reading material in various languages namely, Marathi,

Management

Hindi, and English. During the pandemic, e-books were distributed, followed with the physical distribution of books in the community and creating library groups, containing 5-6 children. The staff also conducted learning activities to improve the learning outcomes of children.

> 260,295 beneficiaries through our education interventions

HEALTH

The Company set up its first Health Centre at Andheri in Mumbai in 1967. At present, L&T has ten Community Health Centres operational at Chennai, Kattupalli, Coimbatore, Thane, Lonavala, Surat, Vadodara, and three Centres in Mumbai. Additionally, L&T also runs artificial kidney dialysis clinics for the underprivileged at its Health Centres in Mumbai, Thane, Vadodara, Surat, and Chennai. L&T Mumbai's Anti-Retroviral Therapy (ART) centre conducts HIV/AIDS awareness camps, provides medical support along with therapy, counselling, and testing. Comprehensive TB related treatment is provided in Mumbai including individualised treatment OPD, check-up, diagnostics, medicines and nutrition support, home visits and counselling. The Health Centre in Mumbai provides infertility treatment services free of cost for the underprivileged communities. The Company also has a well-equipped child guidance clinic in Mumbai in addition to parent counselling. Major services offered are:

Community Health Centre	Mobile Medical Unit		
✓ Consultation services; OPD care	 Primary health / modical care at the depictor 		
\checkmark Low risk and specialised surgical services	Filling fleating medical care at the doorstep		
✓ Intensive Care Unit	\checkmark Health education and promotion		
\checkmark Day care and inter-patient department	✓ Geriatric care		
✓ Diagnostic services	✓ Counselling		
✓ Dialysis services	\checkmark Reaching out to unreached population /linking them to other		
✓ Health promotion and camps	health services		

Case Study

Breast Cancer Brigade Project (BCB) in Kannur, Kerala

- Initiated in the year 2016-17 by Malabar Cancer Care Society
- Provided intensive training to 300 women volunteers this year in comprehensive Breast Cancer Control
- Model for moulding a healthy community of women population

- Specialised free breast examination clinics organised at three locations at Kannur
- Conducted 183 free specialised clinics for women reported to have symptoms based on BSE (Breast Self-Examination) and recommended necessary cases for Mammography test
- Conducted four village-level specialised camps involving Mobile Tele-Medicine unit with facilities of Mammogram, USG, X-ray, Laboratory, etc.
- 5,515 women benefitted







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Health camps held at remand homes and orphanges



Through Blood donation camps, 18,474 blood units were donated to various blood banks across L&T locations.



Covid Vaccination camps were also held at three health centres with public private partnership model benefitting 47,910 beneficiaries

SKILL DEVELOPMENT

In L&T's endeavour to achieve inclusive growth, it provides vocational training courses and other skill building activities to provide uneducated youth with wage-earning skills. L&T's Construction Skills Training Institutes (CSTIs) in different parts of the country, provide free-of-cost training in skills like bar bending, formwork carpentry, masonry, scaffolding, welding, and electrical wiring, etc., to rural and urban youth. With an emphasis on technology and innovation, new technology-based skill-training courses are introduced in Solar PV Technician skills, OFC & CCTV installation and maintenance. Training programmes are conducted at nine CSTIs operational at Kancheepuram and Pulicat in Tamil Nadu, Panvel in Maharashtra, Pilkhuwa in Uttar Pradesh, Jadcherla in Telangana, Cuttack in Orrisa, Attibelle in Karnataka, Chacharwadi in Gujarat and Serampore in West Bengal.

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

Empowering the differently-abled: L&T's 'Project Neev' initiative enriches the lives of the differently-abled by offering specially-designed training programmes.



6,897 youth completed various courses at L&T's CSTIs







63% of enrollees were employed

raining for women 1.8.7 introduced

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

14,587

rural and urban youth, along with women and physically challenged persons from underprivileged communities, are being imparted skills that will improve their employability

Farmer's son to Site Supervisor

Name: Mr. Somnath

Challenge: Could not pursue higher education due to financial difficulties

Intervention: Introduced to CSTI for 3 Months

Impact: Presently appointed as Site Supervisor of rebars with a salary of ₹18,000+

Multi Skilling Training Centre (MSTC) at Vizag

MSTC is a skill-building Centre established by L&T under its CSR initiatives for actively bridging the gap between vocational education and industry needs. The centre helps in improving the employability of fresh ITI technicians, by providing structured skill training by L&T qualified trainers.

