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.
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 the financial and non-financial performance of L&T Limited and is aligned to the principles 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 PROCESS

VISION AND VALUES

Strategic Objectives

- **SO-I**: Value-accrative growth of current businesses
- **SO-II**: Scaling up digital and E-commerce businesses
- **SO-III**: Developing business offerings to ride the Energy Transition wave
- **SO-IV**: Completing the divestment of non-core businesses
- **SO-V**: Enabling business sustainability through high focus on ESG and Stakeholder Value Creation

Strategic Enablers

- **SE-1**: Operational Excellence
- **SE-2**: Industry leading capabilities in digital and advanced technologies
- **SE-3**: Financial Position
- **SE-4**: Talent and Leadership
- **SE-5**: Capability enhancement through innovation, R&D and partners

MATERIAL TOPICS

STAKEHOLDER ENGAGEMENT

GOVERNANCE: POLICIES, PROCESSES, RISK MANAGEMENT
The six Capitals are utilised through business processes and models to generate outputs in sectors of infrastructure, energy, oil & gas, metals, process plants and others, and create value for the stakeholders.
## VALUE CREATION MODEL

### Natural Capital
- Water consumption: 11 Mn kL
- Energy from Non-Renewable sources: 10.61 Mn GJ
- Energy from Renewable sources: 0.13 Mn GJ
- Spend on Environment: ₹ 288.4 Mn
- Material consumed (Mn tonnes):
  - Cement: 4.61
  - Sand: 6.95
  - Ferrous: 3.06

### Manufactured Capital
- Active Project Sites: 729
- Manufacturing plants: 18

### Intellectual Capital
- R&D spend (cumulative last 3 years): ₹ 3,448 Mn
- Patents filed: 8
- R&D Engineers and Scientists: 380
- Active collaborations and partnerships: 20

### Business Processes and Offerings:

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residences</td>
<td>Wastewater recycled: 68%</td>
</tr>
<tr>
<td>Commercial Spaces</td>
<td>GHG emissions: 0.97 Mn tCO₂e</td>
</tr>
<tr>
<td>Mass Transit and Railways</td>
<td>GHG emission intensity: 889 tCO₂e/ ₹ Bn</td>
</tr>
</tbody>
</table>
| Airports | Eco-friendly and recycled material used (tonnes):
  - Steel: 2,339
  - Zinc: 85
  - Crushed Sand: 3.1 Mn |
| Expressways | Building Infra created: 21 Mn sq. ft. |
| Solar Power Plants | Green Building Infra created: 8 Mn sq. ft. |
| Hydro Power Plants | Mobility Infra created: 2,971 |
| Bridges & Tunnels: 45 km | Power Infra created:
  - Transmission Lines: 2,545 ckm
  - Solar Power Capacity: 484 MWp |
| Water & Sanitation Infra created:
  - Irrigation capacity: 1 lakh ha
  - Treatment capacity: 974 MLD |
| Factory Output: 324,579 tonnes | Green Business (Revenue): ₹ 413 Bn |
| Value Engineering projects: 272 |
| Revenue in FY 2023 from new and emerging businesses: ₹ 81,776 Mn |
Human Capital

Employees: 55,202
Engineers: 41,000
Workmen: 277,857
Employees covered under Leadership Development Programmes: 1,672

Social & Relationship Capital

CSR spend: ₹1.4 Bn
CSR partners: 64
MSME suppliers: 10,736
Memberships of Industry Chambers: 75

Financial Capital

Order Book: ₹3,305.5 Bn
Net Current Assets: ₹324.9 Bn
Net Fixed Assets: ₹117.1 Bn

Digitalisation

Value Engineering

Global Sourcing

Speed & Scale

Nuclear Power Plants
Water Treatment Plants
Transmission Lines
Oil & Gas Facilities
Refining and Petchem Plants
Ferrous and Non-ferrous Plants

Revenue per employee: ₹20 Mn
Attrition Rate: 13.9%
Average training hours per employee: 20
Accident-free man hours: 1,040 Mn

CSR beneficiaries: 1.51 Mn
Contribution to Exchequer: ₹59.5 Bn
Complaints received: 803
Complaints resolved: 528

Turnover: ₹1,105 Bn
PBIT: ₹119.6 Bn
Dividend payout: ₹33.7 Bn
Return on Net Worth: 11.3%

1 Spend on environmental management; pollution control, environmental monitoring, waste management, wastewater treatment cost, etc.
2 Mobility Infra created includes Roads (171 lane km), Railways (2,672 track km) and Mass Transit (129 track km).
4 Initiatives for improving processes, products and services to reduce cost, improve project delivery and increase customer satisfaction.
5 Businesses started in the preceding three financial years.
6 Covers education institutes, universities, start-ups, etc.
7 Across all stakeholders, for breakup refer to Section A in Business Responsibility and Sustainability Reporting (BRSR).
8 Wastewater recycled / Wastewater generated.
STAKEHOLDER ENGAGEMENT

L&T’s businesses are primarily EPC projects (Engineering, Procurement, Construction) and Hi-Tech Manufacturing. The Company aims to balance the needs, interests and expectations of various stakeholders with those of the business and deliver long-term value. Aligned with the activities of the businesses, the Company has identified the following key stakeholders:

**Government**

Governments (sovereign, sub-national, local) and related entities (public sector enterprises) are the largest clients of the Company, comprising ~80% of the total Order Book. Additionally, they are also the key determinants of policies (sectoral as well as cross-cutting), long and short-term plans for various sectors, and the country at large.

**Customers**

Other key customers are private sector clients, which comprise ~20% of the total Order Book. While the Company actively seeks new clients, it also enjoys a long-term relationship with many clients. These lead to repeat business and also create the conditions encouraging development of new solutions and technologies.

**Employees and Workforce**

Human Capital is key to project management and execution for the Company. Through this lever, value creation is targeted in all spheres of organisational processes. In the Company’s projects, manufacturing facilities and other locations, more than 55,000 employees and around 277,000 workers are contributing to this process. The management, development and well-being of the employees and workforce enable the Company to continue on its value-creation journey.
Suppliers and Contractors

The Company’s businesses have a high dependence on supply chain partners for sourcing key input materials (commodities, fabricated items, sub-components, and other raw materials) and delivery of projects (through outsourced contracts, particularly for low value-add activities). These supply chain partners are assessed on a regular basis to enable performance-based tiering, and also aid in vendor development.

Shareholders and Investors

Shareholders and investors enable the Company’s growth by providing the requisite financial resources as well as guiding the Company through their approval/disapproval of the Company’s plans (through voting, voicing concerns, feedback, etc.). The Company actively engages with them to communicate its plans, design the way forward, as well as address their concerns.

Communities

L&T strives to promote socio-economic development in the communities around its operations and project sites, as well as in various underdeveloped locations throughout the country. The Company prioritises supporting the underprivileged and marginalised sections of society to empower them and bridge the gap with others.

Media

Media is one of the important channels of communication for the Company’s performance, plans and policies. It helps in engaging with a larger stakeholders’ group and provides a critical link in the feedback loop on concerns or issues related to the Company.

Regulatory Bodies

Various businesses fall under the purview of specific regulatory bodies, not only sectoral but also in some common areas, e.g., environment, labour, etc. It is pertinent to understand the priorities and concerns of these agencies to enable the Company to ensure compliance with mandated levels.
Fostering and nurturing relationships with the 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.

**GOVERNMENT**
- Press Releases
- Quarterly Results
- Integrated Annual Reports
- Stock Exchange filings
- Issue-specific meetings
- Representations
- As and when required
  - Address concerns related to project execution
  - Compliance with regulations and reporting requirements
  - Seek support to enable on-time completion and delivery according to agreed parameters
  - Provide inputs for policies and plans

**CUSTOMERS**
- Business interactions
- Client satisfaction surveys
- As and when required
- Satisfaction surveys carried out biannually
- Transparent and timely communication to provide updates on the status of contracts/supplies
- Address issues related to the delivery of agreed contracts
- Partnerships for innovation

**EMPLOYEES**
- Employee satisfaction and engagement surveys
- Circulars and messages from corporate and line management
- Welfare initiatives for employees and their families
- Online news bulletins to convey topical developments, print and online in-house magazines and newsletters
- L&T Helpdesk, toll-free number
- Interactions through various engagements platforms and events: Hi5, L&T Radio, Art Beats and so on
- As and when required
  - Support the growth, development and well-being of employees
  - Feedback on Company's policies and actions, and address concerns linked to them
  - Develop better corporate citizens
SUPPLIERS AND CONTRACTORS

- Regular supplier and dealer meets
- As and when required for large suppliers, fortnightly for MSMEs
- Payment-related queries, deliveries, technical discussion, EIP-related queries
- MSME: Exchange of information on vendor deliverables and payment issues

SHAREHOLDERS AND INVESTORS

- Press Releases
- Info desk
- Dedicated email ID for Investor Grievances
- Quarterly Results
- Integrated Annual Reports
- AGM (Shareholders' interaction)
- Quarterly investor presentations
- Investor meets
- Stock Exchange filings and Corporate website
- As and when required
- Showcase sustained value creation through Company's performance
- Seek feedback on Company's plans and strategy
- Address concerns (if any) with respect to Company's policies and actions

COMMUNITY

- Direct engagement and / or through NGO partners for implementing CSR projects in urban as well as rural areas
- Annually – as per the agreed scope and duration of the project
- Supporting the provision of Infrastructure, Health and Education services and Skill-building opportunities based on needs assessment for improving the quality of life among vulnerable, marginalised and underprivileged groups

MEDIA

- Press Releases
- Quarterly Results
- Integrated Annual Reports
- AGM (shareholders' interaction)
- Media interactions
- Quarterly and event-based
- Wider dissemination of the Company’s plans, achievements and value creation
- Create awareness of the Company's businesses, offerings and initiatives
- Enhance brand value

Legend

| Channels of communication | Engagement frequency | Engagement purpose and scope |
MATERIAL TOPICS

Materiality is one of the inputs to the Company’s sustainability strategy, which enables prioritising of its key focus areas. The Company considers the concerns of the stakeholders and importance to the businesses while finalising the material topics.

Assessment Process

- Identification of potential material topics
- Categorisation of potential topics
- Stakeholder identification and prioritisation
- Stakeholder engagement and feedback
- Finalisation of material topics and matrix

Coverage of the Assessment

<table>
<thead>
<tr>
<th>External Stakeholders’ Views</th>
<th>Internal Stakeholders’ Views</th>
<th>Global Frameworks</th>
<th>Industry Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement through online surveys covering stakeholders such as customers, suppliers and vendors, NGO partners and feedback received through periodic interactions with investors, shareholders and analysts</td>
<td>Engagement through online surveys to understand the Company’s priorities and concerns from senior management and employees</td>
<td>Global Reporting Initiative (GRI), Integrated Reporting Framework, Sustainability Accounting Standards Board (SASB) Material topics, UN Sustainable Development Goals (SDGs), BRSR</td>
<td>Peer benchmarking including Indian and International companies</td>
</tr>
</tbody>
</table>
Materiality Matrix

32 potential material topics are directly or indirectly related to the business. Stakeholders’ feedback was obtained through surveys and finally, the top 15 material topics, which are most important for short, medium and long-term value creation from internal and external stakeholders’ perspectives, were identified.

Material Topics

1. Customer Experience and Satisfaction
2. Corporate Governance
3. Business Ethics
4. Employee and Workforce Engagement, Well-being, Health and Safety
5. Human Rights and Labour Conditions
6. Skilled Manpower
7. Sustainable Supply Chain
8. Talent Management – Attraction, Retention and Development
9. Climate Action
10. Diversity, Inclusion and Equal Opportunity
11. Data Security, Privacy and Cyber Security
12. Quality of Products and Project Delivery
13. Brand Management
15. Social Engagement and Impact
Overview of the Material Topics

Material topics are those which pose risk (if not addressed) or create opportunity for the Company and have financial implications. An overview of the material topics, approach to mitigate in case of risk and indication of financial implications is as follows:

<table>
<thead>
<tr>
<th>Legend</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="Material topic identified" /></td>
</tr>
<tr>
<td><img src="image" alt="Financial Capital" /></td>
</tr>
<tr>
<td><img src="image" alt="Intellectual Capital" /></td>
</tr>
<tr>
<td><img src="image" alt="Manufactured Capital" /></td>
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<tr>
<td><img src="image" alt="Natural Capital" /></td>
</tr>
<tr>
<td><img src="image" alt="Human Capital" /></td>
</tr>
<tr>
<td><img src="image" alt="Social &amp; Relationship Capital" /></td>
</tr>
<tr>
<td>Financial implications:</td>
</tr>
<tr>
<td><img src="image" alt="Positive" /></td>
</tr>
<tr>
<td><img src="image" alt="Negative" /></td>
</tr>
<tr>
<td><img src="image" alt="Both" /></td>
</tr>
<tr>
<td>Risk or opportunity:</td>
</tr>
<tr>
<td><img src="image" alt="Risk" /></td>
</tr>
<tr>
<td><img src="image" alt="Opportunity" /></td>
</tr>
</tbody>
</table>

1. Customer Experience and Satisfaction

The Company’s presence is primarily in EPC and projects and customers include Central and State governments (as well as foreign governments) and public and private sector organisations. Key focus areas are on-time project completion with deeper ‘customer connect’ at multiple levels, regular visibility of projects, progress, use of industry-leading engineering techniques, high safety standards and agile response to emerging issues to ensure a project is on track.

2. Corporate Governance

Implementing policies and practices to ensure that stakeholders’ expectations are met and balanced. Reflects L&T’s core values, i.e., independence, transparency, accountability, responsibility, compliance, ethics and trust.

Policies, Code of Conduct, and various management systems are in place to ensure transparency, responsibility, compliance, ethics and trust across business processes and accountability to stakeholders. Details available at [https://investors.larsentoubro.com/corporate-governance.aspx](https://investors.larsentoubro.com/corporate-governance.aspx)

Please refer to Annexure ‘B’ – Report on Corporate Governance for further details.

3. Business Ethics

Implementation of policies and procedures regarding topics that include, but may not be limited to, insider trading, fraud, bribery, discrimination, professional conduct, etc.

Clear rules, policies, Code of Conduct and procedures are enforced to deal with issues, which include, but may not be limited to insider trading, corruption, bribery, discrimination, fraud, professional conduct, etc. Policies available at [https://www.larsentoubro.com/corporate/about-it-group/corporate-policies/](https://www.larsentoubro.com/corporate/about-it-group/corporate-policies/)

Please refer to Annexure ‘B’ – Report on Corporate Governance for further details.
4. Employee and Workforce Engagement, Well-being, Health and Safety

With over 55,000 employees and around 277,000 workforce, it is important to continuously engage the workforce in an effective manner. Engagement includes regular communication, training and development, skilling, management-employee dialogues, and technologies that enable the same.

- Implementation and adherence to OHSAS 18001, ISO 45001: 2018 and other health and safety practices
- Putting in place robust health and safety management systems to keep the workplace free of fatalities, injuries and occupational health hazards
- Automation and digital interventions wherever possible [ViewEHS, Workforce Induction and Skills Application (WISA), SHEILD (Safety Health Environment for Industrial Landscape through Digital)], etc.

Please refer to the 'Human Capital' and 'Intellectual Capital' sections for further details.

5. Human Rights and Labour Conditions

Protecting, respecting, upholding and promoting the basic rights and freedom of all who work in the Company and across the value chain, including ~277,000 workforce. Labour conditions cover areas such as working conditions, wages, benefits, discrimination, working hours, overtime pay, compensation, leaves and respecting collective bargaining agreements (subcontractors and workers). The Company also ensures that it is not complicit in any kind of violations.

- Policies, systems, Code of Conduct, and grievance mechanisms in place to ensure compliance
- Mandatory signing of Code of Conduct as a part of vendor onboarding process laying down minimum requirements for ESG compliance
- Evaluation of key suppliers on Human Rights parameters
- Awareness sessions on issues pertaining to Human Rights across the Company

Please refer to the 'Human Capital' and 'Intellectual Capital' sections for further details.
6. Skilled Manpower

Covers trained, educated and experienced segments of the workforce undertaking more complex mental and physical tasks. Skilling manpower on a continuous basis is important to carry out large contracts related to construction, infrastructure as well as hi-tech manufacturing for Defence Engineering and Heavy Engineering businesses. Primary skill sets include bar bending, formwork, electrical work, tiling, masonry, welding, carpentry, solar electrical work, among others.

- Skill development training undertaken by Construction Skills Training Institutes (CSTIs) collaborating with various institutions, etc.
- Onsite training to upskill workers, skilled manpower enabling skilling of other workers based on the project requirement
- Digital interventions such as WISA (end-to-end digital solution for all workmen-related functions) to improve skill management
- Continuous engagement with the contracting agencies to ensure the right skilled manpower is being hired

7. Sustainable Supply Chain

With a supplier base of more than 100,000 and over 10,000 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 protection.

- Mandatory signing of Code of Conduct as a part of vendor onboarding process, laying down minimum requirements for ESG compliance
- Survey of key suppliers on ESG parameters
- Conducting awareness programmes for vendors and suppliers
8. Talent Management - Attraction, Retention and Development

Attracting, retaining and developing talent through policies and practices related to improving performance, staying competitive, driving innovation, forming productive teams, reducing attrition and creating a strong employer brand. Key aspects include productivity, engineering skills, project execution capability, technology orientation, and leadership pipeline.

- L&D strategy and programmes for various levels, viz. Seven Step Leadership Development Programme, Pragati – Project Leadership Development Programme (PLDP), along with dedicated training institutes and academies
- Engagement platforms such as L&T Radio, Leadership Talks, HEERA, L&T Campus Engage, etc., to encourage open communication

Please refer to the 'Human Capital' section for further details.

9. Climate Action

Key aspects include reduction of GHG emissions, efficiency in energy use, renewables, judicious use of water, recycling of water/waste and use of eco-friendly materials, and green business.

Please refer to the 'Risk Management' and 'Natural Capital' sections for further details.

10. Diversity, Inclusion and Equal Opportunity

Providing equal employment opportunities based on merit without any discrimination and ensuring that hiring, learning and development, and promotion practices foster the building of a diverse and inclusive workforce.