In FY 2021-22, the centre has had 125 students and successfully provided basic training to 74 unique beneficiaries of which 34 are women (46%). While out of the 51 advance batch trainees, 23 (45%) got placed with various employers.

Case Study

Self-employment thought Self-development

Name: Initiative DAWN

Location: Kolkata

Impact: Encouraging self-employment among women by introducing various skill development programmes like tailoring, embroidery etc.



L&T-eers continued to engage with children and youth through virtual means – teaching, mentoring, reading out stories, building life skills, conducting educational quizzes, support with sessions on psycho-social care and awareness sessions on environment, sanitation, safety and other issues. L&Teers worked towards mentoring 6th-8th grade children in rural schools to create Science Technology Engineering Math (STEM) models for state level competitions. Several environment related activities included tree plantations, cleanliness drives and creation of artificial nest boxes installed at public gardens and parks were undertaken. Blood donation is part of the L&T heritage and this year **18,474** units of blood was donated.

4,900 L&T-ites volunteered to reach more than 12,800 people, clocking more than 37,119 volunteering hours.



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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, bankers, business partners, Central and State Governments and the communities we interact with. We believe that enduring relationships with all stakeholders provide us with insights that help us review and progressively refine our strategies to create long-term value for all.

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. Our institutional investors include:

Investors	Sum of % Equity
LIC	11.9
GIC Singapore	2.5
HDFC Mutual Fund	2.3
NPS Trust (India)	1.8
ICICI Prudential Mutual Fund	1.8
Fidelity Investments	1.8
GIC India	1.7
SBI Mutual Fund	1.6
ICICI Prudential Life Insurance	1.3
Kotak Mutual Fund	1.2
Franklin Mutual Fund	1.0
SBI Life Insurance	1.0
Nippon Mutual Fund	1.0

₹1,019 Bn Value distributed in FY 2021-22



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. Some of our major clients include State and Central Government departments, ministries, and local municipal bodies as well. We engage with our customers regularly through various modes of communication to get their feedback and suggestions and understand their requirements. Our Customer Satisfaction Score is 89% during FY 2021-2022. Further details have also been provided in BRSR Principle 4-Q2 and Principle 9.

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 5 lakh vendors, dealers, sub-contractors and workers in FY 2021-2022.

Our Code of Conduct has been revamped and includes compliance with environmental regulations, health and safety, labour practices, human rights, ethical behaviour and transparency in business processes. As at March 31, 2022, around 65,000 vendors have signed the Code of Conduct (CoC). Suppliers are assessed based on their environment and social performance during vendor registration and onboarding. Further details have also been covered in BRSR Principle 5 and 6.

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 compliance is non-negotiable. 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:

Make in India	Swachh Bharat Abhiyan	National Health Mission	National Skill Development Mission
 Local sourcing of products and services Our Defence Engineering business collaborates extensively with the Government In FY 2022, we have sourced materials from 2,615 MSME suppliers 	 3,611 household toilets constructed under ICDP from 2017-18 using local skills and materials 855 school toilets constructed from 2015-16 27,000+ children trained in using toilets, cleanliness and hygiene from 2015-16 Community-based monitoring committees ensured that these villages became open defecation free Swajal Yojana under Rural Development Ministry: Water shed development programme under ICDP National Rural Livelihood Mission (NRLM): SHG programme under ICDP Pradhan Mantri Krishi Sinchayee Yojana: Accelerated Irrigation Benefit Programme- Drip irrigation in ICDP 	 National AIDS Control Programme (NACP), L&T ART centre at Andheri Revised National TB Control Programme (RNTCP) at L&T TB Centre at Andheri National Family planning Programme: Contraceptive services made available at L&T Health Centres Integrated Child Development scheme: Improving quality of services at Anganwadi and capacity building of anganwadi workers 	 National Skill Development Mission- L&T CSTI and Skill Development Academy (SDA) at Madh Sarva Shiksha Abhiyan(SSA) Community pre school programmes and community learning centres preventing dropouts and ensuring enrolment STEM Initiative of National Science and Technology Communication Council and the Department of Science and Technology, Government of India- STEM Education Programme-Engineering Futures

Interventions during the year include:

National Smart Cities Mission	Aerospace
The Smart World & Communication 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	Manufacturing shops for space launch vehicles at Powai and Coimbatore
2. Vizag Smart City	
3. Prayagraj Smart City	
4. Mumbai City Surveillance	
5. Raipur Smart City	
6. Moradabad Smart City	
7. Patna Smart City	
8. Jhansi Smart City	
9. BBNL (Bharat Broadband Network) Bharat Net Project [High speed internet connectivity in rural Maharashtra]	
10.JHARNET 2.0 (Government of Jharkhand)	
11.Early Warning Dissemination System (EWDS) helped Odisha and Andhra Pradesh Governments during Cyclone Yaas	



L&T's financial capital helps it create a solid foundation. The Company has created a strong balance sheet with strong linkages to economic growth that can help India reduce external dependencies and enhance self-reliance. L&T has judiciously managed its capital structure, helping the Company to counter risks effectively. Despite the size of its business, L&T has been able to maintain growth. Financial prudence has helped the Company navigate its way through the challenging period of the COVID-19 pandemic.

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KEY HIGHLIGHTS OF FY 2021-22

28%¹ PAT GROWTH

62% INTERNATIONAL ORDER INFLOW GROWTH

STRATEGIES IMPACTED



SDGs IMPACTED



KEY MATERIAL ISSUES IMPACTED

- Customer Experience and Satisfaction
- Corporate Governance
- Business Ethics
- Talent Management-Attraction, Retention & Development
- Climate Action
- Data Security, Privacy, and Cyber Security
- Quality of Products and Project Delivery
- Brand Management
- Social Engagement & Impact

¹ Excluding Exceptional items and Discontinued operations

Input Metrics

Output Metrics



L&T's standalone financials reflect the performance of businesses like Infrastructure, Hydrocarbon,

Power, Heavy Engineering, Defence Engineering and others. The 'others' segment consists of Realty, Construction & Mining Machinery, Rubber Processing Machinery, Smart World & Communication and Digital Businesses. During the financial year, L&T Hydrocarbon Engineering Limited, a wholly-owned subsidiary company was merged with the Company pursuant to approval of the Scheme of Arrangement from National Company Law Tribunal, Mumbai Bench (NCLT) with the appointed date of April 1, 2021. Financials for FY 2021-22 are consequent to the merger and previous year's figures have accordingly been regrouped.



Key highlights of FY 2021-22:

- Order Inflow achieved, basis robust growth in international orders ~62%.
- Revenue growth of 16% reflects progress achieved on execution of robust Order Book.
- PAT from continuing operations (excluding exceptional items) registered a substantial growth of 28%. Besides revenue growth, higher dividend from Subsidiaries coupled with lower interest cost on reduced borrowings, facilitated the growth.
- The margin remains stable notwithstanding the headwinds faced from increasing commodity prices.
- The Board of Directors has recommended a final dividend of ₹22 per equity share for the approval of shareholders an increase of 22% per share over the previous year.



Economic value generated and distributed⁵ [in ₹ Bn]

Value Generated





Value Distributed



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Value Generated - Value Distributed = Value Retained



Description	2021-22	2020-21
Economic Value Generated	1061.71	927.09
Manufacturing, construction and operating expenses	841.21	721.50
Employee wages and benefits	73.91	63.88
Payments to providers of capital		
Interest	17.54	23.82
Dividend	30.91	25.28 ⁶
Payments to exchequer	54.36	53.41
Community investments (CSR spend)	1.32	1.57
Economic Value Retained	42.45	37.61

⁵ Excluding Exceptional items and Discontinued operations ⁶ FY 2020-21 excludes special dividend

SUSTAINABLE DEVELOPMENT GOALS (SDGs)

SDGs define global priorities and aspirations for 2030, with objectives to achieve conservation and ecological balance.

The following demonstrate our alignment with SDGs and our initiatives towards climate change mitigation, environmental conservation and corporate social responsibility.