Legend

- Material topic identified
- Description of the material topic
- In case of risk, the approach to adapt or mitigate
- Financial Capital
- Intellectual Capital
- Manufactured Capital
- Natural Capital
- Social & Relationship Capital
- Human Capital
- Financial Implications:
  - Positive
  - Negative
  - Both
- Risk or opportunity:
  - Risk
  - Opportunity
11. Data Security, Privacy and Cyber Security

Protecting the Company and others’ data from malicious attacks and improper use. Includes mechanisms for data security, privacy and cyber security – covering people, processes and technology.

- Development of a multi-year cyber security and resiliency roadmap and made investments in state-of-the-art security platforms
- Tighter measures put in place to ensure adherence to ISO 27000 security standards and set policies and practices
- Implementation of a group-wide Cyber Risk Assurance Framework
- Operationalisation of one of the most advanced Security Operations Centres to monitor developments 24X7 and respond effectively when required to any cyber incidents
- Use of the latest technology stacks based on AI/ML to detect and mitigate attacks
- Awareness sessions on issues such as cyber security, phishing, e-commerce related attacks, etc.
- Business-critical applications and Disaster Recovery (DR) strategy, i.e., processes and technology to recover the system in case of any eventuality/disaster. The critical system’s DR is tested in a routine manner and certified by businesses. Records are maintained.

Please refer to ‘Risk Management’ in the Management Discussion and Analysis section for further details.

12. Quality of Products and Project Delivery

High quality and timely delivery of the projects are critical for success and growth. EPC projects (buildings, infrastructure, energy, etc.) constitute more than 90% of revenue and high-tech manufacturing products (process plants, reactors, converters, etc.) comprise the balance.

- Quality Management systems are in place with required checks and balances, starting from the design phase and across the entire EPC life-cycle
- Regular quality check audits are conducted to ensure compliance with standards and client specifications
- Continuous engagement and feedback received from clients
13. Brand Management
Developing, maintaining and enhancing the reputation and perception of the brand to build brand equity and loyalty, ultimately driving business success.

Increasing water-use efficiency, water conservation through recycling, reuse and efficiency improvement. Hazardous material management covers aspects of use, storage, handling and disposal of hazardous material, e.g., oil, lubricant, oil/paint containers, etc.
- Processes, technologies and systems deployed to reduce the amount of water used, treat wastewater generated, etc.
- Clear SOPs in place to use, handle, store and dispose the hazardous material and waste, and compliance with regulatory norms.

15. Social Engagement and Impact
Creating a positive impact in the areas where the Company operates. Focus areas include Water and Sanitation, Health, Education and Skill Development.

Please refer to 'Risk Management' in the Management Discussion and Analysis section for further details.

Legend
- Material topic identified
- Description of the material topic
- In case of risk, the approach to adapt or mitigate

Financial implications:
- Positive
- Negative
- Both

Risk or opportunity:
- Risk
- Opportunity
The Sustainability Vision of the Company is to pursue eco-friendly growth, promoting a culture of sustainability and innovation, and thereby contributing towards a better world. It is ingrained in the strategy, policies, systems and business operations of the Company.

Strategy

As part of the Lakshya 2026 plan, the Company re-evaluated shareholder value creation, defined social obligations and framed sustainability goals. The outcome of this assessment was the re-articulation of its Strategic Objectives (SOs), which drive value creation over a long-term horizon. The sustainability agenda is driven by the CSR Board Committee. The scope and membership of the Committee have been detailed in Annexure ‘B’ to the Board Report of this Report.

Policy

The approach is articulated in the Sustainability Policy, which is supported by other policies such as Corporate Social Responsibility, EHS, Green Supply Chain, Human Resource policies, Code of Conduct, etc. These policies strengthen integrated thinking and balance the input and output of the six capitals, viz., Natural, Manufactured, Intellectual, Human, Social and Relationship and Financial. 28 policies of the Company have also been mapped against the nine principles of National Guidelines on Responsible Business Conduct¹ covering governance, ethics, human rights, workforce well-being, health and safety, environmental responsibility, public policy advocacy, inclusive growth and equitable development, and value creation for customers. Most of these policies are reviewed and updated periodically to address the evolving and emerging trends, standards and stakeholder concerns.

¹ National Guidelines on Responsible Business Conduct (NGRBC) released by the Ministry of Corporate Affairs (MCA), Government of India, based on nine principles of Responsible Business Conduct. Business Responsibility and Sustainability Report (BRSR) is a disclosure framework mandated by Securities and Exchange Board of India (SEBI) on these nine principles.
Implementation

Over the years, the necessary tools, systems and processes have been put in place to improve performance, achieve goals and disclose the progress on sustainability. The Company also conducts materiality assessment as a process to capture stakeholder concerns on ESG and its importance to the Company. Materiality is one of the inputs to the Company's Sustainability Strategy, which enables prioritising the key focus areas.

The working of the policies is evaluated by third-party agencies including DNV India, TUV-Nord and LRQA on various standards such as ISO 9001: 2015, ISO 14001:2018 and ISO 45001:2018. During the process, these agencies also check policy elements, procedures, action plans, review processes, etc. In addition to the above, relevant third-party certifications and assessments are also conducted across business units periodically.

The responsibility for implementation lies with the Business Unit Heads and the Heads of various Corporate functions, supported by Corporate Sustainability. Various councils, committees and task forces designated with specific responsibilities have also been constituted for operationalising sustainability across the Company.

Sustainability Governance Structure
The Company conducts materiality assessment (refer to Materiality Assessment section) to identify and prioritise the key material topics pertaining to ESG, based on the relative importance of these topics to the stakeholders and in the context of L&T's business imperatives. The assessment identified 15 important material topics, and detailed performance is stated the respective chapters on the six capitals.

To report sustainability highlights at an overall level, at least one KPI has been selected for each material topic based on the importance attached by investors, rating agencies and regulators and these are given below.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Energy</th>
<th>Emissions</th>
<th>Material Management</th>
<th>Green Business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9,882 GJ/ ₹ Bn</td>
<td>889 tCO₂e/ ₹ Bn</td>
<td>24% Recycled and eco-friendly material used</td>
<td>37% Revenue from Green Business</td>
</tr>
<tr>
<td></td>
<td>Energy consumption intensity</td>
<td>GHG emission intensity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.6% Sourcing from renewables</td>
<td>141,300 tCO₂e</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10,155 kL/ ₹ Bn</td>
<td></td>
<td>68% Wastewater recycling efficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water consumption intensity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Social Workforce Skilling and Talent Management

- 28,000+ employees trained on skill upgradation
- 45,000+ workers trained on skill upgradation

Diversity and Inclusion

- 7.1% Diversity
- 89 Women in senior management

Human Rights

- 100% Own locations assessed on and complied with Human Rights requirements

Health and Safety

- 6.9 Mn Safety training man hours
- 0.06 LTIFR\(^1\)

Sustainable Supply Chain

- 40% Sustainable sourcing from suppliers by value
- 7% of input material sourced from neighbouring districts

Governance

- Governance & Ethics: 100% New joinees trained on CoC
- Customer Centricity: 9.2 Customer satisfaction score out of 10

Brand Management

- Certified as Great Place To Work®
- 3rd among ‘World’s Top 200 Environmental Firms’ ranked by ENR for 2022

Data Privacy & Cyber Security

- Zero cases of data breaches

Social Impact

- 1.5 Mn CSR beneficiaries
- 10,736 MSME suppliers

1 Lost Time Injury Frequency Rate
The world is facing unprecedented challenges – climate change, resource scarcity, energy security, among others, and countries as well as corporates are gearing up for the same. L&T has been consistently working towards the conservation of natural resources, building efficient infrastructure, reducing emissions, and urging stakeholders towards behavioural change through consultation and partnership.

Nagaur-Bikaner Water Supply Scheme

50 MWp Solar Tracker Plant, Theni, Tamil Nadu
Key Highlights of FY 2022-23

24% Recycled and eco-friendly material used of total material

1.9 Mn Saplings planted

8.9% Water consumption intensity reduction

Strategy linkage

For details, refer to ‘Business Model and Strategy’ section

SDGs impacted

Material Topics

- Climate Action
- Water, Waste and Hazardous Material Management
- Sustainable Supply Chain
- Corporate Governance
- Brand Management
The Company’s strategy is to adopt a low-carbon pathway for business growth and translate sustainability initiatives to create a positive impact - on the environment and on society. Its sustainability strategy and initiatives are enabled through a sustainability policy, systems and processes. The Green Campus Committee, led by an Executive Director, looks at granular aspects of decarbonisation plans, including setting targets and developing strategies for implementation. The overall performance is monitored and reviewed by the Company’s Board CSR Committee on a quarterly basis, and the same is reviewed by the Board as required. For further information, please refer to ‘Sustainability Governance’ section.

**Net Zero Strategy**

In line with L&T’s sustainability vision for a better world, the Company aims to achieve Carbon Neutrality by 2040 and Water Neutrality by 2035.

Given L&T’s dominant presence in EPC and high-tech manufacturing, the Company plans to pursue an aggressive growth trajectory of more than 60% increase in revenues over FY 2021-22 - FY 2025-26. This will lead to an increase in GHG emissions, though at a slower pace, and peak at 1.1 million tCO₂e in FY 2025-26, followed by an expected decline in emissions. Hence, the focus is on reducing emission intensity across both Scope 1 and 2, in the next three years.

Currently, Scope 1 emissions are primarily due to high share of diesel in the total energy mix (>70%). Scope 2 emissions arise from electricity sourced through the grid comprising around 30% energy used. Accordingly, the initiatives address the objective of 1) Reducing HSD consumption and 2) Increasing renewable energy consumption.

### Reduce HSD consumption
- Efficiency improvement: 2-2.5% per year
- Switching from DG set to grid connection
- Replacement of HSD-powered equipment with electric-powered
- Use of biofuels

### Increase renewable power in electricity consumption
- On-site solar (capex and opex)
- Off-site renewables (PPA, open access)
- Use of solar-powered equipment e.g., light mast streetlights, high power lamps, traffic blinkers, etc.

As a result of the above abatement strategy, the Company is expected to reduce GHG emissions by 27.5% with respect to a 'business as usual' (BAU) scenario by FY 2025-26. Furthermore, the Company targets to plant more than 1.9 million trees per year (currently 1.5 million trees per year), which will further offset the remaining emissions by 25% by FY 2025-26.

To achieve water neutrality, L&T has identified initiatives focused on improving water use efficiency, reducing water consumption, wastewater recycling (through sewage treatment plants and other basic treatment, e.g., sedimentation tanks) and rainwater harvesting. These are expected to reduce water consumption intensity by 30% by FY 2025-26 with respect to FY 2020-21.
Lakshya 2026 Targets on Natural Capital

The Company has set interim targets for carbon neutrality, water neutrality and other areas based on its Net Zero strategy. These targets are part of the current Lakshya 2026 strategy plan and are:

- **Emissions intensity reduction**: 25%
- **Renewable (% of electricity consumption)**: 50%
- **Energy intensity reduction**: 11%
- **Wastewater recycling efficiency**: 75%

**Emission and energy intensity reduction target w.r.t FY 2020-21**

For intensity calculation, the denominator considered is ₹ billion revenue of the Company.

While overall 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 enhancement measures and greater use of renewables.

### Key Highlights of FY 2022-23

<table>
<thead>
<tr>
<th>Renewable Energy</th>
<th>Green Business</th>
<th>Materials Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.13 Mn GJ</td>
<td>37% of Total Revenue (34.7% in FY 2021-22)</td>
<td>24% Non-Virgin/Recycled and eco-friendly materials used</td>
</tr>
<tr>
<td>9.6% of total electricity mix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29,116 tCO₂e</td>
<td></td>
<td>Expenditure on Environmental Measures</td>
</tr>
<tr>
<td>Emissions avoided</td>
<td></td>
<td>₹ 288.4 Mn</td>
</tr>
</tbody>
</table>

**Materials Management**

- **37%** Non-Virgin/Recycled and eco-friendly materials used

**Expenditure on Environmental Measures**

- ₹ 288.4 Mn

Please note that the environment data excludes transit houses, guest houses, holiday homes and company owned residential facilities as part of the scope.

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1 The Green Business of the Company has been reassessed based on FTSE Green Revenues Index Series and value for FY 2021-22 revised from 38.2% to 34.7%
**Energy**

In FY 2022-23, the Company’s total energy consumption was 10.7 Mn GJ, comprising direct energy consumption of 9.4 Mn GJ and indirect energy consumption of 1.3 Mn GJ. Direct energy intensity increased by 2.6% with respect to FY 2021-22, while indirect energy intensity decreased by 6.14% with respect to FY 2021-22.

**Renewable Energy**

The Company has utilised 35.9 Mn kWh, of renewable energy, which comprises 9.6% of its total electricity consumption (374 Mn kWh) in FY 2022-23. The details of the total renewable energy sourced is shown below:

<table>
<thead>
<tr>
<th>Source</th>
<th>Quantity sourced (Mn kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable (Direct)</td>
<td>1.46</td>
</tr>
<tr>
<td>Solar</td>
<td>1.46</td>
</tr>
<tr>
<td>Renewable (Indirect)</td>
<td>34.46</td>
</tr>
<tr>
<td>Solar</td>
<td>12.06</td>
</tr>
<tr>
<td>Wind</td>
<td>22.40</td>
</tr>
</tbody>
</table>

Energy (electricity) from renewable energy sources was 0.13 Mn GJ in FY 2022-23, which is the same as FY 2021-22. The total electricity consumption has increased from 1.31 Mn GJ in FY 2021-22 to 1.35 Mn GJ in FY 2022-23. Compared to FY 2021-22, renewable as a percentage of electricity has decreased slightly due to reduction in generation capacity at a production unit because of unit closure and lower sourcing from other Power Purchase Agreements (PPA). Unavailability of adequate land or surface area at site locations, developers’ preference for long term (10-15 years) PPAs, and variances in charges and regulations across the states in India are the key challenges faced in increasing the sourcing of renewable energy.

**Energy Use Interventions**

The Company is implementing various initiatives across its project sites and manufacturing facilities. Some initiatives and the benefits derived from them are:

- **Reduction in diesel consumption through operational improvements**
  
  Plant and Machinery (P&M) used in construction projects primarily use diesel as a power source. The Company has undertaken various operational improvement initiatives e.g., increasing the utilisation of P&M, reducing the idling time, reducing fuel wastage, fuel budgeting for equipment, replacing older equipment with new ones, etc.

  **Outcome**

  Estimated to help reduce 7,547 tCO₂e in emissions on account of optimisation in diesel consumption

- **Switching from diesel generators to grid electricity for power**
  
  Typically, construction projects use diesel generators as a power source. The Company has taken initiatives across various project sites to get grid power connectivity and help reduce diesel consumption.

  **Outcome**

  Estimated to avoid 2,396 tCO₂e emissions

- **Increase in renewable energy components as part of electricity consumption**
  
  The Company has taken various initiatives over a period of years to increase the renewable energy component in the electricity consumption mix. These have been done through the installation of rooftop solar and third-party PPAs. In FY 2022-23 the Company has installed additional rooftop solar capacity at its manufacturing facility in Hazira.

  **Outcome**

  The initiative was implemented towards the end of Q2 FY 2022-23 and is expected to avoid 492 tCO₂e in emissions annually.

For other initiatives, please refer to Annexure ‘A’ to the Board Report.
Despite the efforts to reduce energy intensity through various operational measures, energy intensity increased slightly by 1.5% in FY 2022-23 compared to FY 2021-22 owing to significant pick-up in execution and on-site construction activities in several projects across the businesses. The major projects which accounted for this increase were the Mumbai-Ahmedabad High Speed Rail, Mumbai Trans Harbour Link, Metro Rail projects, building projects in New Delhi, water supply projects in Odisha and Uttar Pradesh, irrigation projects in Madhya Pradesh, and some international projects.

**GHG Emissions**

The emissions attributed to the Company’s operations arise primarily from the use of fuels, electricity and materials in its business processes. As part of its Net Zero strategy, the Company is working on reducing its GHG footprint across all three scopes.

**Scope-1:**
Consumption of fuels such as petrol, high speed diesel, furnace oil, natural gas, LPG, CNG and acetylene

693,115 tCO₂e

**Scope-2:**
Utilisation of grid electricity supplied by state electricity supply boards

273,719 tCO₂e

**Scope 3:**
Purchased goods, waste generated in operations (solid waste), inbound logistics, employee commute and business travel

7,128,687 tCO₂e

Energy intensity has increased by 1.5% in FY 2022-23 compared to FY 2021-22 due to significant pick-up in execution and on-site construction activities in various projects. However, emission intensity has remained the same, primarily on account of change in the emission factor considered for grid electricity (0.00081 tCO₂e/kWh), due to increase in percentage of renewable energy in the country’s power generation mix.

2 Revised for FY 2020-21 and FY 2021-22 due to reassessment and data corrections.

3 Partial data reported for waste, employee commute and business travel.

4 Revised emission factor by Central Electricity Authority, Govt of India, https://cea.nic.in/cdm-co2-baseline-database/?lang=en
**Stack Emissions**

The principal sources of air emission are chimney stacks at manufacturing facilities. The Company ensures that these emissions stay within the permissible limits and has been taking initiatives to reduce the same. The table shows stack emissions across different manufacturing facilities of the Company.

<table>
<thead>
<tr>
<th>SOx, NOx and PM emissions (mg/m³)</th>
<th>SOx</th>
<th>NOx</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2022</td>
<td>2 - 38</td>
<td>6 - 40</td>
<td>4 - 80</td>
</tr>
<tr>
<td>FY 2023</td>
<td>3 - 22</td>
<td>12 - 44</td>
<td>10 - 61</td>
</tr>
</tbody>
</table>

**Construction of road pavement with Cold Central Plant Recycling technology**

In highway projects, certain projects require rehabilitation of existing roads. The typical recycling process is hot recycling of the asphalt layer, but it requires a significant amount of energy. The improved version of recycling is Cold Central Plant Recycling (CCPR), which not only reduces the amount of virgin material consumed but also significantly lowers energy consumption. In CCPR, material removed from an existing pavement is transported to a central location, where it is crushed and screened to make a uniform product. It is then mixed with asphalt emulsion or foamed asphalt, which acts as a binding agent, and this final mix is used for constructing the pavement.