Goals	Initiatives	Page number(s)	
1	- Skilling programmes for youth and migrant labour enables higher wage-earning capacity	148-157,	
A:++:+	 Vocational, life skills training and job placements for skilled youth, women and differently-abled 	158-167, 168-177, 178-195	
End poverty in all	 Encouraging entrepreneurship among youth, women and differently-abled through training and promoting Self Help Groups (SHGs) 		
	 Increased agricultural income and multi-cropping due to water adequacy 		
	 Created agro-based livelihood, increasing household incomes 		
	- Formation of farmer's groups and market linkages for better crop prices		
2	- Training communities in better nutrition practices	136-147,	
End hunger, achieve	 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. 	178-195	
food security, improve nutrition and	 Nutrition awareness campaign and counselling for women, pre-school teachers and school children from the community 		
sustainable agriculture	 Addressing malnutrition among children by providing services related to education of mothers, prevention, early detection and treatment 		
	 Promoting low-cost backyard nutrition gardens and recipe demonstration in rural communities; training households in incorporating traditional millets and locally-available low-cost nutritive foods in everyday meals 		
	 Supplementary multi-vitamins / milk at Anganwadis / schools 		
	 Livestock management and training in dairy and poultry business 		
	 Provide food and ration in disasters and crisis situations 		
3 AND WILL STREE	 Multi-specialty community health centres providing access to maternal, family welfare, paediatric and general healthcare 	168-177, 178-195	
/w/❤	- Health centres offering mental health services, child- guidance clinic and counselling		
Ensure healthy	 Mobile health vans and camps for school children, women and elderly from underprivileged communities 		
lives and promote wellbeing of people	 Health awareness for adolescents 		
of all ages	 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 the COVID-19 pandemic 		
	 Welfare teams at the workplace 		

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Goals	Initiatives	Page number(s)
	 School infrastructure development for creating a conducive learning environment, including construction of school sanitation facilities 	178-195
	 Making Government schools accessible by providing technology-enabled education (e-learning facilities) 	
Ensure inclusive and	- Mini science centres and laboratories to develop interest in science subjects	
quality education, and promote lifelong learning opportunities	 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 parental 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 providing digitally-enabled devices to the underprivileged children or visiting students at their homes to provide study material in print form 	
g ann	 Making water available to doorstep and drudgery reduction initiatives 	168-177,
	 Awareness on women's health and menstrual hygiene 	178-195
₽	 Toilet facilities in schools for girls 	
Achieve gender equality	- Motivate parents to encourage girls to participate in STEM activities and exposure visits	
and empower all women and girls	 Creating livelihood opportunities and encouraging entrepreneurship among women through skill development, vocational training programmes and market linkages 	
	 Formation of women's Self-help Groups (SHGs), ensuring participation and decision making in village development and school management committees across villages 	
6 constants	 Achieving water adequacy for drinking, sanitation and agriculture through watershed projects, as part of Integrated Community Development Programmes (ICDP) 	136-147, 178-195
V	- Supplementing water bodies to increase ground water level with participation from communities	
Ensure availability	 Constructing water harvesting structures with contribution from the community and ensuring their maintenance 	
and sustainable water management and sanitation for all	 Developing community-based groups like Village Development Committees and 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 Farmers' 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	
7 minutes	 Providing solar lamps to the underprivileged communities and with back-up for communities and schools 	136-147, 148-157
- O -	 Increasing renewable energy use within campuses and project sites 	
SHEEL -	- Green products and services portfolio for customers	
Ensure access to	 Promoting solar agricultural fences in villages 	
sustainable energy for all	– Promoting bio-gas plants	