**Impact**
- Helped avoid usage of two million tonnes of virgin material (aggregates)
- Helped avoid 10,924 tCO₂e from energy consumption and 1,520 tCO₂e emissions from materials used

**Reuse of excavated material (rock) for land reclamation**

In the Mumbai Coastal Road project, a significant quantity of rock was being excavated in cut and cover works related to the tunnel section. According to the original plan, the excavated material was supposed to be disposed at a designated location approximately 60 km away from the project site. The project team came up with a solution of reprocessing the material, i.e. crushing to desired size, and convinced the client to adopt the solution. The reprocessed material, which met the quality requirements, was used for land reclamations in other sections of the project.

**Impact**
- Helped avoid transportation of material from a quarry by reusing material within the vicinity of project site
- 120,000 m³ of total material reprocessed, estimated savings of 384 kL HSD from transportation, resulting in an emission avoidance of 1,016 tCO₂e

![CCPR implementation at Meerut-Aligarh-Ghaziabad road project](image)

![Material reprocessing at Mumbai Coastal Road project](image)
Water

Though construction projects and hi-tech manufacturing are not water intensive, the Company has been taking initiatives to reduce water consumption and increasing water recycling at project sites and manufacturing facilities as part of its overall commitment to sustainability. The Company is devoting resources to making its campuses green and one of the important components is recycling and reuse of wastewater. The groundwater withdrawal has reduced by 33% over FY 2021-23. Recycled water is used for non-potable purposes e.g. gardening, toilet flushing, as well as ancillary activities in construction e.g. dust suppression, equipment washing and other areas. Various measures have been undertaken to construct rainwater harvesting structures at manufacturing facilities and some project sites.

Water withdrawal\(^5\) (Mn kL)

<table>
<thead>
<tr>
<th>Source</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface water</td>
<td>1.64</td>
<td>2.09</td>
<td>2.38</td>
</tr>
<tr>
<td>Groundwater</td>
<td>4.48</td>
<td>3.72</td>
<td>2.99</td>
</tr>
<tr>
<td>Third party</td>
<td>1.55</td>
<td>1.76</td>
<td>1.46</td>
</tr>
<tr>
<td>Others</td>
<td>3.47</td>
<td>3.63</td>
<td>4.35</td>
</tr>
<tr>
<td>Total</td>
<td>11.13</td>
<td>11.20</td>
<td>11.18</td>
</tr>
</tbody>
</table>

Water consumption\(^6\) (Mn kL/year)

<table>
<thead>
<tr>
<th></th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10.9</td>
<td>11.1</td>
<td>11</td>
</tr>
</tbody>
</table>

Water consumption intensity\(^7\) (kL/\(\text{₹} \text{ Bn}\))

<table>
<thead>
<tr>
<th></th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12,603</td>
<td>11,142</td>
<td>10,155</td>
</tr>
</tbody>
</table>

Wastewater recycling efficiency\(^8\)

<table>
<thead>
<tr>
<th></th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>41%</td>
<td>53%</td>
<td>68%</td>
</tr>
</tbody>
</table>

\(5-8\) Data revised for FY2022 and FY 2021 based on reassessment and corrections.
Use of treated wastewater for tunnelling works

Tunnelling work requires a significant quantity of water, primarily in slurry preparation (60% of total water requirement in a project). In peak summer months (Apr-Jun), it becomes difficult for projects to source water. In the Mumbai Coastal Road project, the team explored options and identified treated wastewater from sewage treatment plants as a potential option. After expert consultation and passing quality checks, the treated wastewater could be used in tunnelling work. The team made arrangements for sourcing from STPs and used only the treated wastewater for tunnelling operations.

Impact
Helped avoid of freshwater consumption by 13,000 kL by using equivalent amount of treated wastewater

Drinking water from atmospheric water generator

Linear projects, particularly those in remote locations, face difficulties in sourcing freshwater for drinking. At the Meghalaya-Assam Bridge project site, the situation becomes even more difficult at times of river flooding. To overcome these difficulties, the project team explored other possible options for sourcing freshwater and identified the Atmospheric Water Generator as a suitable one. Currently, this is in the testing stage.

The humidity of the project location enables this as a potential solution to address the freshwater demand of the site. Due to its unique design, it provides clean water with no significant treatment involved and has the capacity to generate 1kL per day. Also, this solution has no water-reject as compared to that in a typical RO system and thus, significantly reduces the freshwater sourcing requirement.
Waste and Circular Economy

Waste management is another focus area for the Company due to the volume and type of materials used in projects and manufacturing. The Company has undertaken measures to ensure proper waste identification, segregation, collection, recycling, and disposal. Comprehensive waste management guidelines and procedures which follow the 3R principles (Reduce, Reuse, Recycle) are in place. After exhausting the options for reuse/recycling, different disposal methods are deployed depending on the waste categories and also tie-ups with authorised vendors utilised to ensure proper disposal and adherence to Environment Management System (ISO 14001:2015) and other regulatory compliances, wherever applicable.

Hazardous waste
4,239 tonnes
(82% increase w.r.t. FY 2021-22)

Non-hazardous waste
322,636 tonnes
(550% increase w.r.t. FY 2021-22)

The significant increase in waste generation reported is due to higher coverage of waste generation reporting across different businesses, which in the previous year was partial, and on account of higher material consumption linked to significantly higher execution.

Waste management measures:
- Hazardous waste is stored and transported as per the statutory requirements
- Hazardous waste – such as used oil, oil-soaked cotton waste, used chemical/paint/oil containers, batteries, paint residues and ETP sludge – is disposed through Government-approved recyclers/re-refiners/re-processors
- Electronic waste (e-waste) is disposed through authorised vendors as per the statutory requirements
- Biomedical waste generated at dispensaries and health-centres is disposed as per statutory requirements, and responsible disposal is ensured
- Non-hazardous waste is either reused, recycled, or scientifically managed
- There is no import, export, transport or treatment of any hazardous waste covered under the Basel Convention

Material Management

The materials consumed primarily during business activities are steel, cement and sand. Sustained efforts are taken to recycle steel and zinc at the production facilities (transmission tower production unit). However, the scope of using recycled material is limited due to customer specifications. At construction sites, judicious use of fly ash and granular blast furnace slag to blend with cement is made.

Material consumption (Mn tonnes)

<table>
<thead>
<tr>
<th>Material</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous</td>
<td>3.06</td>
</tr>
<tr>
<td>Non-ferrous</td>
<td>0.02</td>
</tr>
<tr>
<td>Cement and sand</td>
<td>11.56</td>
</tr>
</tbody>
</table>

Steel recycled (tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>Steel recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 21</td>
<td>2,497</td>
</tr>
<tr>
<td>FY 22</td>
<td>2,469</td>
</tr>
<tr>
<td>FY 23</td>
<td>2,339</td>
</tr>
</tbody>
</table>

Zinc recycled (tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>Zinc recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 21</td>
<td>155</td>
</tr>
<tr>
<td>FY 22</td>
<td>130</td>
</tr>
<tr>
<td>FY 23</td>
<td>85</td>
</tr>
</tbody>
</table>
Reuse of excavated material as usable soil

In the Delhi Airport project, excavation was done to create the necessary profile before it was refilled with the desired quality of material. Due to the location of the project, both dumping of excavated material as well as sourcing of fresh soil is a challenge. The project team modified an existing aggregate screening plant to recover soil from the excavated material, which was then reused for filling.

**Impact**

Helped avoid sourcing of around 205,882 m³ of virgin material due to reprocessing of excavated material at the project site.
### Extended Producers Responsibility (EPR)

EPR is applicable for plastic waste, e-waste, and battery waste. In 2022, the Ministry of Environment, Forest and Climate Change made changes to the EPR guidelines (Plastic Waste Management Amendment Rules, 2022) and extended the coverage of the regulation to firms (importers) that generate plastic waste from packaging of imported material or equipment. The Company does not manufacture any plastic product and as an importer of some materials/equipment, comes under the ambit of amended EPR regulations. The Company has applied for registration as an importer under EPR (through CPCB portal), and the application is currently under process. Notwithstanding the recent changes, the business units of the Company continue to monitor the generation of plastic and e-waste and disposal according to the Pollution Control Board (PCB) rules. The Company is also undertaking steps to strengthen its waste management system.

### Presence in eco-sensitive areas

Due to the locations of some construction projects and a few manufacturing facilities, the Company has a presence in a few eco-sensitive areas (such as national parks, coastal regulation zones, etc.). The Company complies with all applicable rules and regulations for such locations and ensures that there is no harm done to the flora and fauna due to the business operations in these locations. Further, the Company has taken additional steps to mitigate impact on the environment. A list of projects in these eco-sensitive locations is given in Essential Indicator No. 10 and steps taken are indicated in Leadership Indicator No. 5 in Principle 6 of the BRSR.

### Green buildings in L&T

Leadership Development Academy, Lonavala was re-certified as IGBC Platinum in FY 2021-22 and A.M. Naik Tower, Mumbai was certified as LEED Platinum in FY 2020-21.

In addition, there are 12 buildings across different campuses/locations which were certified at different periods.
Biodiversity

Tree plantation

L&T has planted 1.9 million saplings in FY 2022-23, with over 99% planted by the Water & Effluent Treatment (WET) business. Over the years (2008-2022), L&T has planted over 8 million saplings.
Top soil preservation at Metro project

Construction projects involve excavation to create different structures. In some cases, even the topsoil is excavated and dumped along with other materials excavated. In the Patna Metro Project, an initiative was undertaken to ensure that topsoil was stripped to a depth of 20 cm, stockpiled at designated location, and then reused for plantation purposes.

Preservation of topsoil, aids in biodiversity and quicker afforestation efforts within a city. Total volume of topsoil preserved was 235 m³.

Compliance

The Company’s campuses, manufacturing facilities and and project sites have obtained the 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 business units and regional offices on a quarterly basis. During the year, there were two incidents of allegations of non-compliance, details of which are in Essential Indicator No. 10 in Principle 6 of the BRSR.

The Company continues to explore opportunities both internally and externally in different aspects of Natural Capital. Aligned with the Vision, the Company will pursue eco-friendly growth and help clients in their sustainability journey through our Green Business offerings. Also, the Company will continue to focus on promoting sustainability within the organisation and innovation will be a major enabler towards this objective.
Manufactured capital for L&T comprises EPC Projects and Hi-Tech Manufacturing. Driven by a constant focus on delivery excellence, cost competitiveness and innovation to enhance offerings to its clients, the Company aims to maintain its leadership position across various industry segments. While the business environment continues to remain challenging due to macro factors as well as industry-specific issues, the Company continued to make encouraging progress in all business segments. On the back of strong order wins, the Order Book of the Company is at an all-time high level, and this gives the Company a good base to continue the growth momentum for the coming years.
Key Highlights of FY 2022-23

729
Total active project sites

18
Manufacturing plants

₹413 Bn
Green business

Strategy linkage

For details, refer to ‘Business Model and Strategy’ section

SDGs Impacted

Material Topics

- Customer Experience and Satisfaction
- Quality of Products and Project Delivery
- Water, Waste and Hazardous Materials Management
- Skilled Manpower
- Sustainable Supply Chain
- Human Rights and Labour Conditions
- Data Security, Privacy and Cyber Security
- Brand Management
Buildings & Factories
Offerings
- Airports, Hospitals
- Educational Institutions, Stadiums, Statues, Hotels, Retail Spaces, Station Development
- IT Parks and Office Buildings, Data Centers
- High-rise Structures, Mass-housing Complexes
- Manufacturing Facilities, Cement Plants, Warehousing Facilities
- Test Tracks, Fast-Track Modular Construction

Capabilities
- Turnkey solutions from ‘concept-to-commissioning’ across the entire spectrum of urban infrastructure, hospitals, IT infrastructure and data centers, and manufacturing facilities
- In-house design expertise using advanced systems like Building Information Modelling (BIM), aided by competency cells, advanced formwork systems and digitalised project management
- Track record of building tall, large, complex and iconic structures across India and overseas, e.g., The Statue of Unity, Narendra Modi Cricket Stadium and international airports
- Front-runner in fast-track project execution by offering advanced construction technologies, e.g., Pre-fabricated Pre-finished Volumetric Construction, Structural Steel Construction and 3D Printing

Transportation Infrastructure
Offerings
- Roads and Bridges, Elevated Corridors, Airport Runways
- Integrated/Composite Railway Projects, Dedicated Freight Corridors
- Mass Transit Systems (Metro/Light Rail/Monorail)
- Railway Tracks – Ballastless, Ballasted
- System Works and Integration – Track, Overhead Electrification, Signalling and Telecom

Capabilities
- ‘Design-to-build’ solutions with single-point responsibility for Integrated Railway and Mass Transit Projects
- Design-to-Build expertise for the full spectrum of highways, bridges and elevated corridors, including complex interchanges and ancillary works for runways
- Pioneer in adopting mechanised construction and digital project management for faster execution with higher quality and better safety
- First-of-its-kind Competency Development Centre for Railway Construction in India
Heavy Civil Infrastructure

Offerings

- Mass Transit Systems (Metro Rail – Elevated & Underground, Rapid Rail), High-Speed Rail
- Tunnels (Transport, Water)
- Nuclear Power Plants, Hydro Electric Power Plants, Pumped Storage Plants, Irrigation Systems
- Ports, Shipyards, Marine Structures (breakwaters, berths, jetties and wharfs)
- Deep Underground Storage Caverns

Capabilities

- Concept-to-commissioning capabilities to execute complex infrastructure projects
- Rich expertise to execute underground works with New Austrian Tunnelling Method (NATM) and Tunnel Boring Machine (TBM); Expertise to erect superstructures using innovative methods, e.g., full span launching method
- End-to-end design and engineering capabilities for detailed project reports, seismic qualification, geo-tech engineering, blast resistance, and other areas aided by a unique construction methodology cell to execute complex solutions
- Owner and operator of one of the largest fleets of heavy and complex machinery, e.g., TBM, heavy-lift cranes, shotcrete machines, and other areas.

Power Transmission & Distribution

Offerings

- Transmission Lines, Substations
- Underground Cable Networks, Distribution Networks, Power Quality Improvement Projects, Infrastructure Electrification
- Solar PV Plants including Floating Solar, Battery Energy Storage Systems
- Mini/Micro-grid Projects
- Backbone for Fibre Optic Infrastructure
- Digital Solutions

Capabilities

- Integrated solutions and end-to-end services encompassing design, manufacturing, supply, installation and commissioning
- Digitally-driven tower manufacturing units with a capacity of more than 1.5 lakh tonnes of tower components per annum
- Own and offer one of the world’s largest Tower Testing and Research Station
- In-house Battery Energy Storage System (BESS) containerisation facility to offer large-scale, renewable integration solutions
- Track record of executing first-of-its-kind projects in India and abroad, e.g., India’s first 1,200 kV and 765 kV Gas Insulated Substations
Water & Effluent Treatment

Offerings
- Water Supply Systems - Urban, Rural, Industrial
- Treatment Plants – Water, Sewage, Effluent
- Wastewater Collection Network
- Desalination Plants
- Micro and Lift Irrigation Systems, Canal Irrigation, Reservoirs and Barrages
- Plant Water Systems, 24x7 Pressurised Water Supply, Water Management Solutions, Smart Water Infrastructure
- Riverfront Development

Capabilities
- Proven track record of offering end-to-end solutions, spanning the entire spectrum in water, irrigation and wastewater
- Capability to design and build treatment plants covering an array of process technologies from conventional treatment to advanced treatment like ozonisation and granular activated carbon
- Developing and adopting innovative execution methods, e.g., horizontal directional drilling, micro-tunnelling, advanced pipe repair solutions and pre-cast solutions
- One-stop solution provider for digital and tech-enabled solutions in water and wastewater management, e.g., hydraulic modelling, leakage management, GIS asset mapping, billing and master data management, etc.