Goals	Initiatives	Page number(s)
8 INCONTINUES AND INCOME CONTINUES	 Employable skill training and placements for youth from underprivileged communities, physically and mentally-challenged persons 	168-177, 178-195,
	 Construction Skills Training Institutes for skilling youth 	196-199
	 Transform fresh ITI candidates to multi-skilled workers 	
Promote inclusive and sustainable economic	 Skilling youth through training institutes 	
growth, full and	 Certified computer courses for students 	
productive employment	 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 	
9 MALEER MONALIAN	 Embolden automation with focus on application for patents/Intellectual Property Rights (IPR) to inspire innovation 	148-157, 158-167,
- 🕸 -	 Resilient infrastructure creation and sustainable industrialisation for our clients, through our offerings – i.e. green product and service portfolio 	196-199
Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	 Focus on 'Make in India' initiatives to create employment opportunities and import substitution 	
10 -	- Merit-based hiring with emphasis on equal opportunities	168-177,
<ê>	 Established policies to empower employees irrespective of gender, age, disability, race and religion 	178-195
Reduce inequality within	 Encouraging participation of vulnerable groups like women and the deprived in rural development committees of developmental projects supported by the Company 	
and among countries	 Fairness in distribution of resources within villages under ICDP to circulate the benefit to vulnerable communities 	
	- Prioritise needs of marginal and poor farmers in rural development programmes	
11 Section of the sec	 Create comprehensive and smart technology solutions for critical infrastructure, spanning airports, power plants, metro rail and IT parks 	136-147, 158-167
ABE	 Offer specialised turnkey GIS-based network management solutions for city surveillance, traffic monitoring and analysis 	
Make cities and human settlements inclusive,	 Road barricades and guards to control traffic areas around project sites, especially busy junctions in the city, along with road safety awareness campaigns 	
safe, resilient and sustainable	 Garden maintenance in cities and flood relief interventions 	
Sustainable	 Sustainable ICD Programme for water-stressed rural settlements 	
	 Promoting climate resilient and sustainable agricultural practices, reducing the input cost of crops and increasing the yield by promoting organic methods of cultivation. 	
12 thread to be a construction of the consumption and production patterns	 Implement material conservation initiatives, energy efficiency advancement projects and sustainable production practices 	136-147, 148-157
	- Our cumulative energy conservation over the years is more than 400,000 GJ.	
	 We proactively utilise flash granular blast furnace slag and crushed sand in our construction projects and recycled steel wherever permissible. 	
	 Discouraging plantation of water-intensive crops, use of indigenous pesticides, seed treatment, balanced dose of fertilisers 	
	 Multi-cropping among farmers on increase 	

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Goals	Initiatives	Page number(s)
13 COMMIT	 Climate change mitigation and adaptation initiatives: GHG intensity reduction projects, promoting the use of renewable energy, green buildings and tree plantation 	136-147, 148-157
	- Measurable targets for reducing energy and carbon intensity at campuses and project sites	
	 Carbon footprint mapping at the organisational level 	
Take urgent action to	 Discourage over-exploitation of ground water 	
and its impacts	- Minimising or avoiding use of chemical fertilisers and preventing degradation of soil quality	
	 Building capacity of communities to address climate change and its impact 	
	- Alignment with National Action Plan on Climate Change (NAPCC), Government of India	
	 Evaluate business process risk to ensure that negative impacts are avoided / minimised /controlled 	136-147
Conserve the oceans, seas and marine resources for sustainable development		
15 mm	- Building soil conservation to prevent soil erosion in the ICD programme	136-147,
12	 Village level committee to regulate the use of common resources 	158-167
	 Rainwater harvesting in schools and households 	
Protect, restore and	- Lake clean-up and reserve forest clean-up drives alongside de-silting of water bodies	
promote sustainable use of terrestrial ecosystems,	 Planted 700,000+ saplings in last five years and 150,000+ fully-grown trees are nurtured across major campuses 	
manage forests, combat	 In-house guidelines on scientific tree plantation and maintenance 	
desertification, and halt land degradation and biodiversity loss	 Felicitation of guests with a Tree Certificate, instead of a floral bouquet – planting a tree for each certificate 	
	- Optimising the use of natural resources	
	 Afforestation by creating fast-growing sustainable forest 	
16 PLACE AND STREAME INCOMPANY AND STREAME	 Village level committee and democratic process formulated for maintenance, usage and monitoring the sustainability of ICDP interventions 	136-147, 178-195
- X	- Encourage democratic functioning and financial transparency in conduct of SHG business	
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective as well as accountable institutions at all levels	 Associating with industry forums and Government bodies for promoting sustainable development 	
17 Partnersbers	- Collaboration and partnership with state and national Governments, NGOs and ITIs	178-195
88	 Sharing best practices with stakeholders 	

Strengthen the means of implementation and revitalize global associations for sustainable development

GRI CONTENT INDEX

This Integrated Report is aligned to the GRI Standards and the mapping is as follows:

GRI Standard	Disclosure	Page No
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	196-199
	203-1 Infrastructure investments and services supported	180-193
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	196-199
	301-1 Materials used by weight or volume	138, 139, 143
GRI 301: Materiais 2016	301-2 Recycled input materials used	138, 139, 143, 144
	302-1 Energy consumption within the organization	138, 139, 140
GRI 302: Energy 2016	302-3 Energy intensity	140
	302-4 Reduction of energy consumption	138, 139, 140
	303-2 Management of water discharge-related impacts	142
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	142
	303-5 Water consumption	138,142
	305-1 Direct (Scope 1) GHG emissions	141
	305-2 Energy indirect (Scope 2) GHG emissions	141
	305-3 Other indirect (Scope 3) GHG emissions	141
GRI 305: Emissions 2016	305-4 GHG emissions intensity	141
	305-5 Reduction of GHG emissions	132
	305-6 Emissions of ozone-depleting substances (ODS)	141
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	141
C PL 200: 10/	306-3 Waste generated	142
GRI 306: Waste 2020	306-4 Waste diverted from disposal	142
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	174
	403-1 Occupational health and safety management system	175-177
	403-2 Hazard identification, risk assessment, and incident investigation	175-177
GRI 403: Occupational Health and Safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	175-177
	403-9 Work-related injuries	175
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	169
GRI 405: Diversity and Equal Opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	174
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	180-193



ASSURANCE STATEMENT

Independent Verification Statement

Introduction

DNV Business Assurance India Private Limited ('DNV') has been commissioned by the management of L&T Limited ('L&T' or the 'Company', Corporate Identity Number: L99999MH1946PLC004768) to carry out an independent customised verification of selected sustainability performance data related to Energy and Greenhouse Gas Emissions, Water, Waste, Occupational Health and Safety, Employees, and Corporate Social Responsibility. These performance datasets have been prepared by L&T using topic-specific Standards from the Global Reporting Initiative ('GRI') Standards ('GRI Standards'), that is,

- 302-1 Energy consumption within the organization from GRI 302: Energy 2016;
- 305-1 Direct (Scope 1) GHG emissions, 305-2 Energy indirect (Scope 2) GHG emissions, and GRI 305-3; Other indirect (Scope 3) GHG emissions from GRI 305: Emissions 2016;
- 303-3 Water withdrawal and 303-5 Water consumption from GRI 303: Water and Effluents 2018;
- 306-3 Waste generated from GRI 306: Waste 2020;
- 307-1 Non-compliance with environmental laws and regulations from GRI 307: Environmental Compliance 2016;
- 403-9 Work-related injuries from GRI 403: Occupational Health and Safety 2018, and number of safety training hours;
- Number of permanent employees (male and female); and,
- number of corporate social responsibility (CSR) beneficiaries, and CSR expenditure.

for disclosure in the Business Responsibility and Sustainability Report of its Annual Integrated Report of FY 2021-22.

Our engagement has been carried out based on DNV's assurance methodology VeriSustain^{TM1}, (customised verification procedure) as mutually agreed with L&T for the performance data detailed in Annexure - 1 and provides a limited level of verification while applying a $\pm 5\%$ materiality threshold for errors and omissions.

The intended user of this Verification Statement is the management of the Company (the 'Management'). The team is responsible for all data as well as related assumptions and calculation methodologies as information provided to us for verification, as well as the processes for collecting, analysing and reporting the sustainability performance data in its BRSR as part of its Annual Integrated Report. Our verification engagement is based on the assumption that the data and information provided to us is complete and true and free from material misstatement. We expressly disclaim any liability or co-responsibility for any decision a person or entity would make based on this verification statement. This exercise was carried out during April 2022 – July 2022 by a team of sustainability professionals of DNV.