Minerals & Metals

Offerings
- Iron and Steel Plants
- Non-ferrous Smelter and Refiner – Aluminium, Zinc, Copper, Gold plants
- Mineral Beneficiation plants
- Speciality Conveyors
- Equipment for Mining, Cement and Material Handling

Capabilities
- One-stop solution provider for the minerals and metals (ferrous and non-ferrous) industry, powered by in-house design, engineering, manufacturing, construction and commissioning capabilities
- High-end manufacturing facility for equipment used in mineral processing, bulk material handling (Stacker Reclaimers, Wagon Tipplers, etc.), Port Cranes, High-Speed Railway Equipment (Straddle Carrier, Full Span Launching Girder, Girder Transporter), Steel Plant Machinery (Torpedo Ladle Cars, etc.) and other custom-designed products for various industries, e.g., Cement, Power Plants, Construction Industry and Chemical Plants
- Technology tie-ups with global licensors and OEMs in the metal industry
L&T Energy - Hydrocarbon

Offerings
- Process Complexes and Wellhead platforms, Gas Compression Modules, Subsea Systems, Floating Production Storage and Offloading (FPSO) Modules and Jack-up Rigs, Deepwater Subsea Manifolds and Structures
- Upstream Oil & Gas Processing and Treatment Facilities
- Petroleum Refining Projects, Fertiliser Projects, Petrochemical Projects
- Cross-country Pipelines and Terminals
- Cryogenic Storage Tanks and Regasification Terminals
- Coal/Pet-coke Gasification Projects

Capabilities
- Integrated ‘design-to-build’ solutions for complex onshore and offshore hydrocarbon projects across multiple geographies
- Track record of simultaneous execution of multiple, complex, large-value projects, meeting stringent delivery schedules, quality and safety norms
- Extensive experience in executing projects based on technologies from leading global process licensors
- Comprehensive engineering capabilities, offering ‘fit-to-purpose’ engineering solutions and tailored value engineering solutions such as product modularisation and asset repurposing
- Industry-leading HSE performance
- Strategically located state-of-the-art, all-weather waterfront Modular Fabrication Facilities at Hazira, Gujarat and Kattupalli, Tamil Nadu

L&T Energy - Power

Offerings
- Coal-based Thermal Power Plants – Sub-critical, Supercritical and Ultra-supercritical Technology
- Gas-based Thermal Power Plants - Combined Cycle, Heat Recovery Steam Generators
- Nuclear Steam Turbine & Generator Island
- Flue Gas Desulphurisation units, Electrostatic Precipitators (ESP) and Selective Catalytic Reduction (SCR) units

Capabilities
- Turnkey solutions provider for executing large and complex thermal power projects within and outside India
- Technology collaborations with global leaders like Mitsubishi Power, Japan; Sargent & Lundy, USA; Howden, UK; Chiyoda Corp, Japan and John Cockerill, Belgium
- Capable of supplying high-end equipment for thermal plants, enabled through joint venture companies which manufacture ultra-supercritical/ supercritical boilers, turbines and generators, pulverisers, axial fans, air preheaters and air-pollution-control equipment
- Leadership position in execution of gas-based projects, across different capacities and advanced technologies
Defence

Offerings
- Weapon Delivery Systems (excluding weapons) for Land-based and Naval Applications (Surface Ships and Naval Underwater Platforms)
- Engineering Systems & Equipment: Tactical & Assault Army Bridging Systems, Heavy Air Drop Systems, Helo suite for Naval & Coast Guard Systems, Sonar Domes and Sonar Handling Equipment
- Integrated Platform Management System, Infantry Combat Vehicle

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

Capabilities
- India's leading private sector company in the Defence segment – with over four decades of partnership with the Defence Research Development Organisation (DRDO) and the Ministry of Defence
- Established track record of developing in-house solutions and co-creating indigenous solutions with DRDO, including design, prototyping to supply, field trials/installation on platforms, obsolescence management and through-life support. Proven command and competence in highly specialised applications
- State-of-the-art manufacturing facilities leveraging automation and digitalisation (Industry 4.0) to deliver consistent quality, while meeting stringent performance parameters and tight delivery timelines

Heavy Engineering

Offerings
- Hydrocracker and Renewable Diesel Reactors, Titanium and Zirconium Heat Exchangers, Titanium Clad Oxidation Reactors
- Fluid Catalytic Cracking (FCC) Package, Coke Drums, Ethylene and Propylene Oxide Reactors, Gasification Equipment
- Methanol Converters, Key Gasification Equipment, Urea and Ammonia Equipment, Loop Reactors, HP Heat Exchanger
- Nuclear Power Equipment (Steam generator, Pressuriser, End Shields, Spent Fuel Canisters)
- Modification, Revamp and Upgrade (MRU) Solutions

Capabilities
- Providing engineered-to-order equipment solutions and critical piping for Process Plants (Refining, PetChem, LNG, Fertilizer, Gasification segments) and Nuclear Power segment
- Technology-driven, quick turnaround solutions for process plants offered by MRU business
- World-class manufacturing complex with cutting-edge technology adopting Industry 4.0

Floating Dock for Navy
**Smart World & Communication**

**Offerings**
- Smart Cities and Safe Campuses, Safe Cities
- Advanced Metering Solutions
- Next-Gen Network Solutions, Satellite and Radio Communication, and Communication Networks for the Defence Sector
- Data Center and Private Cloud, Telecom Services Infrastructure including 5G
- Cyber Security

**Capabilities**
- Strong domain expertise and end-to-end implementation capabilities for Safe Cities, Smart Cities and Smart Utilities
- End-to-end solutions for digital transformation of communication networks and systems for the Government, enterprises and industries
- In-house platform and solutions suite to help solve the problems of cities, law enforcement agencies and critical infra domains; developed solutions and services leveraging advanced technologies such as IoT, AI/ML, Geospatial and computer vision in select domains

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**Realty**

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

**Capabilities**
- The business derives its competitive advantage from transparency, cutting-edge technologies and superior project management skills – to create landmark real estate that meets global standards
- One of the most trusted brands in the Real Estate sector in India and respected for its customer-centricity and delivery excellence
Growing L&T's Green Business

Aligned to the Company’s Sustainability Vision of ‘For a Better World’, the Company offers a bouquet of sustainable solutions which help its customers go green. These solutions, termed as 'Green Business', are enabled through advanced technology, and centred around clean energy, clean mobility, water and sanitation, green infra and other areas linked to a green future. Through the Green Business, the Company helps its customers in lowering carbon emissions, improving water use and recycling, improving energy efficiency, reducing air pollution, and enhancing resource conservation. Overall, L&T’s Green Business offer solutions that have a low impact on the environment and help improve public well-being.

The Green Business contributed ₹ 413 billion (37%) to the revenue of the Company as compared to 34.7% in FY 2021-22. As part of the Lakshya 26 Strategy plan, L&T intends to increase its share of Green Business to 40% of revenue.

The environmental impact assessment of Green Business was conducted recently. It was estimated that the projects commissioned in FY 2021-22 and FY 2022-23 would help avoid emissions to the tune of 1 million tCO₂e.

The Company’s green commitment was also acknowledged globally by ENR in its annual rankings for 2022. L&T was ranked 3rd in Top 200 Environment Firms Survey by ENR. Engineering News Record (ENR), New York, is one of the global construction industry’s authoritative publications.
The Company’s Green Business offerings are under two common strategies to handle climate change.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Offerings under</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Reduce the impact of current processes/systems on environment</td>
<td></td>
</tr>
<tr>
<td>Climate change Adaptation</td>
<td>Water and Sanitation Infrastructure, Green Buildings, Others (Smart City Systems, Sand Plants)</td>
</tr>
<tr>
<td>- Building resilience to manage the consequence of changes</td>
<td></td>
</tr>
</tbody>
</table>

Infrastructure/assets created under mitigation also help in adaptation through second order effects.

**Snapshot of Company's Green Business**
At L&T, Human Capital is one of the key assets which drives the Company forward through its competencies and expertise. L&T has a multi-generational workforce drawn from diverse ethnic and cultural backgrounds and embodies a rich mix of educational and professional experience. The Company fosters a fair, inclusive, performance-driven and collaborative work culture, and aspires to create a pipeline of talent that can deliver for diverse businesses, while conforming to L&T’s values and ethos. The Human Resources function is aligned with the Company’s overall business strategy, playing a significant role in its implementation. Learning and Development (L&D) is also an integral part of the people strategy.
Key Highlights of FY 2022-23

55,202
Total employee strength

6.9 Mn
Safety training man hours

33 years
Median age of employees

0.06
LTIFR
(Lost Time Injury Frequency Rate)

Strategy linkage

SO-I  SO-II  SO-III  SO-IV  SO-V  SE-2  SE-4

For details, refer to ‘Business Model and Strategy’ section.

SDGs impacted

Material topics

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

To align and synchronise the HR strategy with the business strategy, a Future-Ready HR Strategy Workshop was organised during the year, which witnessed participation from HR heads of various businesses to help identify key HR strategy themes.

Keeping in mind the overall strategic objectives of the Company, the following themes were identified:

- **Agile Leadership**
- **Alternate Talent Model**
- **Employee Experience**
- **Diversity, Equity and Inclusion**
- **People Leadership at Core (Along with Talent Mobility)**

**Lakshya 2026 Corporate HR Steering Committee**, comprising senior leaders across functions, was formed to provide strategic direction and guidance through conceptualisation, implementation and institutionalisation of the HR strategic theme.

A Programme Management Office has been put in place to facilitate the entire process. Taskforces have been formed comprising of Sr. Executives from Business, HR Heads, Young HR Professionals and Subject Matter Experts. Some of the focus areas are:

- Hiring of niche talent
- Attraction and retention of young talent
- Talent for new businesses
- Equip functional and support teams with suitable talent possessing international experience
- Hire and develop leaders, especially women
- Strengthen the leadership pipeline
- Adopt a radically different and proven approach to workforce contracting
- Deployment and productivity improvement
- Developing Frontline Supervisor (FLS) strength and improving the gender ratio
Accelerating HR Digitalisation

L&T’s HR Digitalisation journey began in 2022 with the incorporation of an advanced ERP system in the form of SF Success Factors (Employee Central). The Company extended the platform in 2023 with further enhancements by introducing Performance Management, Career Development and Succession Planning Modules. These modules provided an impetus towards identifying emerging leaders and building a strong talent pipeline. Subsequently, the Company launched 360-degree and 270-degree feedback modules. The Company has partnered with People Strong for hiring and onboarding processes integrated with the ERP system to digitalise the talent acquisition process. The Company has also partnered with Pay Review to bring L&T’s compensation structure under one roof, and its implementation is underway.

Human Capital Dashboards were created in Power BI and launched during the year. These dashboards help in gauging the pulse of the workforce, improve decision-making and help in strategy formulation.

HEERA, an AI-enabled bot, is integrated with MS Teams, aiding in conducting quick engagement surveys across the organisation. This provides a methodical approach for gathering employee feedback periodically. HEERA provides a window for employee queries and resolutions as well.

The Company is also in the process of launching the Learning Management System and Workforce analytics which will enable predictive analytics by integrating data from multiple systems.

Talent Strategy

Strategic Leadership Talent Acquisition

Strategic Leadership Talent Acquisition function identifies, selects and onboards high-calibre external leadership talent to drive growth of new businesses like Green Energy, Sufin, EduTech, Data Center, and strengthen Corporate departments.

Young Talent Acquisition

L&T offers diverse opportunities for growth and leadership. Last year, the major emphasis was on Campus Hiring and Branding, facilitating the connect with engineering and management students across various colleges by offering industrial visits, sponsoring college fests, organising tech talks, etc. GRACE (Get Ready for an Awesome Career in Engineering) is a pre-joining engagement initiative, which includes gamified content with leaderboards, webinars, newsletters, presentations on marquee L&T projects, virtual industry visits and engagement through social media platforms. In FY 2022-23, 3,050 GETs were inducted, which is double the standard annual headcount of 1,400-1,500.

Employer Branding

A renewed thrust on employer branding was initiated through various initiatives on social media platforms. In FY 2022-23, the Company focused on enhancing the employer brand, increasing brand awareness and engaging with the employees through Life Pages on the Company’s LinkedIn page focusing on Diversity and Inclusion, Campus Engagement and Life at L&T.
## Talent Development

### Talent Identification and Succession Planning

L&T’s Performance Management System FAIR (Framework for Linking Appraisals with Incentives and Rewards) ensures recognition of talent and promotes meritocracy. The Career Development and Succession Planning Module was integrated with the Performance Management System to facilitate the process efficiently. Leadership Development Centres enable the grooming of internal talent and ensure that the right leadership talent is identified through an objective selection process. In talent assessment, the Company has conducted more than 800 assessments across tiers and digitalised the Individual Development Plan module to facilitate the developmental journey of high-potential talent. In FY 2022-23, more than 110 employees across Tiers 3 and 4 have started their IDP journey through Development Centres. Furthermore, an entire portfolio of critical roles is created by aligning the impact drivers, where succession matters the most.

The Company’s signature **Seven-Step Leadership Pipeline Development Programme** is an established best practice in Talent Development. These flagship programmes provide young employees access to curated, high-potential learning experiences delivered by reputed leaders from Indian and International Business Education Institutes. The emerging leaders, who move up the Seven-Step Leadership Pipeline Development Programme, are mentored by senior leaders, ensuring robustness in the continuity of the leadership’s thought process and in taking forward L&T’s value system.

### Corporate Learning and Development

Learning & Development focuses on continually upgrading the capabilities through leadership, strategic and competency-based learning interventions centrally for businesses across L&T.

<table>
<thead>
<tr>
<th>Leadership commitment and resources</th>
<th>L&amp;D Enablers</th>
<th>Alignment with the business needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business partnering through internal and external forums</td>
<td>Robust learning architecture through blended learning</td>
<td>Comprehensive learning ecosystem through internal academics and external institutes</td>
</tr>
</tbody>
</table>

**Human Capital Integrated Annual Report 2022-23**
Employees (age & gender wise)

<table>
<thead>
<tr>
<th>AGE</th>
<th>&lt;30yrs</th>
<th>30-50yrs</th>
<th>&gt;50yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2,082</td>
<td>1,498</td>
<td>183</td>
<td>3,763</td>
</tr>
<tr>
<td>Male</td>
<td>14,485</td>
<td>31,805</td>
<td>5,149</td>
<td>51,439</td>
</tr>
<tr>
<td>Total</td>
<td>16,567</td>
<td>33,303</td>
<td>5,332</td>
<td>55,202</td>
</tr>
</tbody>
</table>

New Joinees (age & gender wise)

<table>
<thead>
<tr>
<th>AGE</th>
<th>&lt;30yrs</th>
<th>30-50yrs</th>
<th>&gt;50yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1,515</td>
<td>390</td>
<td>14</td>
<td>1,919</td>
</tr>
<tr>
<td>Male</td>
<td>7,270</td>
<td>5,554</td>
<td>332</td>
<td>13,156</td>
</tr>
<tr>
<td>Total</td>
<td>8,785</td>
<td>5,944</td>
<td>346</td>
<td>15,075</td>
</tr>
</tbody>
</table>

Attrition (age & gender wise)

<table>
<thead>
<tr>
<th>AGE</th>
<th>&lt;30yrs</th>
<th>30-50yrs</th>
<th>&gt;50yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>431</td>
<td>2,224</td>
<td>9</td>
<td>2,664</td>
</tr>
<tr>
<td>Male</td>
<td>323</td>
<td>4,056</td>
<td>335</td>
<td>4,714</td>
</tr>
<tr>
<td>Total</td>
<td>754</td>
<td>6,280</td>
<td>344</td>
<td>7,378</td>
</tr>
</tbody>
</table>

Compensation Philosophy

L&T's Compensation Philosophy is governed by the 3P model based on fairness, meritocracy and compliance to attract, retain, motivate and reward employees.

Pay for Position
- Internal and external market benchmarking to ensure parity
- Developing an equitable grading structure, pay equity and career development

Pay for Performance
- Considers employees’ performance measured through achievement of Key Responsibility Areas and Performance Thrust Areas of the organisation/business entities

Pay for Potential
- Considers capabilities and experience in setting an equitable and competitive pay level
- Potential of an employee measured in Development Centres (DC) using tools under the L&T Competency Framework
## Overview of Corporate L&D Programmes

<table>
<thead>
<tr>
<th>Category</th>
<th>Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Pipeline Development – 7-Step Programme</strong></td>
<td>Step 1 - Management Education Programme</td>
</tr>
<tr>
<td></td>
<td>Step 2 - Leadership Development Programme</td>
</tr>
<tr>
<td></td>
<td>Step 3 - Global Leadership Development Programme</td>
</tr>
<tr>
<td></td>
<td>Step 4 - Transforming L&amp;T into a Global Corporation Programme</td>
</tr>
<tr>
<td></td>
<td>Step 5 - Global CEOs Programme</td>
</tr>
<tr>
<td></td>
<td>Step 6 - International Executive Education Programme</td>
</tr>
<tr>
<td></td>
<td>Step 7 - Mentoring</td>
</tr>
<tr>
<td><strong>Competency Development Programme</strong></td>
<td>Ascent Series</td>
</tr>
<tr>
<td></td>
<td>Think, Act, Engage Clusters</td>
</tr>
<tr>
<td><strong>Project Management Excellence Programme (Pragati)</strong></td>
<td>Level 1: Programme for Excellence in Project Delivery</td>
</tr>
<tr>
<td></td>
<td>Level 1+: International Executive Master in Business (Specialisation in Project Management)</td>
</tr>
<tr>
<td></td>
<td>Level 2: Advanced Project Leadership Programme</td>
</tr>
<tr>
<td></td>
<td>Level 3: International Project Leadership Programme</td>
</tr>
<tr>
<td></td>
<td>Level 4: Project Portfolio Leadership Programme</td>
</tr>
<tr>
<td><strong>WINSPRIRE (Women Leadership)</strong></td>
<td>Rise</td>
</tr>
<tr>
<td></td>
<td>Propel</td>
</tr>
<tr>
<td><strong>Young Talent Development</strong></td>
<td>Post Graduate Executive Management Programme</td>
</tr>
<tr>
<td></td>
<td>Newbie to Knowbie (N2K)</td>
</tr>
<tr>
<td></td>
<td>Harvard ManageMentor (mini-MBA Programme)</td>
</tr>
<tr>
<td></td>
<td>DDI (Leadership Education Programme)</td>
</tr>
<tr>
<td><strong>Management Development Programme</strong></td>
<td>Management Development Programmes</td>
</tr>
<tr>
<td><strong>Accreditation</strong></td>
<td>Accreditation Programme in Corporate Law</td>
</tr>
<tr>
<td></td>
<td>Executive Diploma in Human Resource Management</td>
</tr>
<tr>
<td><strong>Technology Development Programme</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-Inspired Self-Paced (SISP) Learning</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Programmes

**Step 1 - Management Education Programme**
- Ascent Series
- Think, Act, Engage Clusters

**Step 2 - Leadership Development Programme**
- Level 1: Programme for Excellence in Project Delivery
- Level 1+: International Executive Master in Business (Specialisation in Project Management)
- Level 2: Advanced Project Leadership Programme
- Level 3: International Project Leadership Programme
- Level 4: Project Portfolio Leadership Programme

**Step 3 - Global Leadership Development Programme**
- Post Graduate Executive Management Programme
- Newbie to Knowbie (N2K)
- Harvard ManageMentor (mini-MBA Programme)
- DDI (Leadership Education Programme)

**Step 4 - Transforming L&T into a Global Corporation Programme**
- Management Development Programmes
- Accreditation Programme in Corporate Law
- Executive Diploma in Human Resource Management

**Step 5 - Global CEOs Programme**

**Step 6 - International Executive Education Programme**

**Step 7 - Mentoring**
- RaPL – Quiz-based Learning
- EBSCO – Digital Library

**Coursera Courses, e-books, audiobooks**
- Percipio

**Self-Inspired Self-Paced (SISP) Learning**
- WINSPIRE (Women Leadership)
## Learning Infrastructure and Initiatives

### L&T Institute of Project Management

The Company established the L&T Institute of Project Management (L&T IPM) in Vadodara in 2008 and Chennai in 2012 for creating world-class project management professionals and thereby leveraging their skills and competence in managing and executing projects. L&T IPM offers a portfolio of learning opportunities such as PRAGATI - Project Leadership Development Programme for developing mega-project leaders, Specific Competency Development Modules (SCDMs) and Master Classes (MCs) in the core areas of planning, cost management, contracts, risks and business-specific programmes.