Scope, Boundary and Limitations of Verification

The scope of the verification includes the identified sustainability performance data (detailed in Annexure - 1) for the selected boundary of L&T and its twelve (12) Independent Companies ('ICs') in India for the period 1st April 2021 to 31st March 2022 as indicated in the BRSR, in

¹ The VeriSustain protocol is based on the principles of various assurance standards including International Standard on Assurance Engagements 3000 (ISAE 3000) Revised (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and the GRI Principles for Defining Report Content and Quality, international best practices in verification and our professional experience; and is available on request from www.dnv.com

accordance with the scope of work agreed upon with the management of the Company including the sampling plan to arrive at our conclusion.

During the verification process, we did not come across limitations to the scope of the agreed verification engagement. This verification engagement did not involve any engagement with external stakeholders. The verification was conducted based on desk reviews, site visits to sample ICs, interactions with data owners and other publicly available data made available to us. The review of management approach and other qualitative disclosures was not carried out as part of this engagement. The verification of reported data on expenditure towards CSR activities is not within the scope of our verification exercise as a separate audit is carried out by L&T's statutory financial auditors and reported in L&T's Annual Integrated Report.

Verification Methodology

During the verification, we adopted a risk-based approach, and a sample-based verification was carried out for a limited level of verification as per DNV VeriSustain and as agreed with L&T. We undertook the following activities:

- Review of the data management processes that L&T has in place to report the identified sustainability data. We examined and reviewed supporting evidence such as supporting documents, secondary data and other information made available by L&T to us.
- Carried out online and on-site verification for sample ICs of the Company (i) Buildings and Factories, (ii) Transportation Infrastructure, (iii) Heavy Civil Infrastructure (iv) Power Transmission and Distribution, (v) Water and Effluent Treatment, (vi) Minerals and Metals, (vii) Energy Hydrocarbon, (viii) Energy Power, (ix) Heavy Engineering, (x) Defence, (xi) L&T Realty, and, (xii) Smart World and Communication and offices (Chennai Office Campus, Leadership Development Academy at Lonavala, AMN Tower, L&T House, and Knowledge City) to review the processes and systems for preparing site level sustainability data and implementation of sustainability strategy. DNV was free to choose sites for conducting our sustainability performance data verification.
- Review of systems and procedures for data collection and aggregation, that is, the calculation methodology, assumptions of the selected consolidated sustainability performance data (Annexure-1) prepared for the Company's internal reporting purposes and to be included in the BRSR which forms part of its Annual Integrated Report.
- Assessed the robustness of the data management systems, data accuracy, data flow and controls for the reported sustainability performance data, as well as the processes for data consolidation in context to the principle of Completeness as per DNV's VeriSustain.
- Verification of sample data to check accuracy and reliability for a limited level of customised verification through interaction with data owners.

Conclusions

In our opinion, on the basis of limited level of verification undertaken and mutually agreed scope of work, nothing has come to our attention that would cause us not to believe that the data verified as listed in Annexure - 1, is not a reliable and accurate representation of L&T's selected performance data. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors, and the errors have been communicated for correction and corrected.

Our Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the DNV Code of Conduct² during the assurance engagement and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. We were not involved in the preparation of any statements or data included in the BRSR except for this Assurance Statement and Management Report. DNV maintains complete impartiality toward stakeholders interviewed during the assurance process. We did not provide any services to L&T and its subsidiaries in the scope of assurance for the reporting period that could compromise the independence or impartiality of our work.

For DNV Business Assurance India Private Limited,

Radhakrish Radhakrishnan, Kiran Digitally signed by Radhakrishnan, Kiran Date: 2022.07.08 13:32:56 +05'30'	Vadakepatth Vadakepatth, Nandkumar , Nandkumar 13:36:39 +05'30'
Kiran Radhakrishnan	Vadakepatth Nandkumar
Lead Verifier	Technical Reviewer
DNV Business Assurance India Private	DNV Business Assurance India Private
Limited, India.	Limited, India.