### Corporate Technology & Engineering Academy (CTEA) Madh and Mysuru

CTEA offers technical courses to freshers and competency-based training to experienced professionals in civil, mechanical and electrical labs. The academies transform PGETs, GETs and FLS, by providing hands-on learning through various labs. CTEA Mysuru designed 26 new programmes on the latest technologies delivered by technical experts, including a Certification Programme on Piling and Advanced Steel Design, in collaboration with IIT Madras.

### Statistics

- **Simulation programmes** offered on the ATL platform as of date: **75**
- **Courses conducted in FY 2022-23 against 198,975 in FY 2021-22**: **260,634**
- **Lakhs of hours** of learning through online platforms, clocked by 26,000+ employees: **3.36**
- **Awareness sessions conducted, covering mental health, dietary and general medical topics impacting 17,971 beneficiaries**: **103**
- **Courses conducted in FY 2022-23 against 198,975 in FY 2021-22**: **260,634**
- **Simulation programmes offered on the ATL platform as of date**: **75**
- **Programmes conducted in FY 2022-23**: **>100**
- **Freshers trained at CTEAs in FY 2022-23**: **1,300+**
Any Time Learning (ATL)
L&T has digitalised its learning delivery and democratised the learning process by establishing a scalable and multi-faceted learning platform called Any Time Learning (ATL). It offers a variety of rich learning resources (behavioural, technical and functional). Having tied up with globally-renowned course providers like Skillsoft, Coursera, Harvard ManageMentor (HMM), EBSCO and Development Dimensions International (DDI), the platform provides numerous certification courses around various competencies aligned with L&T’s competency framework to meet the unique upskilling and reskilling requirements of employees. ATLNext also offers a unique AI/ML technology-based communication fitness coaching programme to improve the work-related communication skills of target employee groups.

In FY 2022-23, the Company focused on developing Role-Based Academies, wherein a Blended Learning Programme was curated to meet the knowledge needs of specific roles/functional areas. The Company started virtual academies on Digital Transformation, Finance, Quality Excellence and ESG. The Company launched a Micro-Learning Platform leveraging technology for competency building, which is bite-sized, multilingual and gamified.

Leadership Development Academy, Lonavala
Established in 1997, LDA is the fruition of the management’s vision and commitment towards employee development. Through its 25-plus years of existence, LDA has evolved into a hub of L&D and forms an integral part of L&T’s HR strategy. This integrated facility nurtures thought leaders and entrepreneurs of the future.

Organisation Development Initiatives
L&T continues to implement various developmental initiatives at the organisational level to promote growth and enhance efficiencies. Through FY 2022-23, several businesses launched initiatives aligned with Lakshya 2026 strategic goals. These initiatives leverage team synergies to discover more effective and efficient methods to attain higher and quicker growth and further the organisational culture.
Employee Engagement and Experience

High Five (Hi5)
Online rewards and recognition platform to promote instant rewards and recognition to the employees.

Employee Experience Technology Platform
Platform introduced through HEERA for creating engagement surveys to gauge employees' pulse and take the necessary action. Several surveys on areas such as health and well-being, the Lateral Onboarding survey capturing 30-60-90 days' experience and the Campus Onboarding survey capturing 7-60-90 days' experience, etc., have been launched.

L&T Radio
Internal podcast initiative hosted on the micro-learning platform for employees. Since its launch, more than 50 podcasts have been released, revolving around themes such as Leadership Talks, Micro-learning Nuggets, HR Policies, Health and Wellness and special episodes in alignment with occasions such as Women's Day, etc.

Art Beats
An art campaign organised to bring out the full spectrum of L&T culture through art witnessed more than 260 entries with 50 entries shortlisted for the Grand Finale in February 2023. The jury comprised art collector, Mr. Fida I. Hussain and his team of art aficionados. The ‘Art Beats Gallery’ was organised in March 2023 at AMN Tower - Powai, displaying a selection of the vibrant works of art submitted by L&T employees.

QuizWiz
The second season of L&T QuizWiz – an information and knowledge extravaganza organised in October 2022 and conducted by Quiz Master Mr. Ajay Poonia. It received a phenomenal response from 4,400 participants (2,200 teams).

Annual HR Awards – AHA
Hosted on August 25, 2022, at LDA - Lonavala, AHA is a platform that recognises people practices of teams as well as individuals. Over 80+ applications poured in from across businesses, with 16 teams presenting their cases in the final round.

HR Shared Services Centre (HR SSC)
In FY 2023, HR SSC expanded its operations to cover end-to-end onboarding, talent acquisition, learning and development and compensation and benefits. Initiated one of the most critical ongoing projects i.e. driving Pay Review Implementation which will be the compensation and benefits module for L&T. HR SSC has also been contributing to L&T’s D&I agenda by introducing ‘Lean In’ circles. These are support groups based on various topics that women wish to seek and provide support on. 1,500 women participated in Lean In awareness sessions, with around 30 support groups created.
Diversity, Equity and Inclusion (DEI)

Today, L&T has operations in over 53 countries with employees from 52 nationalities and 36 domiciles across states and UTs within India. Gender diversity has been one of the prominent elements of the talent strategy and the focus is on engaging, developing and retaining talent from diverse cultures and geographies. L&T is an ‘Equal Opportunity’ employer and is working towards creating an inclusive work environment. Women lose out on time and progression when they avail maternity leave. A Policy for Rating Protection of Women on Maternity Leave is in place to ensure that their career progression is not affected due to pregnancy. Wellness rooms have been set up in seven locations to support lactating mothers and others when in need. To support women in the advanced stages of pregnancy, L&T provides the benefit of Work From Home. Special ergonomic chairs are offered to expectant mothers. As a part of Maternity Benefits, transport reimbursement is provided during the period of one’s pregnancy, ensuring safe and comfortable travel.

FY 2022-23 witnessed a renewed focus on hiring women in the organisation. Several initiatives under WINSPIRE focusing on engaging and developing women employees were organised. Sensitisation workshops were conducted across the organisation to increase awareness of Unconscious Bias and encourage employees to showcase respectful and inclusive behaviour in the workplace. In an industry where there are few women, the Company has several leadership positions held by them.

The Company organised a Virtual DEI Showcase on Women’s Day, i.e., March 8, 2023, where businesses organised virtual stalls showcasing their practices to improve gender diversity, organised Women Leader Interactions, showcased achievements along with quizzes and fun activities.

In FY 2022-23, the Company also evaluated its own premises on accessibility to differently abled people; most of them being accessible. The Company is taking steps to ensure 100% of the premises are accessible to the differently abled.

Diversity Hiring

L&T instituted RENEW to encourage women to re-enter the workforce in 2015. The application process is integrated with the online recruitment platform, which enables tracking and monitoring of the process wherein candidates can apply for roles in functions such as Audit, Finance/Accounting, Engineering Design, Project Management, etc. During FY 2022-23, the Company received more than 2,000 applications and RENEW has been the go-to programme to hire talent for functions such as CRM, Planning and L&D.

Great Place To Work® Certified

L&T Group has been certified as a Great Place to Work® in India, which is considered the Gold Standard in recognising great workplace cultures. Over 42,000 employees participated across businesses, grades and locations. The practices in the areas of recruitment, employee experience, talent development, learning and development and total rewards were recognised through this study. It also gave an opportunity to hear the voice of the employees and act in the direction of enhancing employee experience and employer brand. Detailed action planning will be carried out in the upcoming financial year.
Human Rights
L&T is committed to respecting, protecting and upholding the human rights of the workforce and across our value chain. The Code of Conduct is a comprehensive document guiding employees to conduct their businesses in conformity with professional standards of integrity, honesty and ethical conduct, one of the core principles being ‘Respect for Human Rights’. In FY 2022-23, an internal assessment was conducted by the Company across its manufacturing plants and offices to understand and assess the potential human rights risks related to child labour, forced labour, sexual harassment, wages, discrimination at the workplace, health and safety, working conditions, etc. and practices put in place to uphold the rights of the contractual workforce. 100% of the locations adhere to the regulatory requirements and also have grievance redressal mechanisms in place for the workers.

Commitment towards Health and Safety
The Company is committed to Mission Zero Harm and is working on various strategies to continuously enhance the standards within the organisation. This commitment extends to contractors, workers and suppliers as well, working on behalf of the Company at the project sites or premises. The Company adheres to International Standards and Guidelines such as ISO 45001:2018. The Company's EHS Council monitors, measures and reviews the EHS performance and compliance with procedures. For further details on health and safety performance, practices and management systems, please refer to Principle 3 of BRSR in this Report.
L&T’s innovation efforts are focused on reducing material consumption, improving resource productivity, reducing delivery timelines and improving product design/features. These innovation efforts are driven by R&D teams, engineering teams and project execution teams across its various businesses.
**Key Highlights of FY 2022-23**

₹ 3,448 Mn  
Total R&D spend (cumulative for last 3 years)

380  
R&D Engineers/Scientists

₹ 81,776 Mn  
Revenue in FY 2023 from new and emerging businesses

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**Strategy linkage**

For details, refer to ‘Business Model and Strategy’ section.

**SDGs impacted**

**Material Topics**

- Quality of Products and Project Delivery
- Talent Management – Attraction, Retention and development
- Data Security, Privacy, And Cybersecurity
- Brand Management
- Business Ethics
- Corporate Governance

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3D Printed Post Office, Bengaluru
R&D Initiatives at L&T Construction Research and Testing Centre

In construction projects, L&T’s R&D endeavours are led by the L&T Construction Research and Testing Centre (based out of Chennai campus), which primarily focuses its efforts on developing new types of materials and products relevant to the construction sector.

Geopolymer Concrete

The environmental impact of the use of cement in concrete has prompted research into the development of mixes using 100% replacement of cement and Geopolymer (no-cement concrete) is one such concrete made without cement. The main ingredients of Geopolymer concrete include industrial by-products like fly ash and Ground-granulated Blast Furnace slag. The concrete was made by activating the ingredients with an alkaline solution such as sodium hydroxide and sodium silicate. L&T has developed M40 grade Geopolymer concrete and planned for its implementation in some pilot projects. The main advantages of Geopolymer concrete are early high strength and that it does not require water for curing. It can be used in the construction of concrete poles, sewage lines and in pavement construction.

Plastic Roads

Plastic waste management is a major issue due to the non-decomposing nature of many types of plastics. The road construction industry has developed a way to reuse some of these plastics to take a step towards sustainable infrastructure development. In this approach, roads (‘Plastic Roads’) are constructed using shredded waste plastic as a percentage of bitumen, which helps in improving the performance of the road. Research on the mixes developed using waste plastic has shown an improvement in the performance and the life of the asphalt. L&T had constructed a 500 m trial stretch in 2021 with varying percentages of bitumen (0%, 4%, 6% and 8%) replaced with waste plastic. Performance investigations of the field trial stretch showed better performance as compared to conventional mixes.

Plastic Blocks

Another novel method has been developed by L&T to reuse waste plastic – by converting it into paver blocks. This was done by combining waste plastic with other ingredients, e.g., fly ash and powdered glass from glass waste. Single-use plastic (LDPE) was melted and mixed with other raw materials in appropriate proportions to obtain the paver block. The resulting product is a lightweight, vibration-absorbing and eco-friendly material. These paver blocks have been used to construct a walkway on the L&T premises.
**Geopolymer Grout**
L&T has developed a grout as an alternative to the available proprietary grouts and it utilises industrial by-products instead of cement. This in-house developed grout has similar fresh and mechanical properties when compared to the proprietary grout. It is used for precast connections of the RC members. The developed product is 40% more economical when compared to proprietary grout.

**3D Printable Concrete**
3D concrete printing is a form of additive manufacturing used to fabricate buildings or construction components in complex shapes, which may be difficult with traditional formwork.
L&T has developed a printable concrete mix with 8 mm aggregates and utilised the same for the demonstration of 3D printed buildings. Compared to the typical cement-rich concrete mix used in 3D printing, the incorporation of coarse aggregates reduces the cement content percentage and carbon footprint of the concrete.

**Geosynthetic Liner Material for Approach Channel**
Hard surface lining evolved to address the more complex conditions, such as steep slopes and high-water flow in approach channels in hydel, river and marine projects. Cement concrete lining, shotcrete lining, precast concrete lining and cement mortar lining are a few examples of hard surface lining activities. To reduce the use of cement in such activities, L&T has explored alternate materials for conventional lining materials. Geosynthetic liner materials such as Geocomposite liners and Geotextile tubes have been proposed as an effective and economical alternative to conventional cement-based liners.

**Development of Dense Bituminous Macadam Mix with Copper Slag as a Replacement for Fine Aggregates**
Typically Ground-granulated Blast Furnace slag has been use to reduce cement in concrete and now efforts are being made to utilise other types of slags generated in the metal production process. L&T has piloted the use of Copper Slag for replacement of fine aggregates in the bituminous mixture. Trials were undertaken with 10%, 20% and 30% of Copper Slag replacement and the resultant mixes have improved mechanical and performance characteristics as compared with conventional mixes, along with a reduced carbon footprint.
**Digital Transformation of EPC Projects**

L&T commenced on the digital transformation journey of EPC projects in 2016 and has now reached a fairly mature stage. More than 50 digital solutions are being used across project sites to improve project delivery, reduce cost and achieve high levels of quality and safety.

<table>
<thead>
<tr>
<th>Bidding</th>
<th>360º Risk Perspective*</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI for contracts</td>
<td>NLP-based module for key clause identification, risk quantification, document and datasheet extraction.</td>
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<tr>
<td>Digital Solution to capture risk perspectives from all departments.</td>
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<tr>
<th>Pre-Construction</th>
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<tr>
<td>LMNOP+</td>
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<td>Dhruv</td>
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<td>Geospatial Survey</td>
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<tr>
<th>Engineering &amp; Design</th>
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<tbody>
<tr>
<td>BIM</td>
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<tr>
<td>VR Immersive Walkthrough</td>
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<tr>
<td>Desk Design Suite*</td>
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<td>ProdoSpec</td>
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<tr>
<th>Procurement</th>
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<tbody>
<tr>
<td>ConstZon</td>
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<tr>
<td>POMS</td>
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<tr>
<td>Vendor Performance Rating</td>
</tr>
<tr>
<td>Logistics Analytics*</td>
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</tbody>
</table>
**Construction**

- **ProWPack**
  - Solution which enables construction-driven project management by defining construction areas into manageable work packages

- **Drone-based Monitoring**
  - Drone-based project monitoring for live feed of progress, timeline and timelapse video with drawing vs. actual mapping

- **PROCUBE**
  - Integrated project management portal to track and manage projects

- **Geospatial Portal**
  - Web portal for project visualisation in a geospatial format

- **GIS Progress Monitoring**
  - Integration of GIS and project management tools for visualisation and project monitoring

**Safety**

- **Mitr**
  - Behavioural safety tracking application for workforce to report safe/unsafe behaviour and unsafe conditions

- **Video Analytics**
  - Solution leveraging ML algorithms and computer vision to identify potential safety hazards and provide productivity insights

- **ViewEHS**
  - Mobile app to access all SOPs and forms for submission and verification

- **VR-based Induction/Training**
  - VR-based immersive video for safety training during induction or refresher courses

- **SHIELD-EHS**
  - Single platform to manage all EHS processes for a project

*New initiatives in FY 2022-23*
<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
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<tbody>
<tr>
<td>MHE Certification Reminder*</td>
<td>Solution for tracking the certification compliance of equipment, eliminating manual processes</td>
</tr>
<tr>
<td>P-FAB</td>
<td>Application for ensuring quality compliance in every stage of pipe fabrication</td>
</tr>
<tr>
<td>Conquer-Quality</td>
<td>Application for comprehensive quality checks, customer and executive feedback</td>
</tr>
<tr>
<td>ConPro</td>
<td>Application for tracking the entire concrete supply-chain, including integration of batching plants and transit mixers</td>
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<tr>
<td>WPS*</td>
<td>Approval and repository-based portal to capture pre-qualification forms of welders deployed at various projects</td>
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<tr>
<td>WISA</td>
<td>One-stop end-to-end digital solution for all workmen-related functions – profile, historical records, certifications, training, wages, etc.</td>
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<tr>
<td>AIS</td>
<td>Digital platform to track and visualise the count of connected assets, their running status and key operational parameters</td>
</tr>
</tbody>
</table>
Material Management

- **PWCC**
  - Digital application for real-time tracking of precast segment casting and erection

- **Sprint**
  - Geospatial solution to track pipe material during the unloading and laying processes

- **TAG**
  - Solution for codification and tagging of individual special materials and tracking usage in the material lifecycle

- **Digital Weighbridges**
  - Automated weighbridges integrated with ERP for data recording / process flow

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Post-Commissioning

- **RMS**
  - Real-time data and monitoring of operating plants to enable real-time decision making

- **CMMS**
  - Application to visualise and analyse the life-history of each asset to aid maintenance activities for O&M projects

- **Fibertrack**
  - App for ensuring tracking and monitoring of patrollers and O&M of around 16,300 km fibre network

- **Help Lighting**
  - AR-enabled Remote Assistance application, including video collaboration services, that enables experts to work virtually side-by-side with site personnel

*New initiatives in FY 2022-23*
Digital Transformation of Manufacturing
Like EPC Projects, L&T’s manufacturing facilities have undertaken the digital transformation of various processes involved in the delivery of engineered-to-order products. This has helped the businesses to achieve benchmark delivery performance, while improving the working conditions and safety performance.

IoT for Utilities
IoT implemented for critical utilities like water, fire, HVAC and electrical sub-station, enables monitoring and predictive maintenance

PDM
Predictive maintenance module which helps in identifying early failure, reduce spares consumption and improves OEE (over equipment efficiency)

One Man - Multiple Stations
One man operating multiple smart welding stations; leveraging wireless technology, developed as part of the Autonomous Welding Project

IoT Stations
Smart IoT stations for Heat Transfer Equipment (HTE) business unit (PBU) in Feeder shops and Nuclear PBU shops

Factory IoT
Monitoring of OEE (overall equipment effectiveness) through IoT data
<table>
<thead>
<tr>
<th>Engineering</th>
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<tbody>
<tr>
<td><strong>3D PDF</strong></td>
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<tr>
<td><strong>RPA with AutoCAD</strong></td>
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<tr>
<td><strong>PLM CAD Integration</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
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<tr>
<td><strong>Chatbots</strong></td>
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<tr>
<td><strong>AR for ship construction</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
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<tr>
<th>Resource Management</th>
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<tr>
<td><strong>IDMS</strong></td>
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<td><strong>eTLS</strong></td>
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<tr>
<td><strong>iRUDRA</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
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<tr>
<td><strong>Advanced Shipment Notice (ASN)</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Inventory &amp; Material Tracking System</strong></td>
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<table>
<thead>
<tr>
<th>Quality</th>
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<tr>
<td><strong>Smart QMS</strong></td>
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<tr>
<td><strong>Supplier QMS</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
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<table>
<thead>
<tr>
<th>New Technology</th>
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<tbody>
<tr>
<td><strong>3D Printing</strong></td>
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<tr>
<td><strong>Digital Twin</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
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</tbody>
</table>

<sup>*</sup>New initiatives in FY 2022-23
<table>
<thead>
<tr>
<th>Other Digital Initiatives across EPC Projects and Manufacturing</th>
</tr>
</thead>
</table>
| **BBS Tools**  
Enabling Bar Bending  
Schedule preparation  
in a standard format, it  
enables optimised usage  
of offcut reinforcement  
bars, with the support of  
Real Cut1D Optimisation Software. |
| **PCIS (Project Control Indices System)**  
Integrated system for building and monitoring project schedules and capturing micro-level progress against the project plan. It generates weekly and monthly progress insights. |
| **Predictive Analytics with EPSILON**  
Solution which enables project teams to identify possible delays in projects capitalising on schedule integration on EPSILON Platform. |
| **IPBS (Integrated Project Billing System)**  
Integrated application for generating and monitoring project invoices and related supporting documents as per project billing schedule. |

| **GIS-based O&M Tracking Application**  
Real-time tracking of Edge devices implemented across geographically dispersed project sites, SLA tracking and monitoring their health along with reasons for downtime and outage analysis. |

| **Proactive Logistics Tracking for ODC Movements**  
GPS-based solution for logistics team to track the location and status of critical equipment and materials in real-time. It is also connected through API with various logistics service providers. |
| **Precast Tracking Solution**  
Solution for managing large volumes of precast components to be used in rural drinking water projects by tracking the components from yards/factories till erection. |
| **Vendor Finance Scheme**  
Centralised MIS to monitor the status of vendors who are working under the ‘Vendor Financing Scheme’. |

| **ePragati**  
Online platform for monitoring the ongoing projects; includes scheduling, tracking, reviewing and managing the progress and performance of the project along with managing changes when required. |

| **HSE Credible System**  
Quantification of HSE Performance of staff – a tool to report and resolve incidents/ unsafe acts/ conditions in a timely manner. |
| **Digital Health Screening Application (DHSA)**  
Real time recording, monitoring and tracking of basic health parameters of workmen to avoid untimely incidents/ fatalities/ reduce NAD (non-accidental death). |
| **Legal Document Comprehension using ML**  
ML-based solution to extract important clauses and attributes from legal documents |

| **Rise in Service Excellence (RISE)**  
Simplified feedback system to capture the performance of internal functions from various stakeholders. |
| **FORM FIT**  
Solution to track formwork panel and cycles of reuse. |
| **GST Auto Reconciliation**  
RPA bot along with ERP customisation, provides automated GST reconciliation capability to avoid Indirect Taxation losses. |
| **ICAM**  
Internal Control Audit Module for scheduling audits and recording audit findings against technical and commercial points. |
### Value Engineering Initiatives

#### ETAP
Digital application to track history and degree of use of all enabling structures across project sites by using QR codes.

#### RebarPro
End-to-end tracking of rebar from store-to-site after fabrication, enabling wastage minimisation, saving time and accelerating process efficiency.

#### MST
Material scheduling tracker application to plan and track the actual status of the complete procurement cycle from request to site delivery.

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

#### Drishti
Enterprise-level knowledge management system to provide situational guidance and capture, store, extract required information for efficient knowledge transfer across the organisation.

<table>
<thead>
<tr>
<th>Value Engineering Initiatives</th>
<th>End-to-End Tracking of Rebar</th>
<th>Material Scheduling Tracker</th>
<th>Project Monitoring Tool</th>
<th>Knowledge Management System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extremely Long Lifespan Concrete</strong></td>
<td>Digital application to track history and degree of use of all enabling structures across project sites by using QR codes.</td>
<td>Material scheduling tracker application to plan and track the actual status of the complete procurement cycle from request to site delivery.</td>
<td>An integrated tool for project monitoring including material tracking at site.</td>
<td>Enterprise-level knowledge management system to provide situational guidance and capture, store, extract required information for efficient knowledge transfer across the organisation.</td>
</tr>
<tr>
<td><strong>Extremely Long Lifespan Steel Structures</strong></td>
<td>End-to-end tracking of rebar from store-to-site after fabrication, enabling wastage minimisation, saving time and accelerating process efficiency.</td>
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<tr>
<td><strong>Reduction of Bronze Cladding Thickness</strong></td>
<td>Optimisation of the bronze thickness based on Finite Element Method analysis, also enabling the structure to bear high wind speeds and reduced number of prop supports.</td>
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<tr>
<td><strong>Glass Reinforced Fibre Concrete Cladding</strong></td>
<td>Special design to enable large-scale use of GFC cladding in a project, helping conceptual architecture design to come to life.</td>
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<tr>
<td><strong>PPVC Toilet POD</strong></td>
<td>Modular toilets designed – suitable for PPVC type of construction.</td>
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<tr>
<td><strong>Ammonia Refrigerant System for Efficient Energy Management</strong></td>
<td>Ammonia Refrigeration System designed for use in cold storage of raw materials and finished goods, to enable effective cooling and efficient energy management.</td>
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</tr>
<tr>
<td><strong>Water Leakage Detection using Non-Destructive Test</strong></td>
<td>Ground Penetrating Radar and other technology used in combination to determine water leakage in a building basement and subsequent resolution without any disturbance to normal operations/ use of the basement.</td>
<td></td>
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<tr>
<td><strong>White Asphalt Pavement</strong></td>
<td>Cement Grouted Bituminous Macadam (CGBM) which has better performance and wear-resistance than normal flexible pavements.</td>
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*table continued...*
## Value Engineering Initiatives

### Extracting Quantities of Floor Finishes and Wall Finishes
Dynamo script programme for extracting quantities of flooring finishes and wall finishes from Revit BIM model in a short duration.

### Hybrid (Low Impulse + Direct Throw) Air Distribution System
HVAC air distribution with low impulse system and nozzle orientation based on the CFD simulation, to ensure user comfort through uniformity of cooling and air movement in large volumes/spaces without any cold curtain effects or excessive drafts or air stagnation.

### Parametric Modelling of GA drawings
Developed solution for automation of 3D model generation from GA drawings based on standard derived inputs - helps reduce modelling time by 70%.

### AI Optimiser for RCC Structures
AI-based tool to provide optimised engineering solutions for engineering of RCC and Steel structures covering different international codes and standards - enables multiple iterations in shorter time to find right design according to site constraints.

### Twin Truss Launching Girder
Developed new system for rear and bottom feeding of pre-cast segments for super structures in RRTS project, enabled smooth operations for erection activity and achieved a cycle time of 5 days per span.

### In-house Process Design for Sludge Treatment
In-house design of Temperate Phased Anaerobic Digestion for treating Class A sludge - compared to the traditional process, this process has lower power consumption, lower space requirements and does not use chemicals.

### Precast Elements of Overhead Service Reservoirs (OHSR)
First-of-its-kind design of precast concrete elements for OHSR staging and steel tank, helps reduce construction time, increase quality control and minimise waste generation.

### High Speed Rail Track Slab Production
Production line economisation of Japanese casting method for Track Slabs, enabled doubling of casting output, minimisation of waste and optimised production space.

### Custom Designed Pier & Pier Cap Shutters
Devised an innovative, optimal, and easy to handle shuttering arrangement for these diameter circular piers for MAHSR project, reduced fabrication time by 30% and erection time by 40%.

### Application of Curing Compound using Electric Airless Spray Equipment
Identification and deployment of electrically operated Airless Spray Machine - enables higher productivity and improved quality.

### Improved Surface Miner
Improved Surface Miner KSM403 with stronger chassis, upgraded undercarriage for higher life, in-built ROPS and FOPS Cabin for operator safety, ergonomically designed operator seat with new control system and 360 degree viewing camera system for operator convenience.

### Multi-transmitter Setup
Designed a multi-transmitter set-up in STP instrumentation to reduce the number of transmitters; easier data interfacing with the server and reduces operating expenditure.

### OHE LOP Optimisation
In-house development of a design automation tool for OHE design drawing preparation works. It reduces cycle time by 50-60% compared to the traditional process.

### Concrete Design Mix
In-house experimentation with the use of Micro Silica in the design mix of concrete for the Digester structure enhances the microstructure of concrete.

### Steam Tracing
Steam Tracing System automates Material Takeoff calculation related to tracer lines routed from manifold to condensate in refinery projects.

### Electrostatic Painting
Implemented a process of putting an electrostatic charge in the paint itself, to increase transfer efficiency by attracting the electron charged paint to the targeted object.
Solar Powered Electric Vehicle

Project site activities involve considerable intra-site commuting. Typically, HSD-powered jeeps/campers are used in project sites. At the Meghalaya-Assam Bridge Project site, the project’s P&M department developed a battery-powered vehicle (like a golf cart) in-house, and with materials available locally. Additionally, they installed a solar panel on the vehicle to charge the batteries. The vehicle also doubles up as an emergency power back-up for lighting and other purposes.

Two such vehicles are currently working at the site location, with a total running of more than 5,000 km and savings in HSD consumption estimated at 800 litres.

Enhancement of Automatic Welding for Pipe Fabrication

Fabrication works are getting mechanised and one technique which is seeing increased adoption is mechanised orbital flux cored arc welding. For large dia pipes, the weld head, which includes the torch, mounts on a track that encircles the entire exterior or interior circumference of the pipe being welded. A business unit of the Company undertook the task of in-house modification of the welding track used typically and also developed a new method for handling very large diameter (>100” pipes).

With the help of the new track, the orbital FCAW could be used for Fitting-to-Fitting and Fitting-to-Flange weld joints, and weld deposit coverage improved from 50% to 75% in the process. The new method (flexi-track) enabled the welding of large bore pipes (up to 142”) and increased coverage to 90%.
At L&T, building long-term relationships based on mutual trust, respect and benefits for business growth and profitability is a way of life. The Company has created meaningful social and relationship capital while pursuing progress, meeting customers’ needs and demands, working with suppliers, and driving inclusive growth for communities.
Key Highlights of FY 2022-23

1.5 Mn
CSR beneficiaries

10,736
MSME vendors

9.2
Customer satisfaction score

Strategy linkage

For details, refer to ‘Business Model and Strategy’ section.

SDGs impacted

Material topics

- Social Engagement and Impact
- Customer Experience and Satisfaction
- Sustainable Supply Chain
- Diversity, Inclusion & Equal Opportunity
- Corporate Governance
- Business Ethics
- Human Rights and Labour Conditions
- Brand Management
Building India’s Social Infrastructure

L&T is committed to social responsibility and has established a CSR programme that focuses on promoting inclusive growth and development through interventions in areas such as water and sanitation, health, education, and skill development.

The programme operates in accordance with the guidance and framework approved by the CSR Board Committee. The implementation of projects is through collaboration and partnerships with NGOs, Government agencies, along with site-level teams (offices, campuses, projects) to develop, implement, and oversee CSR programmes. The aim is to improve the quality of life, mitigate social inequalities, build self-sufficiency, and help individuals in the identified communities, to achieve their true potential.

Beneficiaries across thematic areas

<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Water and Sanitation</td>
<td>361,985</td>
</tr>
<tr>
<td>Health</td>
<td>763,608</td>
</tr>
<tr>
<td>Education</td>
<td>331,425</td>
</tr>
<tr>
<td>Skill Development</td>
<td>46,441</td>
</tr>
</tbody>
</table>

Drivers of CSR Interventions

- Corporate CSR Team
- CSR Coordinators at campuses, area offices and sites
- L&T’s Health Centres
- L&T-eering Employee Volunteering Programme
- Prayas Trust Run by female spouses of employees and women employees
- L&T Public Charitable Trust (LTPCT) Non-profit entity within L&T
**Integrated Community Development Programme**

L&T's Integrated Community Development Programme (ICDP) facilitates addressing water scarcity issues and is implemented through a structured approach that includes need assessment, community mobilisation, infrastructure construction for water conservation and soil preservation, sanitation initiatives, promotion of sustainable agricultural practices, and empowering residents to utilise resources responsibly. Once the projects are implemented, they are handed over to community institutions to ensure the continuity and sustainability of the initiatives.

**Launched in 2014-15**

Pilot in five water-stressed locations in Rajasthan, Maharashtra and Tamil Nadu, benefiting **11,362 households spread over 22,958 hectares.**

Since 2018-19, implemented in 5 additional water-stressed locations in the same states benefiting **14,866 households spread over 16,233 hectares.**

**Infrastructure for Water Conservation**

Intervention involved community participation in construction of various structures such as check dams, anicuts, contour trenches, farm bunds and farm ponds. The participatory approach is effective in ensuring maintenance, ownership and long-term sustainability of the interventions.

**The ripple effect of water conservation structures: boosting the water table and beyond**

Devgaon cluster faced severe water scarcity due to low rainfall in 2018, leading to a decline in water levels. The Government was providing drinking water through tankers.

Measures such as building farm bunds, trenches, ponds, borewell rechargers, nala deepening, recharge shafts, and check dams, were implemented across six villages, resulting in a significant increase in the water table shown in the graph. This enabled farmers to grow two crops per year and some crops like wheat, gram, sorghum, and vegetables, on a larger scale.
**Key Initiatives in FY 2022-23**

**Capacity-building and knowledge exchange**
ICDP programmes have trained communities to use water efficiently and adopt low-cost organic agricultural methods, such as minimal water-usage practices and crop demonstrations, and provided training on vermi-composting, organic formulation, seed bank and horticulture development. Village committees have also made exposure visits to other villages where water conservation programmes have been successful under the ICDP programme.

**Conservation of endangered seed varieties**
Sevantri Gram Panchayat organised a Seed Exchange Fair attended by around 200 farmers from 14 villages. Farmers set up stalls showcasing diverse seeds of grains, vegetables and fruits. The event emphasised the significance of preserving local and climate resilient seed varieties.

**Promoting sustainable and climate resilient agriculture**
Sustainable agricultural practices like crop rotation, inter-cropping, mulching and organic farming promote water conservation and soil health by improving fertility and moisture retention, while reducing the use of synthetic fertilisers and pesticides in the project area.

**Drip and sprinkler irrigation**
Drip and sprinkler irrigation, facilitated by community participation and Government subsidies, reduced water usage, soil erosion, and waterlogging. The initiative benefited 38 marginalised farmers, enabled year-round irrigation, increased horticulture, and allowed farmers in Sevantri to cultivate gourd crops during the summer months using water-efficient technologies, which were later adopted by other farmers.

**Horticulture development**
The project adopts a holistic approach to horticulture development, promoting efficient irrigation techniques, drought-tolerant crops, soil and water conservation, and community-led approaches for sustainable horticulture development. This year, 24 farmers selected by the Village Development Committee and trained by local Krishi Vigyan Kendra in the Devgaon cluster received support for horticulture plantations with guava and custard apple. 25 cultivators in seven villages from Sevantri planted guava meadow orchards in 2020-21, earning ₹137,500 from the first fruit production after 15 months, with an expected annual income of around ₹2-2.5 lakh per farmer after the 5th year, when the trees mature.
Fruitful venture: The story of a successful guava-orchid plantation

Akbar Rasul, a farmer in Gevrai Marda village, was unable to grow crops due to low rainfall in 2019. He participated in the ICDP project activities, including farm bunding and planting guava orchards. Proper guidance helped him in realising a production value of ₹16,500. Other farmers in Devgaon also benefited from the project, resulting in increased income and an improved economic situation in the village.

Livestock livelihood

The ICDP projects addressed issues related to fodder scarcity and livestock diseases by providing fodder crop demonstrations, silage preparation, and livestock vaccination camps. Additionally, 40 animal health camps were held, leading to improved animal health and overall livestock management.

New technique of agriculture: Less cost, more yield

728 farmers trained under the ICDP on cost-reducing farming methods and climate-resilient practices reported an increase in yield and cost reduction of ₹6,000/acre.

Enhancing nutrition

The project promoted and strengthened livelihoods by providing good quality seeds of indigenous vegetables to women, who were encouraged to plant kitchen gardens for fresh, nutritious, and organic food. In FY 2022-23, 150 households benefited, and a total of 1,252 kitchen gardens have been set up since 2019. Additionally, once water was made available, various agro-based livelihood options like horticulture were made available to the community.

Kitchen gardens introduced at 18 Anganwadis to increase the nutrition value of mid-day meals for children. Vegetables from the garden were used for preparing nutritious meals for 888 children, and parents were made aware of increasing the nutritional value of food consumed daily.

A zeal to adapt and grow

Pratap Singh from Thoriya ki Bhagal village, a regular participant in the Farm Field School under the ICDP, earlier earned ₹5,000 by selling saplings and ₹19,000 by selling 950 kg of produce during the Rabi season. In the Zaid season, he earned ₹25,400 by growing multiple crops and farming for the Kharif season with efficient techniques, and his total income from the two seasons is ₹49,400.