8th July 2022, Bengaluru, India

DNV Business Assurance India Private Limited is part of DNV – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnv.com

² The DNV Code of Conduct is available on request from <u>www.dnv.com (https://www.dnv.com/about/in-brief/corporate-governance.html)</u>

Annexure 1:	Verified	Performance	Data -	2021 -	- 22

Environmental Compliance				
Environmental Regulatory Non-Compliances Resulting in	No. of cocos	2 (Transportation		
Fines or Prosecutions	No. of cases	Infrastructure IC)		
Energy (Renewable)				
Indirect energy consumption	GJ	127,129		
Energy (Non Renewable)				
Direct energy consumption ⁽¹⁾	GJ	8,365,802		
Indirect energy consumption ⁽²⁾	GJ	1,281,464		
Greenhouse Gases ⁽³⁾				
CO2e – Total	KT	889.063		
CO ₂ e - Scope 1	Т	615,035		
CO ₂ - Scope 2	Т	274,028		
N ₂ O - Scope 1	Т	0.93		
CO_2e – Scope 3 (Cat-1: Purchased goods and services,				
Cat-5: Waste generated in operations {solid waste},	Т	4,976,909		
Cat-6: Business travel and Cat-7: Employee commute)				
Water		•		
Water Withdrawal – Total	M ³	9,602,372		
Water Withdrawal – From river / lakes	M ³	2,001,310		
Water Withdrawal – From municipal sources	M ³	1,369,437		
Water Withdrawal – From rain water	M ³	82,364		
Water Withdrawal – From ground water	M ³	3,251,265		
Water Withdrawal – From other sources (Tankers)	M ³	2,897,996		
Water (fresh) consumed - Total	M ³	9,410,093		
Waste ⁽⁴⁾				
Hazardous waste – Generated	Т	2,464		
Non-hazardous waste – Generated	Т	48,995		
Occupational Health and Safety ⁽⁵⁾				
Number of reportable accidents	No. of cases	132		
Number of fatalities	No. of cases	25		
Number of man days worked	Days	1,154,859,499		
Number of man days lost	Days	161,946		
Number of first aid cases	No. of cases	8,769		
Number of near miss accidents	No. of cases	37,674		
Number of safety training hours	Hours	4,969,092		
Employees				
Number of permanent male employees	Number	42,618		
Number of permanent female employees	Number	2,997		
CSR ⁽⁶⁾				
Number of beneficiaries impacted	Number	1,127,544		
CSR Expenditure	Crore INR	136		

Note 1: Direct energy: Consumption is reported based on amount of fuel procured and not consumed as required under GRI topic-specific standard 302-1.

Note 1: Direct energy: Consumption reported based on another of the procured and not consumed as required under our consumption. Note 2: Indirect energy: In case of certain ICs (Smart World and Communications, and Building and Factories) amount of indirect energy consumed is calculated by the cost of total grid electricity consumed divided by an average unit cost decided by each IC. Note 3: Emissions due to SFs and CH4 are not monitored and reported. Types of Ozone Depleting Substances have not been reported by type (HFC, CFC). Note 4: Hazardous and non-hazardous waste classification are not carried out based on types (solid and liquid) as required under GRI topic-specific Standard 206.2 306-3.

Note 5: Reporting on Occupational Health and Safety covers entire workforce covering permanent employees and on-contract workers. Note 6: CSR amount spent is not within the scope of our verification exercise as a separate verification is carried out by L&T's statutory financial auditors and reported in the Annual Integrated Report.

Note 7: Detailed comments on assumptions, methodologies and estimations reviewed as part of DNV's verification are provided in DNV's Management Report.

UNITED NATIONS GLOBAL COMPACT

Communication on progress

Principle	Category	Description	Page
1	Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights.	128-129, 225, 237, 238, 239
2	Human Rights	Businesses should make sure that they are not complicit in human rights abuses.	128-129, 225, 237, 238, 239
3	Labour	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	239, 248
4	Labour	Businesses should uphold the elimination of all forms of forced and compulsory labour.	128-129, 225, 237, 238, 239
5	Labour	Businesses should uphold the effective abolition of child labour.	128-129, 225, 237, 238, 239
6	Labour	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	128, 130, 228
7	Environment	Businesses should support a precautionary approach to environmental challenges.	136-147, 240-248
8	Environment	Businesses should undertake initiatives to promote greater environmental responsibility.	136-147, 240-248
9	Environment	Businesses should encourage the development and diffusion of environmentally friendly technologies.	145
10	Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	128, 129, 224