Cropping intensity of maize and wheat production increased from 4.4 q/ha to 5.7 q/ha in FY 2022-23 in Sevantri leading to a doubling of families’ income, with an additional annual income of ₹6,006 to ₹14,000.
In 2019, a baseline study found that 40% of the children under the age of five in the project area suffered from malnutrition due to various reasons, including poor feeding practices, poverty, lack of sanitation facilities, and inadequate healthcare. To tackle this problem, nutritional food was provided to 217 children attending Balwadis by a trained Balwadi Sanchalika.

Community Groups, including VDCs with 50% women participation, Farmers’ Groups and Self-Help Groups (SHGs), were formed. Monthly meetings were held to plan soil and water conservation works, manage civil sites, cut grass from pastures, distribute the Rabi season seeds, develop kitchen gardens, and manage civil materials for toilet construction.

78 SHGs with 1,254 members saved ₹2.13 lakh and disbursed group loans of ₹2.4 lakh for health, education and livelihood in FY 2022-23.

ICDP programmes in Sevantri empower women farmers and community members through Village Development Committees and SHGs. Gender and financial literacy campaigns, exposure visits, training in accountancy, sessions for developing SHG management and leadership skills, were organised for women. Women's participation led to positive changes in the community, including raising important issues and becoming independent in decision-making.

Active participation of women in SHGs at Nagzari Cluster in Maharashtra led to the formation of a Farmer Producer Company (FPO) named 'Shiv Swarajya'. The FPO has 310 members, including 20% women, and a share capital of ₹4.34 lakh, resulting in an all-women Board of Directors. The FPO sold 20 quintals of Sweet Lime and 700 quintals of Soyabean in September 2022, earning ₹1.4 lakh profit. The FPO plans to establish its own gradation and aggregation unit at the district level to obtain better prices.

In an ICDP, after achieving water sufficiency, the programme shifts its focus to other developmental needs like education and health, based on the community needs and assessment. The aim is to improve the quality of life and help the community achieve their aspirations.
Saajhi Shiksha
The project was initiated in 2020 in 19 schools and six Anganwadi Centres (AWCs) in Bhim, Rajasthan, after water-sufficiency and sanitation interventions were implemented under the ICDP from 2014-2019. The project aims to enhance the foundational competencies of marginalised children aged 3-6 years and promote parental engagement in learning.

Strengthening infrastructure
Creating a positive learning environment is crucial to achieving quality education, and the ‘Saajhi Shiksha’ project improved infrastructure in 19 schools and six AWCs in Bhim block, including smart classrooms, libraries, learning materials, and parent/caregiver training, to support students in the learning process. Additionally, Learning and Resource Centres (LRCs) were established to provide reading campaigns, learning camps, life skills training, and an annual newsletter to support children aged 6-18 during school closures. Results from the assessment of children supported at LRCs showing significant improvement in learning levels, reported as follows:

Impact of Education Initiatives (Across both graphs)

Impact of Water Infrastructure Built
After the initiation of the project in 2019, communities in Devgaon, Nagzari and Sevantri now have access to drinking water and sanitation facilities, which has led to increased crop cultivation and livestock fodder, resulting in improved household incomes and quality of life. The project has also strengthened community ownership and women’s participation in sustainability initiatives.

This year, water and sanitation interventions have impacted the lives of 361,985 beneficiaries
**Coverage under ICDP in three locations- Devgaon, Nagzari and Sevantri**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Devgaon</th>
<th>Nagzari</th>
<th>Sevantri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households covered under ICDP</td>
<td>5,345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area of land under the project area (hectares)</td>
<td>10,074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People covered</td>
<td>25,208</td>
<td></td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>Water Availability</th>
<th>FY 2021-22</th>
<th>FY 2022-23</th>
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</thead>
<tbody>
<tr>
<td>Water harvested (lakh litres)</td>
<td>15,101</td>
<td>19,887</td>
</tr>
<tr>
<td>Increase in water table level (metres - average)</td>
<td>8.88</td>
<td>9.24</td>
</tr>
<tr>
<td>Percentage of households with drinking water</td>
<td>77%</td>
<td>95%</td>
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<table>
<thead>
<tr>
<th>Agriculture</th>
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</thead>
<tbody>
<tr>
<td>No. of crop demonstrations</td>
<td>65</td>
<td>95</td>
</tr>
<tr>
<td>Additional area protected from direct run-off (hectares)</td>
<td>3,471</td>
<td>2,620</td>
</tr>
<tr>
<td>Increase in the area under cultivation / irrigation</td>
<td>53%</td>
<td>60%</td>
</tr>
<tr>
<td>Fallow land converted to agriculture land (hectares)</td>
<td>190</td>
<td>202</td>
</tr>
<tr>
<td>Area under horticulture (hectares)</td>
<td>557</td>
<td>619</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health and Nutrition</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of kitchen gardens</td>
<td>539</td>
<td>240</td>
</tr>
<tr>
<td>No. of children in Balwadis supported</td>
<td>241**</td>
<td>237**</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Livestock Livelihood</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of veterinary camps</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td>Pastureland area under protection (hectares)</td>
<td>19**</td>
<td>24**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institution Building</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Village Development Committees</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>No. of active SHGs</td>
<td>213</td>
<td>235</td>
</tr>
<tr>
<td>SHG Savings fund created for inter-loaning (lakh)</td>
<td>₹ 66</td>
<td>₹ 125</td>
</tr>
<tr>
<td>No. of farmers groups formed</td>
<td>26*</td>
<td>26*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity Building</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of farmers attended farm-field training</td>
<td>408</td>
<td>2,104</td>
</tr>
</tbody>
</table>

Training conducted in
- 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

* Data only from Devgaon and Nagzari
** Data only from Sevantri
Education
L&T’s education programmes aim to promote social advancement and inclusive development in the Indian education system through various initiatives such as providing infrastructure in under-resourced schools, establishing community learning centres, enhancing teachers’ capacity, and promoting community monitoring systems. The STEM (Science, Technology, Engineering and Mathematics) Education programme aims to reduce the urban-rural gap in STEM education by introducing Science and Mathematics to underprivileged students in Government and resource-poor schools to spark their interest in STEM fields.

Activity-based Learning (ABL)
Activity-Based Learning classes using STEM models, collaborative learning in small groups through hands-on activities, experiments, and projects, along with science activity kits and booklets, promote critical thinking, problem-solving, and innovation skills among students. These initiatives inspire future scientists and innovators, cultivate interest in science, and promote STEM education. Additionally, providing science Do-It-Yourself (DIY) kits to students foster enthusiasm for science and technology by enabling them to understand science through practical, hands-on learning experiences. Atal Tinkering Labs have been established in schools to foster an interest in STEM among students and promote a hands-on approach to learning about science and technology.

From a middle bench to a world record – the journey of Shobana through STEM programme
Shobana middle bench reserved student in 8th grade, at Government Girls Higher Secondary School in Kovur, showed little interest in academics but was passionate about creating science projects. Enrollment in the STEM Education Programme gave her the opportunity for project-based learning. With guidance from project staff, Shobana developed 'Click and Clutch', an invention to prevent starting a bike without a helmet. She went on to participate in the Dr. APJ Abdul Kalam Satellite Launch Vehicle Mission 2023 and will receive an Asian and World Book of Records certificate for her contribution. Shobika now aspires to be an astronaut.
Comprehensive approach to treating Autism Spectrum Disorder at Andheri Health Centre

Psychologists provided interventions to Chetan Pangaria, a 4-year-old with mild Autistic Spectrum Disorder. Over 6 months, they offered family counselling, sensory integration, and physical movement activities, resulting in improvement in his verbal skills, self-care abilities, and daily habits. Chetan's family's involvement increased due to their acceptance of his condition, thus helping him in his recovery.

Community-based education model

This year, a community-based education model was introduced to enhance children's learning levels through structured study classes, led by trained volunteers. The initiative received support from parents as it reduced screen-time and engaged children in educational activities. The project reached 1,244 children and 444 mothers, resulting in improved learning levels and positive feedback from parents.

Turning a new leaf – Mahalakshmi’s comeback from missed classes and forgotten concepts

Mahalakshmi, a fifth-grade student at Chennai Middle School, Amman Koil, was a brilliant student before her father’s death due to COVID-19. The pandemic and family situation made her miss many classes and forget concepts, causing her to struggle to keep up with her classmates when she returned to school. A staff member from the Community Learning Centre helped Mahalakshmi, using interesting teaching and learning materials to recall lost skills and progress. Mahalakshmi's reading and math skills improved. She also learned discipline and language skills. Mahalakshmi caught up with her studies and regained her confidence. She feels more motivated and ready to face challenges with support and encouragement from the community learning centre.

Health

L&T's health initiatives aim to improve community health by providing preventive, curative and promotive healthcare services to underprivileged communities in remote areas through L&T's Community Health Centres and Mobile Health Units. The programme is reaching out to people in urban and rural areas across Gujarat, Maharashtra and Tamil Nadu, enabling last mile delivery. L&T established its first Health Centre in Kansabahal, Odisha in 1963, and currently operates 10 Community Health Centres, including 5 Kidney Dialysis Clinics for the underprivileged in different cities. L&T's Health Centre in Mumbai also provides free infertility services and operates a well-equipped child guidance clinic that offers a unique range of services, including parent counselling.

Integrated Annual Report 2022-23

Social and Relationship Capital
Health Units
Mobile Medical Units play a crucial role in providing essential medical care to remote communities, improving their quality of life. L&T has 20 Mobile Health Vans to provide free healthcare services to the marginalised communities residing in and around Mumbai, Lonavala, Talegaon, Surat, Vadodara, Coimbatore, Chennai and Kattupalli. These vans conduct specialised health camps to increase awareness about prevention and cure, and change in behaviour. They provide eye care, diagnosis and treatment for anaemia, vaccinations, skin, geriatric, dental, paediatric and gynaecological care.

Anti-Retroviral Therapy (ART) centre
L&T’s ART centre in Mumbai conducts awareness camps to educate people about HIV/AIDS and provides medical support, counselling and testing services. They offer personalised treatment for tuberculosis, including home visits and counselling sessions. L&T collaborated with various Government schemes such as Pradhan Mantri Jana Arogya Yojana and Jan Aushadhi Yojana to provide monetary aid and subsidised medicines and with Mumbai District AIDS Control Society and National AIDS Control Organisation to control the spread of communicable diseases like HIV/AIDS.

Cancer Care services
L&T aims to promote preventive education and early diagnosis of cancer by implementing interventions targeting both men and women. Specialised checkup camps for cancer were conducted this year in Mumbai, Thane and Palghar districts and identified 149 individuals with suspected cancer. L&T supports a shelter programme that provides temporary residential facilities for caregivers and children from all over India undergoing cancer treatment in Mumbai hospitals.

Reviving health in remote tribal communities – Mobile Medical Unit saves Mrs. Murugathal from rare skin disease
A Mobile Medical Unit treated 55-year-old Mrs. Murugathal living in a remote tribal settlement for a rare skin disease. The team of doctors and nurses provided the necessary medical care, helped her recover, provided awareness on managing the condition, and readied her with measures to prevent infections in future.
**Skill Development**

L&T offers free vocational training courses and skill-building activities for unemployed youth in rural and urban areas through its Construction Skills Training Institutes (CSTIs). CSTIs offer training in trades with high demand in the industry, and new technology-based courses are introduced, such as Solar PV Technician skills, OFC & CCTV Installation and Maintenance, and digital training. All trainees undergo periodic online assessments.

CSTI-trained skilled professionals secure 6th place at the 46th WorldSkills Competition

Naresh Dhravat and Amit Yadav, trained at L&T Construction Skills Training Institute, and secured 6th rank at the competition held in Salzburg, Austria in August 2022. Both individuals, from humble backgrounds, were competing in the Concrete Construction Work segment. Their success is attributed to the quality of their training and mentorship provided by CSTI.

Multi Skilling Training Centre (MSTC) at Vizag:

This is a skill-building centre that addresses the gap between vocational education and industry demands by training individuals to meet the needs of the marine industry. Their programme involves knowledge acquisition, skill development, and behaviour change to increase the employability of fresh ITI technicians, providing them with basic and advanced skillset courses, and connecting them with potential employers.

From irregular income to financial independence – Rohit’s journey with L&T CSTI-Panvel

Rohit Dange, the sole bread-winner of his family, completed a Welding Training Programme at L&T CSTI-Panvel and was appointed as a Front Line Supervisor for QC welding at a construction project site. He feels that the programme provided him with the necessary skills and knowledge to become financially independent and progress in his career.

Multi Skilling Training Centre (MSTC) at Vizag:

This is a skill-building centre that addresses the gap between vocational education and industry demands by training individuals to meet the needs of the marine industry. Their programme involves knowledge acquisition, skill development, and behaviour change to increase the employability of fresh ITI technicians, providing them with basic and advanced skillset courses, and connecting them with potential employers.

From ITI to MSTC: How vocational training transformed Likitha’s life:

Despite facing financial limitations and not being able to get admission to Dockyard Apprentice School, Visakhapatnam, Lithika pursued a diploma in a Electronics at Govt. Polytechnic College for assisting her father, an auto driver. Later, she joined L&T’s MSTC where she received extensive hands-on and classroom training in welding, soldering, lugging, etc. which helped her secure a job as a trainee technician at a private company with a salary of ₹ 10,000 per month.

1,654 individuals trained from Maharashtra, Madhya Pradesh and Goa in skills needed for becoming electrician, machinist, welder, wireman, and electronics mechanic in FY 2022-23

Skill Trainers Academy

This institute focuses on training trainers and assessors in the skilling ecosystem. Jointly developed with Singapore Polytechnic and National Skill Development Corporation (NSDC), the curriculum emphasises on pedagogy skills. It has well-equipped classrooms, laboratories and workshops, and offers a residential programme with hostel facilities and 45 Master Trainers with extensive domain knowledge and experience.
### Empowering women through skill-building

L&T's SARAL Samudaay project in Vadodara empowers women by offering skill-building interventions in stitching, beauty, wellness, and life skills. The programme aims to promote their financial independence and encourage them to start small businesses such as paper bowl making and poultry farming. Additionally, it aims to create systemic changes by promoting entrepreneurship, digital and financial awareness, and interaction with the community, market, and state bodies.

### Linking CSR Interventions with Government Schemes and Programmes

#### Swachh Bharat Abhiyan
- 3,611 household toilets constructed since 2017-18 using local skills and materials
- 855 school toilets constructed since 2015-16
- 27,000+ children trained in using toilets, cleanliness and hygiene since 2015-16
- Community-based monitoring committees ensured that these villages became open defecation free

#### Swajal Yojana under Rural Development Ministry:
Watershed development programme under ICDP

#### National Rural Livelihood Mission (NRLM):
SHG programme under ICDP

#### Pradhan Mantri Krishi Sinchayee Yojana:
Drip irrigation in ICDP

#### National Health Mission
- National AIDS Control Programme (NACP) at L&T ART Centre, Andheri
- National TB Control Programme (RNTCP) at L&T TB Centre, Andheri
- National Family Planning Programme:
  - Contraceptive services made available at L&T Health Centres
  - Improving quality of services at Anganwadi and capacity building of anganwadi workers
- Mother and Child Health Programme:
  - Antenatal and post natal care and immunisation services provided at the health centres are linked to this programme
- Ayushman Bharat Yojana: Patients visiting L&T health centres are linked to this scheme
- Pradhan Mantri Jan Arogya Yojana: Patients availing Dialysis services at L&T centres are linked to this scheme
- Pradhan Mantri Bhartiya Janaushadhi Pariyojana:
  - Patients visiting L&T health centres are linked to this scheme
- Mahatma Jyotiba Phule Jan Arogya Yojana in Maharashtra: Patients visiting L&T health centres are linked to this scheme
- Widow Pension Yojana: HIV impacted widows at ART Centre are linked with this scheme
- Adhar Poshan Yojana: Provide nutritional support to HIV affected patients at ART centre

#### National Skill Development Mission
- L&T CSTI and Skill Trainers Academy (STA) at Madh, Mumbai
- 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 – L&T's STEM Education Programme – Engineering Futures

### L&T-eering: Employee Volunteering Initiative

During FY 2022-23, 6,313 L&T volunteers helped children readjust to school after the pandemic by organising creativity camps, STEM-based workshops, and educational excursions. They engaged in activities such as art and sports-based programmes for children from institutional homes and mentoring young science leaders to create STEM-based solutions to everyday problems. Additionally, L&T volunteers participated in various other activities like fund-raising for children undergoing palliative care, blood donation drives, health education for adolescents, supporting disadvantaged groups through craft and NGO melas, participating in Daan Utsav, cleaning water bodies, planting trees, etc.
The Company continues to strengthen its partnerships through engagement with diverse stakeholder groups. Trustworthy and transparent communication, supported by disclosures that are being continually improved, are the key levers to maintaining relationships with the stakeholders. These include customers, shareholders, employees, business partners, Central and State Governments, even foreign governments, and the local communities. For details on how the Company is building and maintaining relationships, please refer to the ‘Stakeholder Engagement’ section. The Company believes that the stakeholders provide us with insights that help us review and progressively refine our strategies to create long-term value for all. There are systems and processes in place for receiving and redressing grievances from various stakeholders. For further information, please refer to Section A of BRSR.

Stakeholder consultation plays a vital role and is used to support the identification and management of ESG initiatives. A few instances as to how the inputs received from stakeholders on these topics were incorporated into policies and activities are mentioned in Principle 4 of the BRSR section.

The Company works closely with the Government of India as well as local governments during its operations. The Company launched its ‘Public Policy Advocacy’ policy in 2023 which governs the public policy advocacy process. The Company also participates in numerous Government schemes through its business operations and CSR activities. For more information, refer to Principle 7 of BRSR.
Customers

Customers are one of the key partners for growth. Some of the Company’s major clients include State and Central government departments, public sector entities, private sector companies, ministries, and local municipal bodies. One of the thrust areas of the Company is to ensure sustainable growth in the current business portfolio through profitable expansion and execution, scale up through business model innovation and meet customer demands in an agile manner through the newer businesses.

Suppliers and Contractors

At L&T, a base of around 148,000 suppliers and vendors figure among the key stakeholders who contribute directly to business growth and profitability. The Company fosters responsible behaviour in its supply chain, in accordance with the highest standards of ethics and integrity, respect for the law, human and labour rights, and environmental stewardship. To achieve the same, a Code of Conduct for suppliers which guides them to engage in ethical, responsible and legal business practices in their operations. The core areas include the promotion of environmental sustainability, commitment to human rights, labour and society, and upholding ethical integrity. Regular interactions and engagements are conducted to ensure compliance, responsibility and integrity. As at March 31, 2023, around 61,000 vendors have signed the Code of Conduct (CoC) and 18,691 new vendors have been onboarded.

To gauge the maturity of the supply chain, an survey was initiated in 2023, starting with the top 25 suppliers (comprising 35% of procurement value in the Construction business) being assessed on parameters related to the environment, human rights, CSR, health, safety and governance. The Company also evaluated the top 50 suppliers on compliance with sustainable sourcing standards such as ISO 14001, 45001, OHAS 18001, SA 8000, etc.

Shareholders

The Company, as part of its Strategic Plan (Lakshya 2026), has listed down the broad strategic objectives of the Company to ensure value creation for its shareholders. It regularly engages with the investor community for providing updates on the Company’s affairs and its performance. Feedback received from the investor community is also communicated to the Management for taking appropriate action.
Financial capital acts as a strong pillar for the organisation, which enables risk management against any exigency and economic volatility. A strong balance sheet with low gearing enables the Company in maintaining a healthy balance between risk and growth. Further, diversification of the Company across different businesses and enhanced capability spectrum will help in achieving the Lakshya 2026 targets of providing sustainable returns, and in creating value for all our stakeholders.
Key Highlights of FY 2022-23

- **26%** Order inflow growth
- **9%** Revenue growth
- **43%** Dividend payout ratio

Strategy linkage

For details, refer to 'Business Model and Strategy' section

SDGs impacted

Material Topics

- Corporate Governance
- Business Ethics
- Climate Action
- Data Security, Privacy and Cybersecurity
- Social Engagement and Impact
L&T’s Standalone financials reflect the performance of Infrastructure Projects segment, Energy Projects segment (comprising Hydrocarbon, Power and Green Energy), Hi-Tech Manufacturing segment (comprising Heavy Engineering and Defence Engineering), and Others segment (including Realty, Construction & Mining Machinery, Rubber Processing Machinery, Smart World & Communication, E-commerce/digital platforms and Data Centers).

During the year, the Company entered into a Business Transfer Agreement on January 12, 2023 to transfer the carved-out business unit of Smart World and Communication (SWC), forming part of the Others segment, by way of a sale on a going concern basis to L&T Technology Services Limited (LTTS), a listed subsidiary. The transfer has been completed on April 1, 2023.

Key Highlights of FY 2022-23:
- Order Inflow achieved growth of 26%, basis robust growth of 37% in domestic orders.
- Revenue growth of 9% reflects improved execution momentum of strong opening Order Book.
- Buoyancy in collections improved operational cash flows.
- The Board of Directors has recommended a final dividend of ₹ 24 per equity share for the approval of shareholders, resulting in a dividend payout of 43%.
Economic value generated and distributed\(^1\) [₹ Bn]

<table>
<thead>
<tr>
<th>Value generated</th>
<th>Value distributed</th>
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<tbody>
<tr>
<td><strong>Total income</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FY 2022-23</strong></td>
<td>1,162.30</td>
</tr>
<tr>
<td><strong>FY 2021-22</strong></td>
<td>1,061.71</td>
</tr>
</tbody>
</table>

Value generated - Value distributed = Value retained

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2022-23</th>
<th>FY 2021-22</th>
</tr>
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<tbody>
<tr>
<td>Economic value generated</td>
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<td></td>
</tr>
<tr>
<td>Total income</td>
<td>1,162.30</td>
<td>1,061.71</td>
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<tr>
<td>Economic value distributed</td>
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<td></td>
</tr>
<tr>
<td>Manufacturing, construction and operating expenses</td>
<td>922.27</td>
<td>841.21</td>
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<tr>
<td>Employee wages and benefits</td>
<td>82.93</td>
<td>73.91</td>
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<tr>
<td>Payments to providers of capital</td>
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<tr>
<td>Interest</td>
<td>21.25</td>
<td>17.54</td>
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<tr>
<td>Dividend</td>
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<tr>
<td>Payments to exchequer</td>
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<td>Community investments (CSR)</td>
<td>1.37</td>
<td>1.32</td>
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<tr>
<td>Economic value retained</td>
<td>41.25</td>
<td>42.45</td>
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\(^1\)excluding exceptional items
ASSURANCE STATEMENT

Introduction
DNV Business Assurance India Private Limited (‘DNV’) has been commissioned by the management of Larsen & Toubro Limited (‘L&T’ or the ‘Company’, (Corporate Identity Number: L99999MH1946PLC004768) to undertake an independent assurance of L&T’s Business Responsibility and Sustainability Reporting (‘BRSR’) disclosure “Principle 6”, (Businesses should respect and make efforts to protect and restore the environment) which is part of L&T’s reporting on BRSR disclosures included in its Integrated Annual Report, it shall also be published in digital/online format. The disclosures in this Report have been prepared based on the requirements of SEBI Circular no. SEBI/HO/CFD/CMD-2/P/CIR/2021/562 dated May 10, 2021, prescribing format of the BRSR and the guidance notes and the nine principles of the National Guidelines on Responsible Business Conduct, 2019 (‘NGRBC’) of the Ministry of Corporate Affairs, Government of India. The intended user of this assurance statement is the Management of L&T (‘the Management’) and its stakeholders. Our assurance engagement was planned and carried out during January 2023 – June 2023 covering the Company’s sustainability (Environmental) performance during 1 April 2022 to 31 March 2023. We performed a limited level of assurance based on our assurance methodology, VeriSustain™.

Responsibilities of the Management of L&T and of the Assurance Provider
The Management has the sole responsibility for the preparation of the Report and is responsible for all information disclosed in the Report as well as the processes for collecting, analyzing and reporting the information presented in the Report. L&T is also responsible for ensuring the maintenance and integrity of its website and any referenced disclosures on environmental performance. In performing this assurance work, DNV’s responsibility is to the Management of L&T; however, this statement represents our independent opinion and is intended to inform the outcome of the assurance to the stakeholders of L&T.

We do not provide any services to L&T, which in our opinion constitutes a conflict of interest with this assurance work. Our assurance engagements are based on the assumption that the data and information provided by the Company to us as part of our review have been provided in good faith and are free from material misstatements.

Scope, Boundary and Limitations
The reporting scope and boundary encompasses sustainability (Environmental) performance of L&T as brought out in Section A: General Disclosures of the BRSR.

The assurance engagement considers an uncertainty of ±5% based on materiality threshold for estimation/measurement errors and omissions. We did not engage with any external stakeholders as part of this assurance engagement.

During the assurance process, we did not come across limitations to the scope of the agreed assurance engagement.

Basis of our Opinion
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 carried out the following activities:

- Reviewed the approach to stakeholder engagement and materiality determination process and its outcomes as brought out in the Report.
- Conducted interviews with selected representatives responsible for management of environmental issues and carried out reviews of selected evidence to support topics and claims disclosed in the Report. We were free to choose interviewees and interviewed those with overall responsibility to deliver L&T’s overall sustainability objectives.
- Carried out Onsite and off-site verification of sustainability (Environmental) performance data and sample evidence related to the sampled sites besides corporate office of L&T to review the processes and systems for aggregating site-level sustainability (environment) information
- Reviewed the process of reporting on BRSR requirements including Section A: General Disclosures, Section B: Management and Process Disclosures, and Section C: Principle “6” Performance Disclosures.

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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
Opinion and Observations
Based on the verification undertaken, nothing has come to our attention to suggest that the Report together with referenced information does not adhere to the requirements of BRSR “Principle 6” including the General Disclosures, Management and Process Disclosures.

Without affecting our assurance opinion, we provide the following observations against the principles of VeriSustain:

Materiality
The process of determining the issues that is most relevant to an organization and its stakeholders.
The Report brings out the broad range of with the rationale for issues which the Company has identified as being material to its business which are mapped as risks and opportunities, along with the rationale for considering the issue as being material. Key environmental risks, stakeholder opinions and concerns, and peer issues were taken into account while arriving at overall topics which were further prioritized to arrive at the significant material issues. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Materiality.

Stakeholder Inclusiveness
The participation of stakeholders in developing and achieving an accountable and strategic response to Sustainability.
The Report brings out the formal and informal channels in place to engage with its various identified stakeholders, including descriptions of the methods, frequencies and basis of engagement with each stakeholder group, as well as opinions and concerns arising out of the engagement processes during the reporting period. Inputs from the stakeholder engagement are used towards identifying key environmental topics and refining the Company’s policies and strategies. Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Stakeholder Inclusiveness.

Responsiveness
The extent to which an organization responds to stakeholder issues.
The Report brings out the approaches adopted by the Company to adapt and/or mitigate impacts related to its identified material issues, as well as responses to key stakeholder concerns. The disclosures bring out the descriptions of structures, policies and processes implemented by L&T towards adopting and reviewing the NGRBC Principle 6, as well as performance data, and processes for governance. Nothing has come to our attention to believe that the Report does not meet the requirements related to the Principle of Responsiveness.

Reliability
The accuracy and comparability of information presented in the report, as well as the quality of underlying data management systems.
The Report brings out the processes that L&T has established towards capturing and reporting its sustainability performance related to Principle “6” of NGRBC. The majority of the data and information verified through our remote assessments with the Company’s management teams and data owners at the sites, sampled by us as part of our assurance engagement were found to be fairly accurate and reliable. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors. These data inaccuracies have been communicated for correction and the related disclosures were reviewed for correctness. Nothing has come to our attention to believe that the Report does not meet the principle of Reliability.
Completeness
How much of all the information that has been identified as material to the organisation and its stakeholders is reported?
The Report brings out the Company’s performance during FY2023 related to environmental aspects of the BRSR and covering the operations of L&T, covering the performance related to NGRBC Principle “6”. L&T may further strengthen its processes towards capturing and reporting information and data related to Essential and certain Leadership Indicators of Principle-wise Performance Disclosures in future reporting periods.
Nothing has come to our attention to suggest that the Report does not meet the Principle of Completeness with respect to scope, boundary and time.

Neutrality
The extent to which a report provides a balanced account of an organization’s performance, delivered in a neutral tone.
The Report brings out L&T’s sustainability (Environmental) performance during the reporting period in a neutral tone in terms of content along with descriptions of key risks and opportunities during the reporting period.
Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Neutrality.

Statement of 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 Conduct\(^2\) during the verification engagement and maintain independence where required by relevant ethical requirements as detailed in DNV VeriSustain. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of any statements or data except for this Assurance Statement, the GHG Verification Statement and Management Report. DNV maintains complete impartiality toward stakeholders interviewed during the verification process. We did not provide any services to L&T in the scope of assurance during FY2023 that could compromise the independence or impartiality of our work.

For DNV Business Assurance India Private Limited

<table>
<thead>
<tr>
<th>Karthik Ramaswamy</th>
<th>Sharma Anjana</th>
<th>Kakaraparthi Venkata Raman</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Digitally signed by Sharma Anjana</td>
<td>Digitally signed by Kakaraparthi Venkata Raman</td>
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<td>Date: 2023.06.27 13:09:58 +05'30&quot;</td>
<td>Date: 2023.06.27 13:23:18 +05'30&quot;</td>
<td>Date: 2023.06.27 13:35:30 +05'30&quot;</td>
</tr>
<tr>
<td>Karthik Ramaswamy Lead Verifier, Sustainability Services, DNV Business Assurance India Private Limited, India</td>
<td>Anjana Sharma Head – Regional Sustainability Operations, DNV Business Assurance India Private Limited, India</td>
<td>Venkata Raman Kakaraparthi Assurance Reviewer, Sustainability Services DNV Business Assurance India Private Limited, India</td>
</tr>
</tbody>
</table>

27th June 2023, Mumbai, 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 www.dnv.com (https://www.dnv.com/about/in-brief/corporate-governance.html)
VERIFICATION STATEMENT

Data 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 environmental performance data of Energy consumed; Indirect (Renewable and Non-renewable), Direct (Non-renewable), Emissions; GHG - Scope 1 & Scope 2, Scope 3, NO2, SO2 and Particulate matter, Water withdrawal and consumption and Waste generated (Hazardous and Non-hazardous) for disclosure in its Integrated Annual Report of FY 2022-23. These performance data sets have been prepared by L&T.

Our engagement has been carried out based on DNV’s assurance methodology VeriSustain™1, (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 ±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 and information provided to us for verification, as well as the processes for collecting, analysing and reporting the sustainability performance data as part of its Integrated Annual 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 January 2023 – June 2023 by a team of sustainability professionals of DNV.

Scope, Boundary and Limitations of Verification
The scope of the verification includes the identified environmental 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 2022 to 31st March 2023, in 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/information made available to us.

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

Project No.: PRJN-491401
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 environmental 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) Smart World & Communication, (xii) Realty, and offices (A M Naik Tower, Mumbai; L&T Head office, Chennai; L&T House, Mumbai; Knowledge city, Vadodara, Learning Development Academy, Lonavala and Domestic marketing network) 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 environmental performance data (Annexure-1) prepared for the Company’s internal reporting purposes and to be included in its Integrated Annual Report.
- Assessed the robustness of the data management systems, data accuracy, information 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 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 Conduct\(^2\) 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 except for this Assurance Statement. 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

Karthik Ramaswamy

Digitally signed by Karthik Ramaswamy
Date: 2023.06.16 20:12:59 +05'30'

Lead Verifier,
Sustainability Services,
DNV Business Assurance
India Private Limited, India

Sharma, Anjana

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Head – Regional
Sustainability Operations,
DNV Business Assurance
India Private Limited, India

Kakaraparthi Venkata Raman

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Date: 2023.06.17 11:04:12 +05'30'

Assurance Reviewer,
Sustainability Services
DNV Business Assurance
India Private Limited, India

16 Jun 2023, Mumbai, India

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

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
## Annexure 1: Verified Performance Data - 2022 – 23

<table>
<thead>
<tr>
<th>Energy (Renewable)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect energy consumption</td>
<td>GJ</td>
<td>1,29,410</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy (Non Renewable)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct energy consumption(^{(1)})</td>
<td>GJ</td>
<td>9,395,966</td>
</tr>
<tr>
<td>Indirect energy consumption</td>
<td>GJ</td>
<td>1,217,321</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Greenhouse Gases</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CO(_2)e - Scope 1</td>
<td>T</td>
<td>693,115</td>
</tr>
<tr>
<td>CO(_2)e - Scope 2</td>
<td>T</td>
<td>273,719</td>
</tr>
<tr>
<td>CO(_2)e - Scope 3(^{(2)})</td>
<td>T</td>
<td>7,128,687</td>
</tr>
<tr>
<td>N(_2)O</td>
<td>Mg / M3</td>
<td>12-44</td>
</tr>
<tr>
<td>SO(_2)</td>
<td>Mg / M3</td>
<td>3-22</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>Mg / M3</td>
<td>10-61</td>
</tr>
</tbody>
</table>

### Water

| Water Withdrawal – Total               | KI    | 11,176,696|
| Water Withdrawal – From Surface water | KI    | 2,379,231 |
| Water Withdrawal – From Ground water  | KI    | 2,991,910 |
| Water Withdrawal – From Third party   | KI    | 1,457,540 |
| Water Withdrawal – From other sources | KI    | 4,348,015 |
| Water (fresh) consumed - Total        | KI    | 11,038,686|

### Waste

| Hazardous waste – Generated           | T     | 4,239    |
| Non-hazardous waste – Generated       | T     | 322,636  |

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**Note 1:** Direct energy: Consumption is reported based on amount of fuel issued

**Note 2:** Scope 3 reporting categories; Purchased goods, Upstream supply, Waste generation in operations, Business travel and employee commute
## UNITED NATIONS GLOBAL COMPACT

### COMMUNICATION ON PROGRESS

<table>
<thead>
<tr>
<th>Principle</th>
<th>Category</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Human Rights</td>
<td>Businesses should support and respect the protection of internationally proclaimed human rights.</td>
<td>151, 153, 158, 161, 197, 227, BRSR Principle 5 (265-268)</td>
</tr>
<tr>
<td>2</td>
<td>Human Rights</td>
<td>Businesses should make sure that they are not complicit in human rights abuses.</td>
<td>151, 153, 158, 161, 197, 227, BRSR Principle 5 (265-268)</td>
</tr>
<tr>
<td>3</td>
<td>Labour</td>
<td>Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.</td>
<td>153, BRSR Principle 3 (259)</td>
</tr>
<tr>
<td>4</td>
<td>Labour</td>
<td>Businesses should uphold the elimination of all forms of forced and compulsory labour.</td>
<td>153, 161, 197, 227, BRSR Principle 5 (265-268)</td>
</tr>
<tr>
<td>5</td>
<td>Labour</td>
<td>Businesses should uphold the effective abolition of child labour.</td>
<td>153, 161, 197, 227, BRSR Principle 5 (265-268)</td>
</tr>
<tr>
<td>6</td>
<td>Labour</td>
<td>Businesses should uphold the elimination of discrimination in respect of employment and occupation.</td>
<td>153, 155, 197, BRSR Principle 5 (267-268)</td>
</tr>
<tr>
<td>7</td>
<td>Environment</td>
<td>Businesses should support a precautionary approach to environmental challenges.</td>
<td>26, 173, 175, BRSR Principle 6 (271, 276, 277)</td>
</tr>
<tr>
<td>8</td>
<td>Environment</td>
<td>Businesses should undertake initiatives to promote greater environmental responsibility.</td>
<td>162-175</td>
</tr>
<tr>
<td>9</td>
<td>Environment</td>
<td>Businesses should encourage the development and diffusion of environmentally friendly technologies.</td>
<td>166, 168, 170, 172, 184, 185, 200, 201, 211</td>
</tr>
<tr>
<td>10</td>
<td>Anti-Corruption</td>
<td>Businesses should work against corruption in all its forms, including extortion and bribery.</td>
<td>BRSR Principle 1 (253), 342</td>
</tr>
</tbody>
</table>